

OAH 65-2500-32764
MPUC PL-9/CN-14-916
MPUC PL-9/CN-15-340

OAH 65-2500-33377
MPUC PL-9/PPL-15-137

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE PUBLIC UTILITIES COMMISSION

In the Matter of the Application of
Enbridge Energy, Limited Partnership,
for a Certificate of Need for the Line 3
Project in Minnesota from the North
Dakota Border to the Wisconsin Border

In the Matter of the Application of
Applicant Enbridge Energy, Limited
Partnership for a Routing Permit for the
Line 3 Project in Minnesota from the
North Dakota Border to the Wisconsin
Border

**FINDINGS OF FACT,
CONCLUSIONS OF LAW, AND
RECOMMENDATION**

OAH 65-2500-32764
MPUC PL-9/CN-14-916
MPUC PL-9/CN-15-340

OAH 65-2500-33377
MPUC PL-9/PPL-15-137

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE PUBLIC UTILITIES COMMISSION

In the Matter of the Application of
Enbridge Energy, Limited Partnership,
for a Certificate of Need for the Line 3
Project in Minnesota from the North
Dakota Border to the Wisconsin Border

TABLE OF CONTENTS

In the Matter of the Application of
Applicant Enbridge Energy, Limited
Partnership for a Routing Permit for the
Line 3 Project in Minnesota from the
North Dakota Border to the Wisconsin
Border

Table of Contents

STATEMENT OF THE ISSUES.....8

SUMMARY OF FACTS AND RECOMMENDATION.....8

FINDINGS OF FACT.....12

 I. INTRODUCTION.....12

 A. General Project Description.....12

 B. Relationship to Sandpiper Project.....13

 C. Applicant and Enbridge’s Mainline System.....15

 D. Existing Line 3.....18

 E. sProject Overview20

 F. Applicant’s Preferred Route (APR)21

G.	System and Route Alternatives	23
II.	PROCEDURAL HISTORY	26
A.	Initial Filings and Commencement of the Action	26
B.	Scoping and Environmental Review Process	32
C.	DEIS, Classification of Data, and Setting of Prehearing Schedule.....	49
D.	Issue Arises Related to EIS Adequacy Determination.....	52
E.	Additional Interventions and Revision of Public Hearing Schedule.....	54
F.	Issuance of FEIS and ALJ Adequacy Recommendation	55
G.	Public Hearings.....	58
H.	Evidentiary Hearing/Public Comment Period and Close of Hearing Record.....	60
I.	FEIS Adequacy Determination and Post-Hearing Matters	64
III.	PUBLIC COMMENTS SUMMARY	70
A.	Public Hearing Comments	70
B.	Comments in Opposition to Line 3 Project.....	71
C.	Comments in Support of Line 3 Project.....	88
D.	Written Comments Received.....	103
IV.	GENERAL PROJECT BACKGROUND	111
A.	History of Existing Line 3 Releases	111
B.	History of Pipeline Spills and Resulting Federal Consent Decree Enbridge's History of Spills and Failures	114
C.	Funding of Project by Canadian Oil Producers (a/k/a Shippers)	119
D.	Project Design.....	122
E.	Decommissioning and Abandonment	126
F.	Permanent and Temporary Easements Required for Project	127
G.	Indian Reservations and Treaty-Ceded Territories	133
H.	Shipping Agreement, Nominations, and Apportionment.....	149
i.	"Pay-as-you-go" vs. "Take-or-Pay" Shipping Systems.....	149
I.	Alternatives Evaluated.....	153
V.	APPLICATION OF Certificate of Need Criteria.	160
A.	Result of Denial Would Adversely Affect Future Adequacy, Reliability, or Efficiency of Energy Supply to Applicant, Applicant's Customers, or the People of Minnesota and Neighboring States [Minn. R. 7853.0130(A)]	162

B.	More Reasonable and Prudent Alternatives [Minn. R. 7853.0130(B)]	209
C.	Consequences of Granting vs. Consequences of Denial [Minn. R. 7853.0130(C)].....	229
D.	Compliance with Relevant Policies, Rules, and Regulations [Minn. R. 7853.0130(D)].....	259
VI.	PERMIT CONDITIONS.....	263
A.	Conditions Recommended by the DOC-DER.....	263
B.	Decommissioning Trust.....	265
C.	Corporate Guaranty and Insurance	265
VII.	DECOMMISSIONING, ABANDONMENT, REMOVAL, AND IN-TRENCH REPLACEMENT	283
A.	Decommissioning and Abandonment	283
B.	Removal.....	288
C.	In-Trench Replacement.....	296
VIII.	ROUTE PERMIT	299
A.	Rule Criteria	299
B.	Description of APR and Route Alternatives	300
C.	Impacts to Human Settlement	304
D.	Natural Resources and Features	311
E.	Lands of Historical, Archaeological, and Cultural Significance	334
F.	Impacts on Economies within the Routes	337
G.	Pipeline Cost and Accessibility.....	343
H.	Use of Existing Rights-of-Way Sharing or Paralleling.....	347
I.	Cumulative Potential Effects of Related or Future Pipeline Construction	349
J.	Relevant Policies, Rules, and Regulations of Other Bodies.....	351
K.	Comments from MPCA and MDNR on Route Selection.....	353
L.	Summary of ALJ Findings and Conclusions on Route Selection	354
	CONCLUSIONS OF LAW	356
I.	Certificate of Need Application.....	356
A.	Jurisdiction.....	356
B.	Completeness of Application	356
C.	Notice and Hearing Requirements	356
C.	Criteria for Evaluating CN Application	357

II.	Route Permit Application	362
A.	Procedural Requirements	362
B.	Application of Route Selection Criteria	362
III.	Permit Conditions	364

OAH 65-2500-32764
MPUC PL-9/CN-14-916
MPUC PL-9/CN-15-340

OAH 65-2500-33377
MPUC PL-9/PPL-15-137

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE PUBLIC UTILITIES COMMISSION

In the Matter of the Application of
Enbridge Energy, Limited Partnership,
for a Certificate of Need for the Line 3
Project in Minnesota from the North
Dakota Border to the Wisconsin Border

**FINDINGS OF FACT,
CONCLUSIONS OF LAW, AND
RECOMMENDATION**

In the Matter of the Application of
Applicant Enbridge Energy, Limited
Partnership for a Routing Permit for the
Line 3 Project in Minnesota from the
North Dakota Border to the Wisconsin
Border

The above-entitled matter came on for an evidentiary hearing on November 1, 2, 3, 6, 8, 9, 13-17, and 20, 2017, at the offices of the Public Utilities Commission in St. Paul, Minnesota.

Christina Brusven and Patrick Mahlberg, Fredrikson & Byron, P.A., and Eric Swanson, Winthrop & Weinstine, P.A., appeared on behalf of Applicant Enbridge Energy, Limited Partnership (Applicant).

Linda Jensen, Assistant Attorney General, appeared on behalf of the Minnesota Department of Commerce - Energy Environmental Review and Analysis (DOC-EERA).

Peter Madsen and Julia Anderson, Assistant Attorneys General, appeared on behalf of the Department of Commerce - Division of Energy Resources (DOC-DER).

Brian Meloy, Stinson, Leonard Street, appeared on behalf of Kennecott Exploration Company (Kennecott).

Kevin Pranis appeared on behalf of Laborers' District Council of Minnesota and North Dakota (Laborers' Council).

Anna Friedlander, O'Donoghue & O'Donoghue, LLP, and Sam Jackson, Cummins & Cummins, appeared on behalf of the United Association of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry of the United States and Canada, AFL-CIO (United Association).

Michael Ahern, Dorsey & Whitney, LLP, appeared on behalf of Shippers for Secure, Reliable and Economical Petroleum Transportation (Shippers).

Leili Fatehi and Hudson Kingston, Advocate, PLLC, appeared on behalf of the Sierra Club (Sierra Club).

Scott Strand, Environmental Law and Policy Center, appeared on behalf of Friends of the Headwaters (FOH).

Akilah Sanders-Reed and Brent Murcia appeared on behalf of Youth Climate Intervenors (Youth Climate).

Frank Bibeau and Paul Blackburn appeared on behalf of Honor the Earth (HTE).

David Zoll, Rachel Kitze Collins, and Arielle Wagner, Lockridge, Grindal, Nauen, PLLP, appeared on behalf of the Mille Lacs Band of Ojibwe (Mille Lacs).

Sara Van Norman, the Davis Law Firm, Philip Mahowald, the Jacobson Law Firm, and Seth Bichler, appeared on behalf of the Fond du Lac Band of Lake Superior Chippewa (Fond du Lac).

Joseph Plumer, appeared on behalf of the White Earth Band of Ojibwe (White Earth) and Red Lake Band of Chippewa Indians (Red Lake).

Chris Allery appeared on behalf of the Leech Lake Band of Ojibwe (Leech Lake).

James Reents appeared on behalf of the Northern Water Alliance of Minnesota (NWAM).

Stuart Alger, Malkerson, Gunn, Martin, LLP, appeared on behalf of Donovan and Anna Dyrdal (Dyrdals).

Bret Eknes and Scott Ek appeared as representatives of the Minnesota Public Utilities Commission (Commission).

STATEMENT OF THE ISSUES

1. Should Enbridge Energy's Application for a Certificate of Need for the proposed Project be granted?
2. If so, should the Commission grant a Route Permit for the Project?
3. If so, which of the proposed route or route alternatives best meets the route selection criteria set forth in Minn. R. 7852.1900, subp. 3?
4. If a Certificate of Need and Route Permit are issued in this case, what conditions or provisions should be included in the permits?

SUMMARY OF FACTS AND RECOMMENDATION

Applicant has proposed, what it calls, a "replacement project" – a project to replace Line 3 in Minnesota. In reality, Applicant is asking to abandon its current Line 3 and construct an entirely new pipeline – one that is longer and wider, has the capacity to transport more oil, and opens a new corridor through northern Minnesota for nearly half of its route. For Applicant, the new line would replace existing Line 3 within Enbridge's Mainline System. For Minnesota, as proposed, the Project represents a new oil pipeline and the abandonment of an oil one.

Line 3 was constructed in Minnesota in the 1960s. Through the years, and as recently as 2009, Enbridge has added additional pipelines alongside Line 3, such that Line 3 is now located within a corridor with five to six other Enbridge lines. This corridor of lines runs through two Indian Reservations: the Leech Lake and the Fond du Lac Reservations. Regardless of whether the Project is approved, five other Enbridge pipelines in the Mainline corridor will continue to run through those two Reservations.

The evidence in this case establishes that Line 3 is currently being used and remains an integrated part of the Enbridge Mainline System. This system of pipelines delivers crude oil to Minnesota and various other states. Line 3, however, is old, needs significant repair, and poses significant integrity concerns for the State. Accordingly, the Judge finds that replacement of the line is a reasonable and prudent action.

The evidence also establishes that "apportionment" on the Enbridge Mainline System currently exists for heavy crude oil, has existed for some time, and will continue to exist if this Project is denied. "Apportionment" means that Canadian oil shippers who use the Mainline System to transport their products are unable to ship all of the crude they seek to export into the United States. Apportionment shows that demand for shipment of oil on the Mainline System exceeds Applicant's capacity to ship the oil through its pipelines.

The evidence shows that, due to its age and condition, existing Line 3 cannot transport more than 390 kbpd of light crude oil. Therefore, without significant repair or

replacement, Line 3 cannot assist Applicant in resolving apportionment on the Mainline or meeting its customer's demand for oil transportation services.

A new Line 3 would solve two problems. First, it would remedy the integrity issues related to the old line. Second, it would allow the Mainline System to meet the current and future shipping demands of Applicant's customers (i.e., shippers), who are predominantly Canadian oil producers.

Based upon these facts, Applicant has established, by a preponderance of the evidence, that the probable result of denial of a Certificate of Need would adversely affect the future adequacy, reliability, or efficiency of the transportation of crude oil by Applicant's customers; specifically, Canadian crude oil shippers.

Applicant has not, however, established, by a preponderance of the evidence, that Minnesota refiners or the people of Minnesota would be adversely impacted by denial of the Project. The evidence shows that Minnesota refiners are currently receiving sufficient amounts of crude oil to meet their production needs. Therefore, denial of the Project would not result in harm to Minnesota refiners.

While a denial of the Project may not result in harm to Minnesota refiners, granting a Certificate of Need would likely result in benefits to Minnesota's refiners and refiners in the region. These refiners would benefit from access to more crude and different crude mixes. This increase in supply options would likely yield benefits to the people of Minnesota, as consumers of refined petroleum products.

Based upon this evidence, the Administrative Law Judge concludes that Applicant has met its burden of proof in establishing the first criterion of need under Minn. R. 7853.0130(A).

Applicant has not established, however, that the consequences to society of granting the Certificate of Need are more favorable than the consequences of denial when evaluating the Project, as proposed. As proposed, the Project requires the creation of a new crude oil pipeline corridor through Minnesota for approximately 50 percent of its route (from Park Rapids to eastern Carlton County). The Administrative Law Judge finds that, based upon Applicant's Preferred Route, the consequences for Minnesota outweigh the benefits of the Project, as it is proposed.

This cost-benefit analysis changes, however, if Applicant replaces Line 3 in its current location. That is, if the Commission were to select Route Alternative 07 as the pipeline route in this case. In such a circumstance, the benefits to Minnesota refiners, refiners in the region, and the people of Minnesota slightly outweigh the risks and impacts of a new crude oil pipeline.

In-trench replacement of the line allows Minnesota the benefits of the Project, including the replacement of an aging and infirm line; elimination of apportionment on the Mainline System; and the economic benefits of removal and replacement. (Note that removal of the line will substantially increase the economic benefit to Minnesota.)

Moreover, in-trench replacement mitigates, to a large degree, the detrimental impacts that abandonment of an old line and creation of a new oil pipeline corridor would have on the State.

In-trench replacement will: (1) allow Applicant to utilize its existing pipeline corridor where at least five other Enbridge pipelines currently operate; (2) isolate the environmental risks of an oil pipeline to an existing, active oil pipeline corridor; (3) prevent the abandonment of nearly 300 miles of steel pipeline; and (4) avoid establishing a new oil pipeline corridor in a particularly sensitive region of the State that could be used, in the future, for additional pipelines.

In 2029, Enbridge's easements with the federal government, allowing it to run six pipelines through the two Indian Reservations, will expire. Thus, sometime before 2029, Applicant will need to either renegotiate those easements with the Tribes and the federal government; or remove those lines from the Reservations. Approval of the Project, as proposed, would result in a partially new oil pipeline corridor being created in the State where Applicant could someday request to relocate its other pipelines. This is especially true if negotiations with the Tribes before 2029 are unsuccessful.

Applicant seeks to decommission and abandon its old Line 3 in place. That would mean nearly 300 miles of steel infrastructure being abandoned in Minnesota, where it will remain for hundreds, if not thousands, of years. In addition, the easements that Applicant has obtained from landowners for the new Line 3 allow it to "idle in place" the new line, thereby signaling to the Commission that Applicant also intends to someday abandon the new Line 3 when it no longer serves Applicant's needs.

The abandonment of the old Line 3 and the creation of a new corridor leaves open the possibility of thousands of miles of Enbridge pipelines someday being abandoned in place when they are no longer economically useful to Applicant. This is particularly true in a carbon-conscious world moving away from fossil fuels; a move that Minnesota aspires to follow.

To that end, the Administrative Law Judge recommends that the Commission **GRANT** Applicant's Application for a Certificate of Need **but only if** the Commission also selects **Route Alternative 07 (in-trench replacement)** as the designated route. The ALJ finds that Route Alternative 07 best satisfies the legal criteria for selection of a pipeline route, as compared to Applicant's Preferred Route and the other route alternatives.

An approval of Route Alternative 07 does not, in any way, infringe on the sovereignty of the various Indian Tribes to disapprove permits or other approvals required for construction of the Project through land over which the Tribes maintain jurisdiction. Just like the Commission cannot bind the federal government, the Commission does not have the authority to require the Indian Tribes to permit the replacement of Line 3 within the Reservations. It would, however, likely encourage the Tribes and Applicant to accelerate discussions that must inevitably occur prior to 2029 related to the five other lines.

Absent the existence of five other lines within the same corridor, and absent Applicant's request to abandon its old line, the Administrative Law Judge may have made a different recommendation. But under the facts as presented by the parties, this result best balances the public interest in the transportation of energy and the protection of Minnesota's people and environment.

Applicant states that it is seeking a "replacement" of Line 3. This recommendation endorses such an approach – it provides for a true replacement of the line.

FINDINGS OF FACT

I. INTRODUCTION

A. General Project Description

1. This action involves the applications by Enbridge Energy, Limited Partnership (Applicant) for a Certificate of Need (CN Application) and a Route Permit (RP) for the construction of a 340-mile pipeline across northern Minnesota (Project).¹ The proposed Project is part of a larger program commenced by the company to replace Line 3 of Enbridge's Mainline System.² The Mainline System is a system of pipelines that carry Canadian crude oil from the Western Canadian Sedimentary Basin (the tar sands region) of Alberta, Canada, to the United States.³ The Mainline System through Minnesota is comprised of six pipelines, all located within the same corridor in northern Minnesota.⁴ The first of these pipelines in Minnesota (Lines 1 and 2) were constructed in the 1950s.⁵ Line 3, the subject of this proceeding, was constructed in the 1960s.⁶ The remainder of the Enbridge pipelines located in Minnesota were constructed more recently, the last two being constructed in 2009.⁷

2. Line 3 of the Mainline System begins in Alberta, Canada, enters the United States in North Dakota, travels across the State of Minnesota, and terminates in Superior, Wisconsin.⁸ The proposed Project involves only the Minnesota portion of this larger replacement program.⁹

3. The existing Line 3 in Minnesota is a 282-mile, 34-inch diameter pipeline that enters Minnesota at the North Dakota border in Kittson County, and exits Minnesota at the Wisconsin border in Carlton County (Existing Line 3).¹⁰

4. The Project, as proposed, entails the shut-down of Existing Line 3 and "replacement" of a new pipeline.¹¹ However, rather than actually replacing the Existing Line 3 in its current location, Applicant proposes to abandon the existing line in-place and construct a new pipeline through the state.¹²

¹ Ex. EN-1 at 1-1 (CN Application).

² *Id.*

³ *Id.* at 1-3.

⁴ See Ex. EN-19 at Sched. 7 (Glanzer Direct).

⁵ See Ex. LL-5 (Survey Maps); LL-6 (Correspondence) (establishing initial construction dates for Lines 1, 2, and 3).

⁶ Ex. EN-1 at 1-5 (CN Application).

⁷ See e.g., FDL-9 (FLD Settlement Agreement); Ex. LL-3 (LL Settlement Agreement). The last two pipelines are Line 67 (the Alberta Clipper line) and the Southern Lights diluent line (Line 13). Line 13 is technically not part of the Mainline System but is, nonetheless, a line operated by Enbridge. It delivers diluent from the United States to Alberta, Canada, thereby transporting product in the opposite direction of the rest of the Enbridge Mainline pipelines.

⁸ Ex. EN-1 at 1-1 (CN Application).

⁹ *Id.*

¹⁰ *Id.*

¹¹ *Id.*

¹² *Id.*

5. As proposed, the new pipeline would parallel the Existing Line 3 from the North Dakota-Minnesota border until Clearbrook, Minnesota. From Clearbrook, the new pipeline would deviate from the Mainline corridor and, at Park Rapids, would forge a new oil pipeline corridor across the state until the line reconnects with the Mainline corridor in eastern Carlton County, near the Wisconsin border.¹³ As proposed, the Existing Line 3 would be decommissioned (taken out of service) and left abandoned in-ground into perpetuity.¹⁴

6. Unlike Existing Line 3, the proposed new Line 3 would be wider (36 inches rather than 34 inches in diameter) and longer (340 miles rather than 282 miles) than its predecessor.¹⁵ Due to its age and condition, and pursuant to the terms of a settlement agreement with the federal government, Existing Line 3 is operating at approximately 50 percent of its original capacity, transporting approximately 390,000 barrels of light crude oil per day.¹⁶ As proposed, the new line would carry an average of 760,000 barrels of oil per day – both heavy and light crude – thereby returning Line 3 to its original, mixed service operating capacity.¹⁷

7. As part of the scoping and environmental review of this Project, the DOC-EERA and Commission identified one system alternative, four route alternatives, and 24 route segment alternatives to evaluate in this case, in addition to the Applicant's Preferred Route (APR).¹⁸

8. This Project, which was originally proposed in 2014, has been the subject of extensive environmental analysis and public scrutiny. There have been 27 informational and scoping meetings, 16 public hearings, and a three-week evidentiary hearing; and over 72,000 written comments were received, not including the thousands of environmental review and scoping comments filed in this case. This Report endeavors to summarize the immense record created in this action and provide a recommendation to the Commission for its consideration.

B. Relationship to Sandpiper Project¹⁹

9. To fully understand this Project, it is important to understand its relationship to another pipeline project proposed by Enbridge prior to the commencement of this action.

10. In 2013, the North Dakota Pipeline Company, a joint venture between Enbridge Energy Partners, Limited Partnership (EEP), and Williston Basin Pipeline LLC,

¹³ Ex. EN-24 at 5 (Eberth Direct); Ex. EN-22 at 8-9 (Simonson Direct).

¹⁴ Ex. EN-1 at 1-1 (CN Application).

¹⁵ *Id.*

¹⁶ Ex. EN-12 at 21 (Kennett Direct); Ex. EN-30 at Sched. 1 (Consent Decree).

¹⁷ Ex. EN-12 at 21 (Kennett Direct); Ex. EN-1 at 1-1 (CN Application).

¹⁸ See Ex. EERA-29 (FEIS); EERA-42 (Revised EIS).

¹⁹ The Administrative Law Judge includes a description of the Sandpiper Project to provide context and background for the procedural, legal, and other issues present in the current Project.

a wholly-owned subsidiary of Marathon Petroleum Corporation,²⁰ filed applications for a Certificate of Need and Route Permit with the Commission.²¹ The applications sought to build a 616-mile pipeline from Tioga, North Dakota, to a terminal in Clearbrook, Minnesota (Clearbrook), and traverse east across Minnesota to the Enbridge terminal located in Superior, Wisconsin (Superior).²² The project was known as “The Sandpiper Project.”²³ EEP is a limited partner of Applicant in this case.²⁴ Both entities are part of a “family” of companies falling under the “umbrella” of Enbridge, Inc., a Canadian corporation.²⁵

11. The route proposed in the Sandpiper Project ran in the same corridor from Clearbrook to Superior as the Applicant’s Preferred Route in this matter.²⁶

12. Unlike the proposed Project, the Sandpiper line sought to transport light crude from the Bakken Formation in North Dakota (Bakken), as opposed to heavy crude from Western Canada, to terminals in Clearbrook and Superior.²⁷ A map of the two projects is set forth below:

PROPOSED ENBRIDGE PIPELINE PROJECTS



²⁰ *In the Matter of the Application of North Dakota Pipeline Company, LLC for a Certificate of Need for the Sandpiper Pipeline Project in Minnesota*, MPUC Docket No. PL-6668/CN-13-473, Findings of Fact, Summary of Public Testimony, Conclusions of Law, and Recommendation at 3 (April 15, 2015).

²¹ *Id.* at 10.

²² *Id.* at 20.

²³ *Id.*

²⁴ Ex. EN-42 at 2 (Johnston Rebuttal).

²⁵ Ex. DER-13 (Enbridge’s U.S. Operations Organizational Chart); Ex. DER-14 (Enbridge, Inc. Organizational Chart).

²⁶ See generally, *In the Matter of the Application of North Dakota Pipeline Company LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project in Minnesota*, MPUC Docket No. PL-6668/PPL 13-474, Application for Routing Permit (Nov. 8, 2013).

²⁷ *In the Matter of the Application of North Dakota Pipeline Company, LLC for a Certificate of Need for the Sandpiper Pipeline Project in Minnesota*, MPUC Docket No. PL-6668/CN-13-473, Findings of Fact, Summary of Public Testimony, Conclusions of Law, and Recommendation at 21 (April 15, 2015).

13. Approximately one year after EEP filed an application for a CN and RP in the Sandpiper Project, Applicant filed an application for a CN (and later an application for a RP) for this Line 3 Project.²⁸

14. In August 2015, the Commission granted a CN for the Sandpiper Project.²⁹ FOH appealed the decision, arguing that the Commission violated the Minnesota Environmental Policy Act (MEPA) by granting a CN without requiring that an Environmental Impact Statement (EIS) be prepared.³⁰ As a result of the Sandpiper appeal, the Line 3 Project was stayed to allow the Commission to decide whether it would also require an EIS for the Line 3 Project.³¹

15. In 2016, the Minnesota Court of Appeals issued its decision in the *Sandpiper* case, holding that MEPA requires that an EIS be completed before the Commission can make a final decision on a CN.³² As a result, the Commission's decision to grant the Sandpiper CN was reversed and the matter remanded back to the Commission for completion of an EIS and final decision.³³ Shortly thereafter, EEP petitioned to withdraw its applications for a CN and RP for the Sandpiper Project.³⁴ In lieu of the Sandpiper line, EEP invested in the Dakota Access Pipeline, a pipeline transporting crude from the Bakken Formation in North Dakota to Illinois.

16. While the applications for the Sandpiper Project were eventually withdrawn, for a significant portion of the pendency of this case the Line 3 Project tracked closely with the Sandpiper Project. This was due to the corporate relationship between the applicants in both projects (both Enbridge entities), as well as the proposed shared corridor for the two lines from Clearbrook to Superior – a new oil pipeline corridor for Minnesota.

C. Applicant and Enbridge's Mainline System

17. The Applicant in these proceedings is Enbridge Energy, Limited Partnership.³⁵ It is a different legal entity than the applicant in Sandpiper Project. This distinction is important and will be discussed further in Section VI below.

18. Applicant, a limited partnership, is comprised of two general partners: Enbridge Pipelines LLC (Lakehead) and Enbridge Pipelines (Wisconsin) Inc. (Enbridge-

²⁸ Ex. EN-1 (Certificate of Need Application).

²⁹ *In the Matter of the Application of North Dakota Pipeline Company, LLC for a Certificate of Need for the Sandpiper Pipeline Project in Minnesota*, MPUC Docket No. PL-6668/CN-13-473, Order Granting Certificate of Need (Aug. 3, 2015).

³⁰ *In re Application of North Dakota Pipeline Co. LLC*, 869 N.W.2d 693 (Minn. Ct. App. 2015), *review denied* (Minn. Dec. 15, 2015).

³¹ First Prehearing Order (Sept. 15, 2015) (eDocket No. 20159-114009-01 (CN)).

³² *In re Application of North Dakota Pipeline Co. LLC*, 869 N.W.2d 693, 699 (Minn. Ct. App. 2015), *review denied* (Minn. Dec. 15, 2015).

³³ *Id.*

³⁴ *In the Matter of the Application of North Dakota Pipeline Company, LLC for a Certificate of Need for the Sandpiper Pipeline Project in Minnesota*, MPUC Docket No. PL-6668/CN-13-473, Petition to Withdraw Applications (Sept. 1, 2016).

³⁵ Ex. EN-1 at 2-1 (CN Application); Ex. EN-4 at 1-1 (R Application).

WI) and one *limited partner*, Enbridge Energy Partners, L.P. (EEP).³⁶ EEP – Applicant’s limited partner -- was the applicant in the Sandpiper case.³⁷

19. Applicant and its component partners fall within a complicated corporate structure of Enbridge, Inc.,³⁸ a Canadian corporation.³⁹ (A thorough discussion of Enbridge’s corporate structure is set forth in the Conditions Section, Section VI below.)

20. Enbridge, Inc., through its “family” of related companies and partnerships (collectively referred to herein as “Enbridge”), owns and operates a system of liquid pipelines in the United States and Canada known as the Enbridge Mainline System, one of the longest liquid petroleum pipelines in North America.⁴⁰

21. The Mainline System is comprised of approximately 3,000 miles of pipeline in the United States and Canada.⁴¹ The Mainline System can move – directly or via interconnections – approximately 2.4 to 2.6 million barrels of crude oil every day to North American markets.⁴² The crude moved on the Mainline System originates in the Western Canadian Sedimentary Basin and is transported to markets in the U.S. and Eastern Canada.⁴³ Five North American regional submarkets are accessible to Canadian crude oil transported via the Enbridge Mainline System: the Upper Midwest; the Lower Midwest; Ontario/Quebec; U.S. Midcontinent; and the Gulf Coast.⁴⁴

22. The Mainline System is comprised of 16 crude oil pipelines: Lines 1, 2A, 2B, 3, 4, 5, 6A, 6B, 7, 10, 11, 14/64, 61, 62, 65, and 67, as shown below.⁴⁵

³⁶ Ex. DER-13; Evid. Hrg. Tr. Vol. 6A at 81-82 (Johnston).

³⁷ *In the Matter of the Application of North Dakota Pipeline Company, LLC for a Certificate of Need for the Sandpiper Pipeline Project in Minnesota*, MPUC Docket No. PL-6668/CN-13-473, Findings of Fact, Summary of Public Testimony, Conclusions of Law, and Recommendation at 3 (April 15, 2015).

³⁸ Because of the complicated corporate structure involving limited partnerships and limited liability companies controlling various pipelines, this Report will refer to “Enbridge” generally as the collection of entities that fall under the Enbridge, Inc. umbrella, as set forth in Ex. DER-13.

³⁹ Ex. DER-13; Evid. Hrg. Tr. Vol. 6A at 130-131 (Johnston).

⁴⁰ Ex. EN-1 at 1-3 (CN Application).

⁴¹ Ex. EN-30, Sched. 1 at 1 (Consent Decree).

⁴² Ex. EN-24 at 15 (Eberth Direct); Evid. Hrg. Tr. 9A at 100 (Shahady).

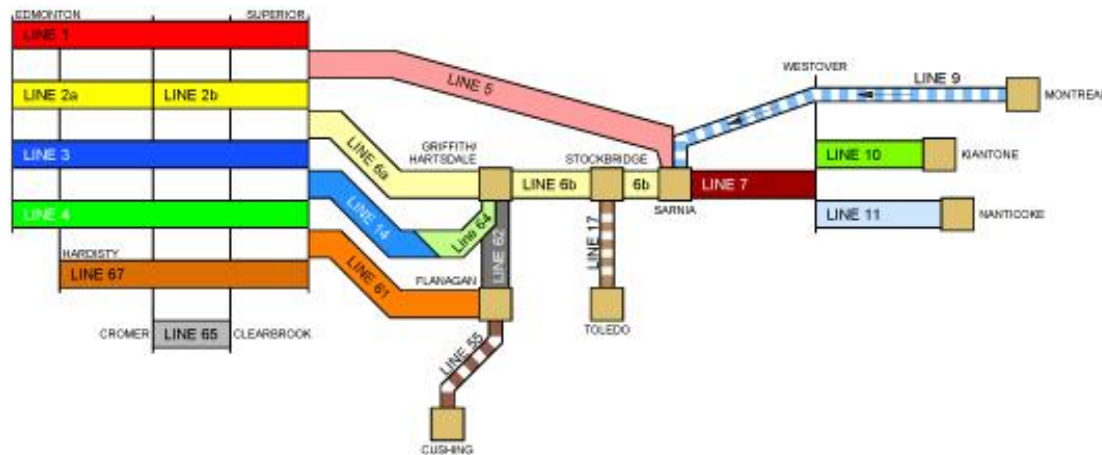
⁴³ Ex. EN-19 at 4 (Glanzer Direct).

⁴⁴ Ex. EN-15, Sched. 2 at 48 (Earnest Direct).

⁴⁵ Ex. EN-19 at Sched. 7 (Glanzer Direct). Note that Lines 9, 17, 55, 59, and 79 are not part of the Mainline System. Line 6B is no longer in operation pursuant to a Consent Decree described later in these Findings. Line 13 (the Southern Lights Pipeline), while part of the Mainline System, carries diluent from Illinois to Canada, and is not included in the count of crude oil pipelines comprising the Mainline System.

Pipeline System Configuration

Quarter 1, 2013



23. The Mainline pipelines running through Minnesota include: Lines 1, 2B, 3, 4, 65, and 67.⁴⁶ Line 13, a diluent line, not part of the Mainline System, also travels through Minnesota.⁴⁷

24. The United States portion of Enbridge's Mainline System is called the Lakehead System.⁴⁸ The Lakehead System consists of pipelines in North Dakota, Minnesota, Wisconsin, Illinois, Indiana, Michigan, and New York, and serves refineries in those states.⁴⁹

25. Applicant and its predecessors have been operating pipelines in northern Minnesota since 1949, approximately 65 years.⁵⁰

26. The pipelines comprising the Mainline System operate as an integrated system, meaning that the pipelines work together to transport multiple grades of light and heavy crude oil to various locations in the United States and Canada.⁵¹

27. The crude oil pipeline systems, refineries, and refined products distribution systems in the United States are all interconnected and interdependent, allowing crude oil and refined products to be transported and distributed quickly across the nation.⁵² Enbridge's Mainline System is a part of that national system.⁵³

⁴⁶ Ex. EN-17 at Sched. 7 (Glanzer Direct).

⁴⁷ *Id.*

⁴⁸ Evid. Hrg. Tr. Vol. 6A at 107-108, 134 (Johnston); Ex. EN-42 at 3 (Johnston Rebuttal).

⁴⁹ Ex. EN-24 at 14 (Eberth Direct).

⁵⁰ Ex. EN-42 at 2 (Johnston Rebuttal).

⁵¹ Ex. EN-15 at 20 (Earnest Direct).

⁵² Ex. EN-15, Sched. 2 at 18 (Earnest Direct).

⁵³ Ex. EN-19 at 6 (Glanzer Direct).

28. The United States is divided into five Petroleum Administration for Defense Districts (PADD).⁵⁴ Minnesota is part of PADD II, the Midwest Region. It consists of 15 states: Minnesota, North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, Iowa, Missouri, Wisconsin, Illinois, Michigan, Indiana, Ohio, Kentucky, and Tennessee.⁵⁵ The Enbridge Mainline System can serve all refineries in PADD II either directly or indirectly.⁵⁶

29. To be used by consumers, crude oil must be refined into product (such as jet fuel, diesel fuel, gasoline, asphalt, and other specialty product). There are two refineries in Minnesota, and one refinery in Superior, directly or indirectly served by the Mainline System: the Flint Hills facility in Pine Bend, Minnesota (Flint Hills); the Andeavor (formerly Northern Tier Energy) facility in St. Paul Park, Minnesota (Andeavor); and the Calumet Specialty Products Partners facility in Superior, Wisconsin (Calumet).⁵⁷

D. Existing Line 3

30. The subject matter of this proceeding is Applicant's Existing Line 3, a 1,097-mile pipeline that begins in Alberta, Canada, and ends in Superior, Wisconsin.⁵⁸ Existing Line 3 has been transporting oil through Minnesota since the 1960s, traversing 11 Minnesota counties.⁵⁹

31. Existing Line 3 begins in Edmonton, Alberta, Canada, and crosses the Canada/U.S. border near Gretna, Canada and Neche, North Dakota.⁶⁰ From there, the line continues through the northeastern tip of North Dakota, entering into Minnesota in Kittson, County.⁶¹ From Kittson County, the line travels southeast to a terminal in Clearbrook, Minnesota, where it connects with other lines. After Clearbrook, Existing Line 3 travels east/southeast through the entirety of Minnesota, crosses the Minnesota/Wisconsin border, and ends in Superior, Wisconsin, as depicted below:⁶²

⁵⁴ During World War II, the Petroleum Administration for War, established by Executive Order in 1942, created and used five defense districts to ration gasoline. Although the Administration was abolished after the war in 1946, Congress passed the Defense Production Act of 1950, which created the Petroleum Administration for Defense and used the same five districts, only now called the Petroleum Administration for Defense Districts. The PADDs help the U.S. Energy Information Administration (EIS) (and others) assess regional petroleum product supplies and analyze patterns of crude oil and petroleum product movements throughout the nation. See <https://www.eia.gov/todayinenergy/detail.php?id=4890>.

⁵⁵ <https://www.eia.gov/todayinenergy/detail.php?id=4890>.

⁵⁶ Ex. EN-15 at 13 (Earnest Direct).

⁵⁷ Ex. EN-15, Sched. 2 at 17 (Earnest Direct).

⁵⁸ Ex. EN-24 at 6 (Eberth Direct).

⁵⁹ Ex. EN-24 at 5 (Eberth Direct).

⁶⁰ Ex. EN-1 at 2-4 (CN Application).

⁶¹ *Id.*

⁶² *Id.*

ENBRIDGE LINE 3 PIPELINE



SOURCE: MAPBOX STREETS

THE CANADIAN PRESS

32. Line 3 has two main connection points: the Clearbrook terminal and the Superior terminal.⁶³

33. The Clearbrook terminal is a connection point for five other lines in the Mainline System (Lines 1, 2B, 4, 67, and 65).⁶⁴ Minnesota's two refineries (Flint Hills and Andeavor) receive all of their crude oil supplies from Clearbrook, either from the Enbridge Mainline System (Canadian heavy crude) or the North Dakota Pipeline (Bakken light crude).⁶⁵ Crude going to the Minnesota refineries is diverted at Clearbrook to the Minnesota Pipeline, which directly serves the two Minnesota refineries.⁶⁶

34. Line 3 terminates in Superior, Wisconsin, at Enbridge's Superior terminal. The Superior terminal hosts 45 storage tanks, provides a connection to the Calumet refinery, and connections to four other of Enbridge's outgoing pipelines (Lines 5, 6A, 14/64, and 61).⁶⁷ These four outgoing pipelines provide access to Midwest refineries, Eastern Canada refineries, and U.S. Gulf Coast refineries.⁶⁸

35. The Minnesota portion of Existing Line 3 consists of 282 miles of 34-inch diameter pipe, stretching across the state from its North Dakota border on the west to its Wisconsin border on the east.⁶⁹

⁶³ Ex. EN-19 at 5-6 (Glanzer Direct).

⁶⁴ Ex. EN-19 at Sched. 7 (Glanzer Direct).

⁶⁵ Ex. EN-15, Sched. 2 at 9 (Earnest Direct).

⁶⁶ Evid. Hrg. Tr. Vol. 7B at 94 (Eberth).

⁶⁷ Ex. EN-19 at 6; Sched. 7 (Glanzer Direct).

⁶⁸ Ex. EN-19 at 6 (Glanzer Direct).

⁶⁹ Ex. EN-24 at 5 (Eberth Direct).

E. Project Overview

36. The proposed Project is part of Enbridge's "Line 3 Replacement Program," a \$7.5 billion dollar undertaking that seeks to replace the existing Line 3 with a new Line 3 pipeline in Canada, North Dakota, Minnesota, and Wisconsin, as depicted below:⁷⁰



37. The Project before the Commission for consideration consists of the just the Minnesota portion of the Line 3 Replacement Program. The estimated cost of the Minnesota portion of the Line 3 Replacement Program is \$2.1 billion.⁷¹

38. The Project, in Minnesota, seeks to take out of service and leave in-ground Existing Line 3 and "replace" it with a new, wider pipeline, having a partially new and different route through Minnesota than does the Existing Line 3. The proposed Project seeks to abandon all 282 miles of Existing Line 3 and construct an entirely new Line 3, which would be longer (340 miles vs. 282 miles) and wider (36-inch diameter vs. 34-inch diameter) than the Existing Line 3.⁷² The new pipeline would create a new oil pipeline corridor in Minnesota for nearly 50 percent of the route.⁷³

39. Enbridge has received regulatory approvals for a new Line 3 in Wisconsin, North Dakota, and Canada.⁷⁴ Canada's National Energy Board (NEB) approved the construction of the Canadian portion of the new Line 3 in 2016.⁷⁵ No permits were required in North Dakota or Wisconsin.⁷⁶ (Only a small portion of the line crosses those

⁷⁰ Ex. EN-24 at 6 (Eberth Direct).

⁷¹ Ex. EN-24 at 6 (Eberth Direct).

⁷² Ex. EN-24 at 5 (Eberth Direct).

⁷³ Ex. EN-24 at 5 (Eberth Direct).

⁷⁴ Thief River Pub. Hrg. Tr. (Vol. 1B) at 75-76 (Eberth); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 124 (Eberth).

⁷⁵ Ex. EN-24 at 8 (Eberth Direct).

⁷⁶ Ex. EN-24 at 9 (Eberth Direct).

states - approximately 28 miles in North Dakota and approximately 14 miles in Wisconsin.⁷⁷⁾

40. In North Dakota, the line falls within Applicant's existing right-of-way, so Applicant is exempt from permitting requirements as a maintenance and replacement project.⁷⁸ Also, Applicant is merely replacing 34-inch diameter pipe with 34-inch diameter pipe in North Dakota.⁷⁹ In Wisconsin, Applicant is conducting replacement of the line in adjacent right-of-way and Applicant was able to procure the right-of-way without the use of eminent domain, thereby negating the need for a permit approval by the Wisconsin Public Service Commission.⁸⁰ Replacement of the line in Wisconsin involves 36-inch diameter pipe.⁸¹ Construction has begun in Canada and Wisconsin, and will be completed whether or not the Project is approved in Minnesota.⁸²

41. Apparently confident that it will obtain the necessary CN and RP in Minnesota, Applicant has begun construction on Line 3 in both Canada and Wisconsin.⁸³ In addition, in the spring of 2015, Applicant placed the order for all pipe required for its proposed line (both the U.S. and Canadian portion), including the pipe necessary for the Minnesota portion.⁸⁴ A majority of the pipe (between 50 and 60 percent) has already been delivered in the United States and is currently stored in six storage yards in Minnesota along the proposed route.⁸⁵ The cost of the pipe for the U.S. portion of the line is approximately \$300 million, of which \$200 million has already been paid.⁸⁶

F. Applicant's Preferred Route (APR)

42. Unlike in Wisconsin and North Dakota, where Applicant is replacing the old Line 3 with a new Line 3 in the same corridor as the existing line, in Minnesota (where the large majority of the U.S. portion of Line 3 runs), Applicant is proposing an entirely new pipeline corridor for approximately 47 percent of the line.⁸⁷

⁷⁷ Ex. EN-1 at 2-4 (CN Application)

⁷⁸ Thief River Pub. Hrg. Tr. (Vol. 1B) at 75-76 (Sept. 26, 2017) (Eberth); Evid. Hrg. Tr. Vol. 2B at 36 (Simonson).

⁷⁹ Ex. DER-1 at 21 (O'Connell Direct).

⁸⁰ Ex. EN-24 at 9 (Eberth Direct); Thief River Pub. Hrg. Tr. (Vol. 1B) at 75-76 (Sept. 26, 2017) (Eberth); Evid. Hrg. Tr. Vol. 2A at 115 (Simonson).

⁸¹ Ex. DER-1 at 21 (O'Connell Direct).

⁸² Evid. Hrg. Tr. Vol. 2A at 117 (Simonson).

⁸³ Thief River Pub. Hrg. Tr. (Vol. 1B) at 75-76 (Sept. 26, 2017) (Eberth); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 124 (Oct. 12, 2017) (Eberth).

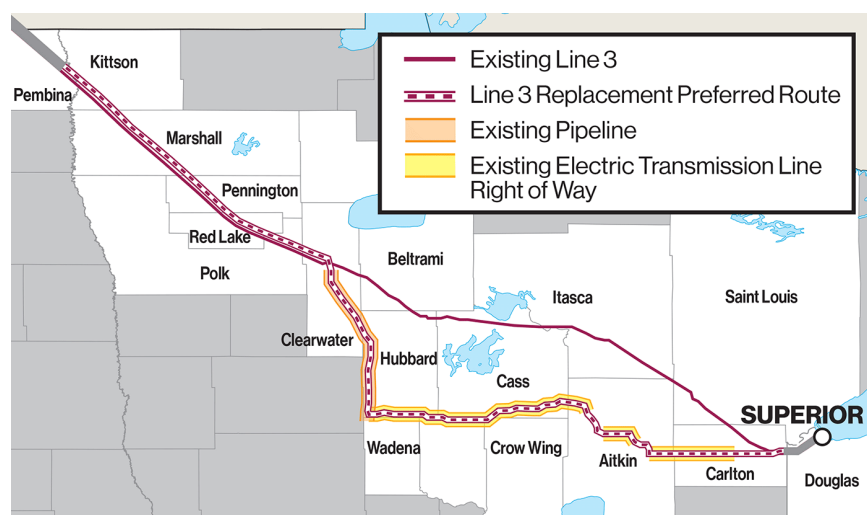
⁸⁴ Evid. Hrg. Tr. Vol. 2A at 35-36 (Simonson).

⁸⁵ Evid. Hrg. Tr. Vol. 2A at 45 (Simonson); Evid. Hrg. Tr. Vol. 2B at 18 (Simonson).

⁸⁶ Evid. Hrg. Tr. Vol. 2A at 45 (Simonson). If the Project does not get approved in Minnesota, and the Project is "terminated" by the Representative Shipper Group, the monies expended for pipe would be recoverable by Applicant from the shippers through a surcharge or tariff. See Ex. EN-1 at Appendix D (RSG Issue Resolution Sheet); Evid. Hrg. Tr. Vol. 1B at 118 (Fleeton).

⁸⁷ The Minnesota portion of the APR is approximately 340 miles. Ex. EN-24 at 5 (Eberth Direct). According to Applicant's witness Barry Simonson, the North Dakota border-to-Clearbrook segment is 111 miles and the Clearbrook-to-Wisconsin border segment is 226 miles (65.5 miles from Clearbrook to Park Rapids, and 160.5 miles from Park Rapids to Carlton County). Ex. EN-22 at 8-9 (Simonson Direct). The North Dakota Border-to-Clearbrook segment follows the Mainline corridor (111 miles). The Clearbrook-to-Park Rapids

43. Applicant's Preferred Route (APR) for the Project runs parallel to the Existing Line 3 from the North Dakota/Minnesota border in Kittson County to Clearbrook in Clearwater County, Minnesota. After Clearbrook, the APR takes a new direction, opening a new corridor through Clearwater, Hubbard, Wadena, Cass, Crow Wing, Aitkin, and Carlton Counties in Minnesota, as shown below:⁸⁸



44. As illustrated in the map above, the APR begins at the North Dakota/Minnesota border in Kittson County and extends to the southeast for approximately 111 miles, paralleling the Existing Line 3 to Enbridge's Clearbrook Terminal in Clearwater County (referred to herein as the "North Dakota border-to-Clearbrook segment").⁸⁹ From Clearbrook, the APR deviates substantially from the Existing Line 3, extending south for approximately 65.5 miles, paralleling the Minnesota Pipe Line Company (MinnCan pipeline) right-of-way until the southern portion of Hubbard County near Park Rapids.⁹⁰ At Park Rapids, the APR turns east for approximately 160.5 miles, traveling through Wadena, Cass, Crow Wing, Aitkin, and Carlton Counties, following an existing high voltage transmission line (HVTL) corridor for 73 miles in that segment of the route.⁹¹ In eastern Carlton County, the line rejoins the existing Enbridge Mainline corridor, where it crosses the Wisconsin border, and terminates at Superior, Wisconsin.⁹²

45. While this new route parallels an existing oil pipeline right-of-way from Clearbrook to Park Rapids, it follows an HVTL corridor – not a pipeline corridor – from

segment follows the Minnesota Pipeline corridor (65.5 miles). However, the Park Rapids-to-Carlton County segment does not follow any existing pipeline corridor. Therefore, from Park Rapids to Carlton County, the APR opens a new pipeline corridor. This segment is approximately 47 percent of the APR (163.5 miles of the 340-mile route).

⁸⁸ Ex. EN-1 at Appendix J (CN Application).

⁸⁹ Ex. EN-22 at 8 (Simonson Direct).

⁹⁰ Ex. EN-22 at 9 (Simonson Direct).

⁹¹ Ex. EN-22 at 9 (Simonson Direct); Evid. Hrg. Tr. Vol. 2A at 50 (Simonson).

⁹² Ex. EN-22 at 9 (Simonson Direct).

Park Rapids to eastern Carlton County, thereby creating a new oil pipeline corridor for approximately 47 percent of its route.⁹³

46. In total, the Project, as proposed by Applicant, would cross 12 Minnesota counties: Kittson, Marshall, Pennington, Polk, Red Lake, Clearwater, Hubbard, Wadena, Cass, Crow Wing, Aitkin, and Carlton.⁹⁴

47. Despite having a different route than Existing Line 3, the Proposed Line 3 would still connect at Enbridge's Clearbrook and Superior terminals, like the Existing Line 3, thereby allowing it to integrate into Enbridge's Mainline System.⁹⁵ At Clearbrook, the Project would be able to connect to the existing Minnesota Pipe Line System, which delivers crude to the two Minnesota refineries.⁹⁶ As designed, the new Line 3 would have connectivity to tanks 56, 57, 58, 59, 60, 61, 62, 63, and 64 (like the Existing Line 3) for any product that needs to land in tankage at Clearbrook Terminal. The Project would also be able to deliver product directly to Minnesota Pipe Line without going into tankage.⁹⁷ The Project also maintains the same tankage connectivity to tanks 56, 57, 58, 59, 60, 61, 62, 63 and 64 as the Existing Line 3 for any product that needs injections into Line 3 at Clearbrook Terminal to be delivered to the Superior Terminal in Wisconsin.⁹⁸

48. While the Proposed Line 3 would effectively replace Existing Line 3 with respect to its place in Enbridge's Mainline System, in Minnesota the Project would create an entirely new pipeline (while the old pipelines remains abandoned in-ground) and forge a new pipeline corridor through the state. For Applicant's purposes, the new Line 3 is a replacement. For Minnesota, however, it is a new, longer, and wider pipeline opening a new oil pipeline corridor through the state.

G. System and Route Alternatives

49. As part of the scoping process in this case, the DOC-EERA and Commission identified one system alternative, four route alternatives, and 24 route segment alternatives to study in the EIS.

50. A "system alternative" is a conceptual project alternative that provides comparative analysis for a proposed project.⁹⁹ Unlike a route alternative, which can be selected by the Commission in a RP proceeding, a system alternative cannot actually be

⁹³ Evid. Hrg. Tr. Vol. 2A at 50; Vol. 2B at 28 (Simonson). The Minnesota portion of the APR is approximately 340 miles. Ex. EN-24 at 5 (Eberth Direct). According to Mr. Simonson, the North Dakota border-to-Clearbrook segment is 111 miles and the Clearbrook-to-Wisconsin border segment is 226 miles (65.5 miles from Clearbrook to Park Rapids, and 160.5 miles from Park Rapids to Carlton County). Ex. EN-22 at 8-9 (Simonson Direct). Because the Park Rapids-to-Carlton County segment does not follow an existing oil pipeline corridor, the percentage of the APR that creates a new pipeline corridor is 47 percent (160.5 mile of 340 miles = 47percent of the APR).

⁹⁴ Ex. EN-22 at 9 (Simonson Direct).

⁹⁵ Ex. EN-24 at 5 (Eberth Direct).

⁹⁶ Ex. EN-22 at 8 (Simonson Direct).

⁹⁷ Ex. EN-22 at 8 (Simonson Direct).

⁹⁸ Ex. EN-22 at 8 (Simonson Direct).

⁹⁹ Ex. EERA-29 at 4-8 (FEIS).

permitted as part of this proceeding.¹⁰⁰ The purpose of a system alternative is to provide a comparative analysis for the proposed Project.

51. In this proceeding, FOH has proposed a system alternative that runs from Neche, North Dakota, south through western Minnesota and ending in Joliet, Illinois.¹⁰¹ This alternative is referred to as “System Alternative 04” or “SA-04”.

52. The concept behind SA-04 was to demonstrate the possibility of a pipeline that could avoid northern and central Minnesota (an area dense in natural water-rich resources), and yet transport Western Canada oil to the Central United States, serving the regional petroleum needs of PADD II.¹⁰²

53. SA-04, as originally proposed, is depicted as follows:¹⁰³



54. If a need for the Project is found, the Commission must evaluate the APR in comparison to route alternatives under the criteria set forth in rule and law.¹⁰⁴ A “route alternative” is a relative long section of new pipeline with the same origin, destination, and

¹⁰⁰ Ex. EERA-29 at 4-8 (FEIS).

¹⁰¹ Ex. EERA-29 at 4-8 (FEIS). SA-04 was originally proposed in the Sandpiper Project and has been modified for the Line 3 Project. Ex. EERA-15 at 3.2.1 (Alternatives Screening Report).

¹⁰² Ex. EERA-29 at 4-8 (FEIS).

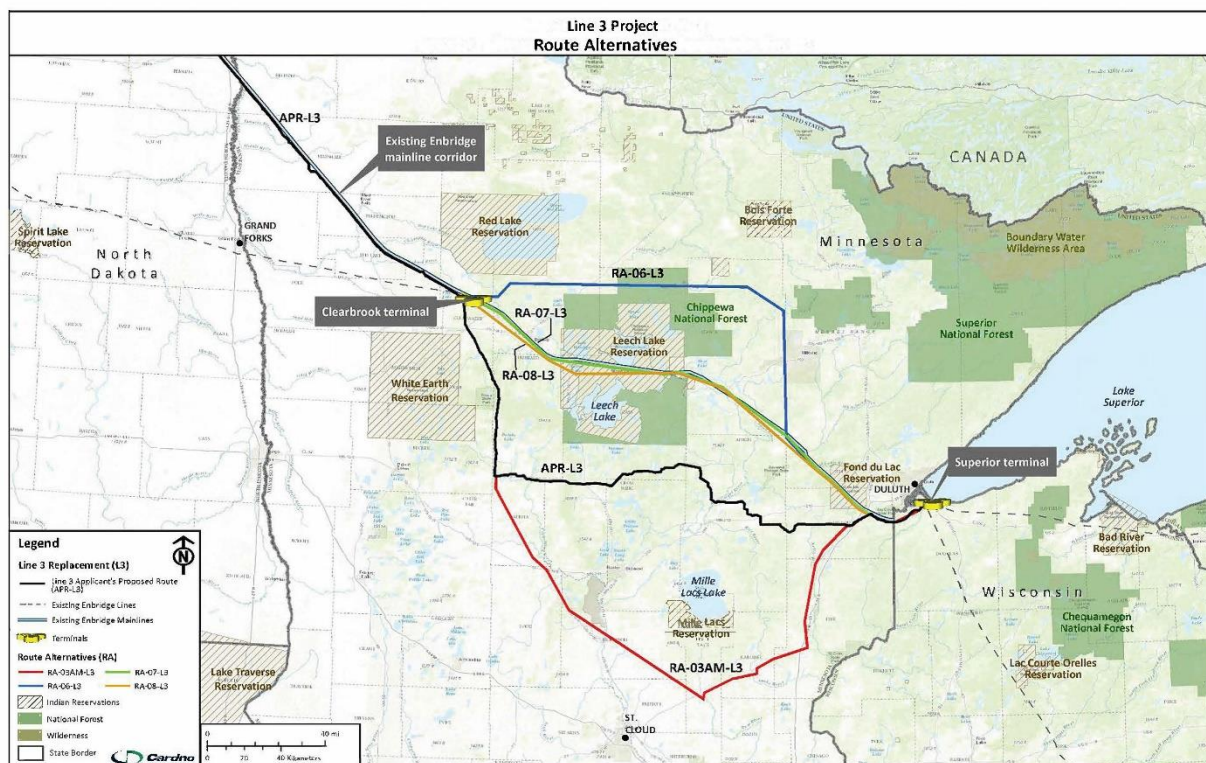
¹⁰³ Ex. EERA-42 at 4-4 (FEIS).

¹⁰⁴ Minn. Stat. § 216G.02, subd. 3(b)(2); Minn. R. 7853.1900.

intermediate points of delivery as those proposed by Applicant, and can be evaluated as an entire route.¹⁰⁵

55. The EIS evaluated four route alternatives in this case: Route Alternative 03, as modified (RA-03AM); Route Alternative 06 (RA-06); Route Alternative 07 (RA-07); and Route Alternative 08 (RA-08).¹⁰⁶ RA-03AM represents the southern alternative; RA-06 represents the northern alternative; RA-07 represents the in-trench replacement alternative; RA-08 represents a modified version of the in-trench replacement alternative.¹⁰⁷

56. All of the route alternatives share the existing Mainline System corridor as the APR between Neche, North Dakota, and Clearbrook, Minnesota. However, from Clearbrook to the Wisconsin border, the route alternatives diverge from the APR.¹⁰⁸ The APR, SA04, and the four route alternatives are illustrated in the map below:¹⁰⁹



57. The EIS also evaluated 24 route segment alternatives (RSAs).¹¹⁰ A "route segment alternative" is a short deviation (from a fraction of a mile to a few miles in length)

¹⁰⁵ Ex. EERA-15 at Table 1 (Alternatives Screening Report).

¹⁰⁶ Ex. EERA-29 at 4-20 (FEIS).

¹⁰⁷ *Id.*

¹⁰⁸ Ex. EERA-29 at ES-9 (FEIS Figure ES-3).

¹⁰⁹ EX. EERA-29 at ES-9 (FEIS Figure ES-3).

¹¹⁰ Ex EERA-29 at 4-29 (FEIS).

along the APR or a proposed route alternative.¹¹¹ These segments begin and end at intermediate points along a route or route alternative, and are proposed to resolve or mitigate a perceived localized resource conflict.¹¹²

58. The system alternative, the four route alternatives, and the route segment alternatives are more fully described in Sections I. F.; IV., I., below.

II. PROCEDURAL HISTORY

59. In the over three years the Line 3 Project has been pending, there has been significant litigation, a related appeal, extensive public comment, procedural challenges, and unprecedented environmental analysis conducted. As a result of: (1) the *Sandpiper* appeal; (2) the length of time necessary for the DOC-EERA to prepare one of the most extensive environmental impact statements in Commission history; (3) an order by the Commission requiring the completion of a Final Environmental Impact Statement prior to the filing of intervenor direct testimony in this case; and (4) a robust and extensive public and evidentiary hearing process, the Commission (with the consent of Applicant) has, understandably, exceeded the one-year deadline to decide this case.

60. All of these processes have served to ensure a thorough analysis and careful consideration of this Project. A summary of the procedural posture of this case is set forth below.

A. Initial Filings and Commencement of the Action

i. Notice Plan

61. On October 24, 2014, Applicant filed with the Commission a Notice Plan, Request for Exemptions, Proposed Protective Order, and Proposed Order for a separate docket for highly sensitive information pertaining to the Project.¹¹³

62. The DOC-DER recommended that the Commission accept Applicant's proposed Notice Plan subject to certain revisions; grant certain exemptions; and deny certain exemptions. The DOC-DER also requested that Applicant provide certain supplemental information.¹¹⁴

63. On November 26, 2014, Applicant asked the Commission to approve its Notice Plan, as revised, grant its Request for Exemptions, approve its request for a separate docket for trade secret and highly sensitive trade secret information, and issue

¹¹¹ Ex. EERA-15 at Table 1 (Alternatives Screening Report).

¹¹² *Id.*

¹¹³ Ex. EN-25 (Pet. for Approval of Notice Plan).

¹¹⁴ Comment by DOC-DER (Nov. 13, 2014) (eDocket No. 201411-104637-01 (CN)). For ease of reference, only the Certificate of Need (CN) Docket number will be cited where documents appear in both the CN and Route Permit (RP) Dockets.

protective orders.¹¹⁵ Applicant also provided the supplemental information requested by DOC-DER.¹¹⁶

64. After reviewing Applicant's revisions to the Notice Plan and supplemental information, the DOC-DER recommended that the Commission accept Applicant's Notice Plan subject to some additional revisions, and grant the requested variances and exemptions.¹¹⁷

65. On December 30, 2014, Applicant filed a revised Notice Plan, which made the changes recommended by DOC-DER.¹¹⁸

66. The Commission met to discuss Applicant's proposed Notice Plan and requested exemptions, variances, and protective orders on January 6, 2015.¹¹⁹ On January 27, 2015, the Commission issued an Order Approving Notice Plan, Granting Variance Request, Approving Exemption Requests, and Approving and Adopting Orders for Protection and Separate Docket.¹²⁰ A separate docket, MPUC Docket No. PL-9/CN-15-340 (HSTS Docket) was created to facilitate the filing of highly sensitive nonpublic data. The only individuals or parties that have access to Docket No. 15-340 are the Administrative Law Judge, Commission, Applicant, DOC-DER, and DOC-EERA.

67. In February 2015, Applicant implemented the Notice Plan approved by the Commission.¹²¹

68. Between February 2, 2015, and February 15, 2015, Applicant published newspaper notice to members of the public in areas reasonably likely to be affected by the Project.¹²² The notice was published in 30 local newspapers in 15 counties, as well as the *Star Tribune*, *Pioneer Press*, *Duluth News Tribune*, and *Grand Forks Herald*.¹²³

69. Applicant sent notice by mail to all landowners and mailing addresses reasonably likely to be affected by the Project.¹²⁴ The initial mailing was sent on February

¹¹⁵ Reply Comment by Applicant (Nov. 26, 2014) (eDocket No. 201411-104995-01 (CN)).

¹¹⁶ *Id.*

¹¹⁷ Response to Reply Comment by DOC-DER (Dec. 4, 2014) (eDocket No. 201412-105187-01 (CN)).

¹¹⁸ Reply Comment by Applicant (Jan. 27, 2015) (eDocket No. 201412-105817-01 (CN)).

¹¹⁹ January 6, 2015 Agenda Meeting (Mar. 6, 2015) (eDocket No. 20153-108006-06 (CN)).

¹²⁰ Ex. PUC-1 (Order Approving Notice Plan, Granting Variance Request, Approving Exemption Requests, and Approving and Adopting Orders for Protection and Separate Docket) (On page 3, the Commission stated that it "concurs with the Department that persons involved in the related Sandpiper and Line 67 Upgrade proceedings would benefit from knowing about this project, intended to be co-located with the Sandpiper project. To avoid confusion over multiple filings of information in this and other dockets, however, the Commission will require Applicant to serve notice of the Line 3 project on the service lists in the other two dockets – the Sandpiper and Line 67 Upgrade dockets – rather than requiring Applicant to serve all documents in this case in the other two dockets.")

¹²¹ Ex. EN-26 (Certificate of Need Notice Plan Compliance Filing).

¹²² Ex. EN-26 (Certificate of Need Notice Plan Compliance Filing).

¹²³ Ex. EN-26 (Certificate of Need Notice Plan Compliance Filing).

¹²⁴ Ex. EN-26 (Certificate of Need Notice Plan Compliance Filing).

19, 2015, and additional mailings were sent to corrected addresses on March 12 and 23, 2015.¹²⁵

70. Applicant also sent notice by mail to tribal governments and the governments of towns, statutory cities, home rule charter cities, and counties whose jurisdictions are reasonably likely to be affected by the Project, as well as members of the state legislature and Congress representing constituents in the area.¹²⁶ The initial mailing was sent on February 18, 2015, and additional mailings were sent to corrected addresses on February 27, 2015, and March 23, 2015.¹²⁷

71. Applicant also served notice of the Project on the service lists in the Sandpiper Docket, MPUC Docket No. PL-6668/CN-13-473, and the Line 67 Upgrade Docket, MPUC Docket No. PL-9/CN-13-153.¹²⁸

72. On April 13, 2015, the Commission issued a Protective Order and a Protective Order for Nonpublic Highly Sensitive Trade Secret Data.¹²⁹

ii. Certificate of Need and Route Permit Applications

71. On April 24, 2015, Applicant filed its Certificate of Need Application for the Project.¹³⁰

72. Applicant also filed a Pipeline Routing Permit Application for the Project (RP Application) on the same day.¹³¹ The filing of the RP Application initiated the opening of a new docket, MPUC Document No. PL-9/PPL-15-137 (RP Docket), separate and apart from the CN proceeding which is identified as MPUC Docket No. PL-9/CN-14-916 (CN Docket).

73. On April 28, 2015, the Commission issued a Notice of Comment Period on the Completeness of the CN and RP Applications.¹³² The Commission advised that the initial comment period would close on May 12, 2015, and that the reply comment period would close on May 19, 2015.¹³³

74. Initial comments were received from DOC-DER, DOC-EERA, Carlton County Land Stewards (CCLS), Friends of the Headwaters, the Minnesota Department of Natural Resources (MDNR), the Minnesota Pollution Control Agency (MPCA),

¹²⁵ Ex. EN-26 (Certificate of Need Notice Plan Compliance Filing).

¹²⁶ Ex. EN-26 (Certificate of Need Notice Plan Compliance Filing).

¹²⁷ Ex. EN-26 (Certificate of Need Notice Plan Compliance Filing).

¹²⁸ Ex. EN-26 (Certificate of Need Notice Plan Compliance Filing).

¹²⁹ Ex. PUC-3 (Protective Order); Ex. PUC-2 (Protective Order for Nonpublic Highly Sensitive Trade Secret Data).

¹³⁰ Ex. EN-1 (Certificate of Need Application).

¹³¹ Ex. EN-4 (Route Permit Application).

¹³² Ex. PUC-4 (Notice of Comment Period on Completeness of Certificate of Need and Route Permit Applications).

¹³³ Ex. PUC-4 (Notice of Comment Period on Completeness of Certificate of Need and Route Permit Applications).

Minnesota Center for Environmental Advocacy (MCEA), and numerous members of the public.¹³⁴ Applicant was the only party to file reply comments.¹³⁵

75. On May 4, 2015, Applicant filed a revised Appendix B to the RP Application, which contained updated project maps.¹³⁶

76. Kennecott Exploration Company (Kennecott) filed a Petition to Intervene in the RP Docket on May 11, 2015.¹³⁷ The Petition was unopposed and Kennecott was granted full party status in the RP Docket by operation of law.¹³⁸

77. On May 12, 2015, DOC-DER recommended that the Commission declare the CN Application complete upon the submission of additional information, and refer the petition to the Office of Administrative Hearings (OAH) for a contested case proceeding.¹³⁹

78. Also on May 12, 2015, FOH filed a letter requesting an extension of the comment deadline.¹⁴⁰

79. On May 13, 2015, DOC-EERA submitted comments and recommendations to the Commission on the completeness of the RP Application pursuant to Minn. R. 7852.2100 to 7852.3100 (2015).¹⁴¹ The DOC-EERA recommended that the Commission: (1) approve the variance request to the 70-day time limit in Minn. R. 7852.1400 (2015) to allow more time for route alternatives to be submitted; (2) determine that an advisory task force or other outreach effort is warranted pursuant to Minn. R. 7852.1100 (2015); (3) approve the DOC-EERA's proposed project budget of up to \$700,000; (4) authorize the DOC-EERA staff to implement the requirements of the review process in Minn. Rules 7852.1300 (2015) (Public Information Meetings), 7852.1400 (2015) (Route Proposal Acceptance), and 7852.1500 (2015) (Alternative Route Analysis).¹⁴²

80. On May 14, 2015, the Laborers' Council filed a Petition for Intervention in both the CN and RP Dockets.¹⁴³ The Petition was unopposed and the Laborers' Council was granted full party status by operation of law.¹⁴⁴

¹³⁴ Briefing Papers July 1, 2015 Agenda (June 24, 2015) (eDocket Nos. 20156-111725-02_(CN),_20156-111725-01_(R)).

¹³⁵ Briefing Papers July 1, 2015 Agenda (June 24, 2015) (eDocket Nos. 20156-111725-02 (CN),_20156-111725-01_(R)).

¹³⁶ Ex. EN-5 (Errata Appendix B - Route Permit Maps Part 7 of 12).

¹³⁷ Kennecott Pet. to Intervene (May 11, 2015) (eDocket No. 20155-110313-01 (RP)).

¹³⁸ See Order Finding Application Substantially Complete and Varying Timelines at 1 (Aug. 12, 2015) (eDocket No. 20158-113179-01) (RP)).

¹³⁹ Comment by DOC-DER (May 12, 2015) (eDocket No. 20155-110354-01 (CN)).

¹⁴⁰ Extension Request (May 12, 2015) (eDocket Nos. 20155-110360-03 (CN); 20155-110360-04 (RP)).

¹⁴¹ Comment by DOC-EERA (May 13, 2015) (eDocket No. 20155-110371-01 (RP)).

¹⁴² *Id.*

¹⁴³ Laborers' Council Pet. to Intervene (May 14, 2015) (eDocket Nos. 20155-110417-03 (CN), 20155-110417-04 (RP)).

¹⁴⁴ See Notice of Hearing at 2-3 (Feb. 1, 2016) (eDocket No. 20162-117889-01) (RP)).

81. Pursuant to Minn. R. 7829.2500, subp. 5, the Applicant published notice of the filing of the CN Application in newspapers of general circulation throughout the State of Minnesota on May 24, 2015 (specifically, the *Star Tribune* and *St. Paul Pioneer Press*).¹⁴⁵

82. On June 29, 2015, Applicant filed supplemental information relating to pumping stations and transmission lines associated with the Project.¹⁴⁶

83. The Commission met on July 1, 2015, to discuss the completeness of Applicant's CN and RP Applications, as well as various procedural and administrative items.¹⁴⁷ The Commission agreed to authorize the DOC-EERA to: (1) administer the alternative route proposal development process under Minn. R. 7852.1400; (2) extend the 70-day time limit for people to complete their alternative pipeline route proposals (Minn. R. 7852.1400, subp. 3C); (3) vary Minn. R. 7852.1400, subp. 4, to extend the time limits associated with Commission approval of route alternatives to be considered at hearing; (4) alter Minn. R. 7852.1300, subp. 1, to authorize public information meetings in areas near and conveniently spaced along the proposed route (in lieu of meetings within every county along the route); and (5) recommended that at least one required meeting be held on or near tribal lands.¹⁴⁸

84. On July 16, 2015, Applicant filed an updated supplemental response providing estimated lengths for the four transmission lines planned for the Project.¹⁴⁹

85. On July 20, 2015, the Commission and DOC-EERA issued a joint Notice of Application Acceptance - Public Information and Environmental Analysis Scoping Meetings.¹⁵⁰ The Notice announced the acceptance of the CN and RP Applications, and contained information about the public information and environmental analysis scoping meetings pursuant to Minn. R. 7852.0900 (2015).¹⁵¹ The Notice advised of 14 public information/scoping meetings to occur between August 11 and August 26, 2015.¹⁵² The DOC-EERA issued a Revised Notice on August 17, 2015, to accommodate a request

¹⁴⁵ Affidavit of Publication (June 10, 2015) (eDocket No. 20156-111315-01 (CN)).

¹⁴⁶ Supplemental Response (June 29, 2015) (eDocket Nos. 20156-111819-01 (CN); 20156-111819-02 (RP)); Briefing Papers July 1, 2015 Agenda (June 24, 2015) (eDocket Nos. 20156-111725-02 (CN); 20156-111725-01 (RP)); Comment by FOH (May 12, 2015) (eDocket Nos. 20155-110359-02 (CN); 20155-110359-01 (RP)).

¹⁴⁷ Notice of Commission Meeting (June 19, 2015) (eDocket Nos. 20156-111585-13 (CN); 20156-111585-10 (RP)); Corrected Notice of Commission Meeting (June 19, 2015) (eDocket Nos. 20156-111599-11 (CN); 20156-111599-12 (RP)); Minutes July 1, 2015 Agenda (Nov. 12, 2015) (eDocket Nos. 201511-115672-07 (CN); 201511-115672-01 (RP)).

¹⁴⁸ Ex. PUC-6 (Order Finding Application Substantially Complete and Varying Timelines - Notice of and Order for Hearing).

¹⁴⁹ Updated Supplemental Response (July 16, 2015) (eDocket No. 20157-112494-02 (RP)).

¹⁵⁰ Ex. PUC-5 (Notice of Application Acceptance – Public Information and Environmental Analysis Scoping Meetings).

¹⁵¹ *Id.*

¹⁵² *Id.*; see also Ex. PUC-6 (Order Finding Application Substantially Complete and Varying Timelines - Notice of and Order for Hearing); Order Finding Application Substantially Complete and Varying Timelines (Aug. 12, 2015) (eDocket No. 20158-113179-01 (RP)) (related to the varying of requirements set forth in Minn. R. 7829.3200 and 7852.1300).

from the Mille Lacs Band of Ojibwe (Mille Lacs) to hold a meeting at the East Lake Community Center in McGregor, resulting in a 15th public meeting.¹⁵³

iii. Completeness Findings

86. On August 12, 2015, the Commission issued a combined Order Finding Application Substantially Complete and Varying Timelines; and Notice of and Order for Hearing in the CN Docket.¹⁵⁴ In the Order, the Commission: (1) accepted the CN Application as substantially complete; (2) granted certain variances; (3) ordered Applicant to publicize its CN Application in a certain manner; (4) referred the matter to the OAH for a contested case proceeding (including public and evidentiary hearings); and (5) placed certain requirements on the notice of public and evidentiary hearings.¹⁵⁵ The Commission noted that its rules for pipelines, Minn. R. ch. 7853 (2015), “do not call for the preparation of a separate environmental document within that [CON] process.”¹⁵⁶ Nonetheless, the Commission authorized the DOC-EERA to prepare “an environmental analysis of the Line 3 proposal.”¹⁵⁷

87. The Order directed the administrative law judge to: (1) convene at least one public hearing on the CN Application; (2) work with Commission staff in developing hearing notices; (3) emphasize the one-year statutory timeframe for the Commission to make a final decision on the application and encourage the parties/participant to adhere to that schedule; (4) prepare a report consisting of findings of fact, conclusions, and recommendations on the merits of the proposed Project and alternatives; and (5) in her report, provide comments and recommendations on the conditions and provisions of the CN.¹⁵⁸ The Commission did not order the Administrative Law Judge to make recommendations on or determine the adequacy of the DOC-EERA’s environmental review.

88. On the same day that the Commission issued the Order finding the CN Application substantially complete (August 12, 2015), the Commission also issued an Order in the RP Docket.¹⁵⁹ In its Order, the Commission: (1) varied the deadline for determining completeness of the RP Application; (2) accepted the RP Application as substantially complete; (3) directed Applicant to publicize its RP Application; (4) authorized the DOC-EERA to establish citizen advisory committees; (5) directed the DOC to administer the alternative route proposal development process; (6) granted the DOC certain variances related to the route development process; (7) varied the location of

¹⁵³ Ex. EERA-1 (Notice of Line 3 Permit Application Acceptance and Public Information and Scoping Meetings).

¹⁵⁴ Ex. PUC-6 (Order Finding Application Substantially Complete and Varying Timelines - Notice of and Order for Hearing).

¹⁵⁵ *Id.*

¹⁵⁶ *Id.* at 6.

¹⁵⁷ *Id.*

¹⁵⁸ *Id.* at 11-12.

¹⁵⁹ Order Finding Application Substantially Complete and Varying Timelines (Aug. 12, 2015) (eDocket No. 20158-113179-01.(RP)). On page 5 of the Order, the Commission notes that although Minn. R. 7853.0200, subp. 7, provides 15 days for the Commission to determine whether a petition for a certificate of need is complete, “15 days is not enough time in which to review a filing as large and complex as Applicant’s.”

public information hearings; and approved the DOC's proposed application fee of \$700,000 to recover the costs incurred in processing the RP Application.¹⁶⁰ The Commission did not, at that time, refer the RP Application to the OAH for a contested case proceeding.¹⁶¹

B. Scoping and Environmental Review Process

i. Commencement of Scoping Process

89. The environmental analysis scoping period, conducted under Minn. R. 7852.1300, began on July 20, 2015 (upon the Notice of Application Acceptance), and continued through September 30, 2015 (the end of the comment period).

90. Pursuant to Minn. R. 7852.1300, Applicant published newspaper notice of the public information meetings in each county crossed by the Project between July 29, 2015, and August 13, 2015.¹⁶² In addition, on August 25 and 26, 2015, Applicant published newspaper notice of the additional meeting in McGregor, Minnesota.¹⁶³ Notice of the meetings was also published in state-wide notice and regional newspapers on July 31, 2015, as well as tribal newspapers and/or publications.¹⁶⁴

91. In addition, pursuant to Minn. R. 7852.2000, subp. 6 (2015), Applicant mailed copies of the CN and RP Applications to local libraries and government centers on July 28, 2015.¹⁶⁵ Applicant provided additional copies of the Applications to the Commission for distribution to government agencies, tribal governments, local, state, and federal government officials, and landowners; as well as posted them on its publicly-available project website.¹⁶⁶

ii. Public Scoping Meetings and Comment Period

92. Between August 11, 2015, and August 27, 2015, Commission staff and DOC-EERA conducted 15 public information/scoping meetings in 10 of the 12 counties crossed by the proposed Project.¹⁶⁷

¹⁶⁰ Order Finding Application Substantially Complete and Varying Timelines (Aug. 12, 2015) (eDocket No. 20158-113179-01_(RP)).

¹⁶¹ *Id.*

¹⁶² Ex. EERA-2 (Newspaper Publication of 2015 Public Information Meetings).

¹⁶³ *Id.*

¹⁶⁴ *Id.*

¹⁶⁵ *Id.*

¹⁶⁶ *Id.*

¹⁶⁷ Ex. PUC-5 (Notice of Application Acceptance and Public Information and Environmental Analysis Scoping Meetings); Ex. EERA-1 (Notice of Line 3 Permit Application Acceptance and Public Information and Scoping Meetings).

93. The Commission received hundreds of comments during the public comment period.¹⁶⁸ The DOC-EERA filed the public comments, including the transcripts from the scoping meetings, on eDockets on October 7, 2015.¹⁶⁹

94. On September 5, 2015, the Sierra Club filed a Petition to Intervene in the CN Docket.¹⁷⁰

95. Thereafter, Sierra Club filed a Motion to Continue Prehearing Conference based upon an anticipated Minnesota Court of Appeals decision related to the Sandpiper Project.¹⁷¹ FOH filed a similar motion.¹⁷² Applicant opposed both motions.¹⁷³

96. On September 9, 2015, the Minnesota Chamber of Commerce (Chamber) filed Petitions to Intervene in both the CN and RP Dockets.¹⁷⁴ The Petitions were unopposed and the Chamber was granted full party status by operation of law.¹⁷⁵

97. On September 11, 2015, the Administrative Law Judge¹⁷⁶ issued an order denying the motions to continue the prehearing conference.¹⁷⁷ A First Prehearing Conference was held on September 14, 2015.

98. On the same day of the scheduled First Prehearing Conference, the Minnesota Court of Appeals issued a decision involving the Sandpiper Project that would ultimately impact the proceedings and timelines in this case.¹⁷⁸ In the *Sandpiper* case, the Court held that “[w]hen certificate of need proceedings precede routing permit proceedings for a large oil pipeline, the Minnesota Environmental Policy Act requires that an environmental impact statement be completed before a final decision is made on the certificate of need.”¹⁷⁹ Based upon the holding in *Sandpiper*, the Commission was required to complete a full EIS prior to making a decision on Applicant’s CN Application.

99. On September 15, 2015, the Administrative Law Judge issued a First Prehearing Order granting the Sierra Club and the Chamber full party status in the CN

¹⁶⁸ Order Denying Motions, Approving Scoping Decision as Modified, and Requiring Expanded Notice (Nov. 30, 2016) (eDocket Nos. 201611-126917-02 (CN), 201611-126917-01 (RP)); see also Ex. EERA-3 (Comments from 2015 Public Information and Scoping Meetings).

¹⁶⁹ Ex. EERA-3 (Comments from 2015 Public Information and Scoping Meetings).

¹⁷⁰ Pet. to Intervene (Sept. 4, 2015) (eDocket Nos. 20159-113787-01 (CN); 20159-113790-01 (RP)).

¹⁷¹ Motion to Continue Prehearing Conference (Sept. 8, 2015) (eDocket No. 20159-113814-01 (CN)).

¹⁷² Motion to Continue Prehearing Conference (Sept. 11, 2015) (eDocket No. 20159-113936-01 (CN)).

¹⁷³ Response Objecting to Motion to Continue Prehearing Conference (Sept. 11, 2015) (eDocket No. 20159-113924-01 (CN)).

¹⁷⁴ Pet. to Intervene (Sept. 9, 2015) (eDocket Nos. 20159-113867-01 (CN); 20159-113790-01 (RP)). The Chamber filed a Petition for Reconsideration on Feb. 3, 2016 and subsequently discontinued its involvement in the case as an intervenor but did not file a notice of withdrawal.

¹⁷⁵ Notice of Hearing at 2-3 (Feb. 1, 2016) (eDocket No. 20162-117889-01 (RP)).

¹⁷⁶ Administrative Law Judge Barbara Neilson was originally assigned to this matter. The matter was re-assigned to Judge Ann O'Reilly on February 4, 2016, after the completion of the scoping process.

¹⁷⁷ Order on Sierra Club’s Motion to Continue Prehearing Conference (Sept. 11, 2015) (eDocket No. 20159-113932-01 (CN)).

¹⁷⁸ *In re Application of N. Dakota Pipeline Co. LLC*, 869 N.W.2d 693 (Minn. Ct. App. 2015), review denied (Minn. Dec. 15, 2015) (referred to herein as the *Sandpiper* case).

¹⁷⁹ *Id.* at 694.

Docket.¹⁸⁰ The Order also indefinitely continued the prehearing conference pending further action by the Commission on how to proceed in light of the decision in the *Sandpiper* case.¹⁸¹

100. On September 23, 2015, Sierra Club filed a Motion to Suspend or Extend or Reopen the Scoping Comment Period.¹⁸² Applicant opposed the motion.¹⁸³

101. Two days later, on September 25, 2015, Applicant filed a Petition for Referral of Route Permit Proceedings to the OAH and Request for Comments.¹⁸⁴

102. On September 30, 2015, Mille Lacs filed a Petition to Intervene in the CN docket.¹⁸⁵

103. On November 9, 2015, the Administrative Law Judge issued an Order granting Mille Lac's Petition to Intervene, certifying to the Commission the Administrative Law Judge's indefinite continuance decision, and certifying the Commission for decision Sierra Club's Motion to Suspend, Extend, or Reopen the Scoping Comment Period.¹⁸⁶ In the Order, Mille Lacs was granted full party status in the CN Docket.¹⁸⁷

104. Pursuant to Minn. R. 7852.1400, subp. 1, on November 30, 2015, the DOC-EERA submitted Comments and Recommendations to the Commission on the Line 3 Route Alternative Proposals (DOC-EERA Line 3 Route Alternatives Report).¹⁸⁸ The Report summarized the comments received during the scoping period and recommended for analysis 11 new route alternatives (in addition to the route alternatives previously approved for the co-located portions of the Sandpiper Project).¹⁸⁹

¹⁸⁰ First Prehearing Order (Sept. 15, 2015) (eDocket No. 20159-114009-01 (CN)).

¹⁸¹ *Id.* Note that both the North Dakota Pipeline Company and the Commission petitioned the Minnesota Supreme Court for review of the Court of Appeals' decision in the Sandpiper case. The petitions for review were both denied. In its Petition for Review, Applicant argued that the Court of Appeals decision to require an EIS "mandat[ed] unnecessary duplication and delay." *In re App. of N. Dakota Pipeline Co. LLC for a Certificate of Need for the Sandpiper Pipeline Project in Minn.*; *In re App. of N. Dakota Pipeline Co. LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project in Minn.*, No. A15-0016, North Dakota Pipeline Company LLC's Petition for Review and Petitioner's Addendum at 5 (Oct. 14, 2015).

¹⁸² Motion to Suspend, Extend or Reopen Scoping Period (Sept. 23, 2015) (eDocket Nos. 20159-114235-01 (CN); 20159-114235-02 (RP)).

¹⁸³ Response in Opposition to Sierra Club Motion to Suspend or Extend or Reopen the Scoping Comment Period (Oct. 5, 2015) (eDocket Nos. 201510-114602-04 (CN); 201510-114602-03 (RP)).

¹⁸⁴ Pet. for Referral of Route Permit Proceedings to the OAH and Request for Comments (Sept. 25, 2015) (eDocket Nos. 20159-114295-03 (CN); 20159-114295-04 (RP)).

¹⁸⁵ Mille Lacs Petition to Intervene (Sept. 30, 2015) (eDocket No. 20159-114468-01 (CN)).

¹⁸⁶ Order Granting Pet. to Intervene of Mille Lacs Band of Ojibwe and Certifying the ALJ's Indefinite Continuance Decision and the Sierra Club's Motion to Suspend, Extend, or Reopen the Scoping Comment Period to the Commission (Nov. 9, 2015) (eDocket No. 201511-115589-01 (CN)).

¹⁸⁷ *Id.*

¹⁸⁸ Ex. EERA-4 (Comments and Recommendations on Line 3 Route Alternative Proposals).

¹⁸⁹ *Id.*

105. On December 8, 2015, the Commission issued a Notice Requesting Information from Official Parties in which the Commission requested comments from the parties regarding DOC-EERA's Line 3 Route Alternative Routes Report.¹⁹⁰

106. On December 17, 2015, two days after the Minnesota Supreme Court denied the petitions for review of the *Sandpiper* case, the Commission convened to discuss the CN and RP Applications. The Commission discussed whether to: (1) refer the CN and RP Applications to the OAH for joint contested case proceedings; (2) affirm the completeness of the Applications; (3) incorporate certain procedures into the route permit referral order; (4) authorize the preparation of a combined EIS and combine environmental review to consider cumulative impacts of the Sandpiper and Line 3 Projects; (5) approve the issuance of a generic pipeline-route-permit template; (6) require completion of the Draft Environmental Impact Statement (DEIS) prior to conducting contested case proceedings; and (7) require completion of the Final Environmental Impact Statement (FEIS) prior to the filing of intervenor direct testimony.¹⁹¹

107. White Earth filed a Petition to Intervene in the CN Docket on January 19, 2016.¹⁹² Applicant responded White Earth's Petition, but did not object to White Earth's intervention.¹⁹³

iii. Joinder of Need and Routing Dockets

108. On February 1, 2016, the Commission issued a Notice of Hearing referring the RP Application to the OAH for a contested case proceeding.¹⁹⁴ At the same time, the Commission issued an Order Joining Need and Routing Dockets.¹⁹⁵ In the Order joining the dockets, the Commission again referred the CN Application to the OAH for a contested case proceeding; affirmed its Order finding the CN Application substantially complete; ordered that a joint contested case hearing be held regarding the CN And RP Applications; authorized the preparation of a combined EIS for the CN and RP Dockets; and authorized a combined environmental review addressing the cumulative impacts of the Sandpiper Project and the Line 3 Project.¹⁹⁶ The Commission authorized DOC-EERA to act as its agent in preparing a combined EIS for both the Sandpiper and Line 3 Projects.¹⁹⁷ The Commission further directed that the FEIS be completed prior to the

¹⁹⁰ Ex. PUC-7 (Notice Requesting Information from Official Parties). This Notice was subsequently rescinded by the Commission in its Order Joining Need and Routing Dockets (Feb. 1, 2016) (eDocket No. 20162-117877-02 (CN)).

¹⁹¹ Minutes December 17, 2015 Agenda (Feb. 19, 2016) (eDocket Nos. 20162-118510-07_(CN), 20162-118510-01_(RP)).

¹⁹² White Earth Pet. to Intervene (Jan. 19, 2016) (eDocket Nos. 20161-117391-01 (CN)).

¹⁹³ Response to White Earth Band Petition to Intervene (Jan. 29, 2016) (eDocket Nos. 20161-117820-04 (CN)). White Earth filed a reply to Applicant on February 11, 2016. See White Earth Reply to Response (Feb. 11, 2016) (eDocket Nos. 20162-118186-01 (CN)).

¹⁹⁴ Notice of Hearing (Feb. 1, 2016) (eDocket No. 20162-117889-01 (RP)).

¹⁹⁵ Ex. PUC-8 (Order Joining Need and Routing Dockets).

¹⁹⁶ *Id.*

¹⁹⁷ *Id.* On page 8 of the Order, the Commission explained that "given the size and complexity of both the Sandpiper and Line 3 projects, and the degree of record development that has already occurred in the Sandpiper dockets, the Commission concludes that the administrative challenges of completely combining

filing of intervenor direct testimony.¹⁹⁸ The Commission did not request or order the Administrative Law Judge to make recommendations on or determine the adequacy of the EIS.

109. The Laborers' Council, Chamber, United Association, and Applicant filed Petitions for Reconsideration of the Commission's February 1, 2016 Order.¹⁹⁹ FOH, Mille Lacs, and the Sierra Club responded to these Petitions.²⁰⁰

110. On February 4, 2016, the CN and RP Dockets were reassigned to Administrative Law Judge Ann C. O'Reilly (ALJ) for contested case proceedings.²⁰¹

111. FOH filed a Petition to Intervene in the CN and RP Dockets on February 9, 2016.²⁰²

112. On February 10, 2016, White Earth filed a letter asking the Department of Commerce (DOC) to request that negotiations with engineering firms for the completion of the EIS be made public and subject to input, or that such negotiations be deferred until after the completion of the scoping process.²⁰³

113. The Minnesota Center for Environmental Advocacy (MCEA) filed a Petition to Intervene in both the CN and RP Dockets on February 22, 2016.²⁰⁴ Applicant opposed MCEA's Petition.²⁰⁵

114. To obtain additional assistance and expertise in preparing the EIS for the Project, the DOC, MDNR, and MPCA entered into a Memorandum of Understanding (MOU).²⁰⁶ The MOU, dated March 2, 2016, recognized the Commission as the responsible government unit (RGU) for environmental review of the proposed Project.²⁰⁷

consideration of these two projects would exceed the benefits. Consequently[,] the Commission declines to combine review of the Line 3 and Sandpiper projects completely."

¹⁹⁸ *Id.* at 9.

¹⁹⁹ Laborers' Council Pet. for Reconsideration (Feb. 3, 2016) (eDocket Nos. 20162-117975-01 (CN); 20162-117975-02 (RP)); Chamber's Pet. for Reconsideration (Feb. 3, 2016) (eDocket Nos. 20162-117970-02 (CN); 20162-117970-01 (RP)); United Association's Pet. for Reconsideration of the Feb. 1 Order (Feb. 4, 2016) (eDocket No. 20162-118012-01 (CN)); Applicant Pet. for Reconsideration (Feb. 5, 2016) (eDocket No. 20162-118041-04 (CN); 20162-118041-03 (RP)).

²⁰⁰ FOH Response (Feb. 11, 2016) (eDocket Nos. 20162-118216-01 (CN); 20162-118216-02 (RP)); Answer to Pet. for Reconsideration and for Clarification (Feb. 16, 2016) (eDocket Nos. 20162-118307-01 (CN); 20162-118307-02 (RP)); Sierra Club Answer to Pet. for Reconsideration and for Clarification (Feb. 16, 2016) (eDocket Nos. 20162-118307-01 (CN); 20162-118307-02 (RP)).

²⁰¹ Reassigned to Judge Ann C. O'Reilly (Feb. 4, 2016) (eDocket No. 20162-118019-01 (CN)).

²⁰² FOH Pet. to Intervene (Feb. 9, 2016) (eDocket Nos. 20162-118104-02 (CN); 20162-118104-01 (RP)).

²⁰³ Letter from White Earth to DOC (Feb. 10, 2016) (eDocket Nos. 20162-118129-01 (CN); 20162-118130-01 (RP)).

²⁰⁴ MCEA Pet. to Intervene (Feb. 22, 2016) (eDocket Nos. 20162-118565-01 (CN); 20162-118565-04 (RP)).

²⁰⁵ Response in Opposition to MCEA Pet. to Intervene (Feb. 29, 2016) (eDocket Nos. 20162-118788-02 (CN); 20162-118789-02 (RP)).

²⁰⁶ Mem. of Understanding (Mar. 7, 2016) (eDocket No. 20163-118961-01 (CN)).

²⁰⁷ Ex. EERA-5 (Memorandum of Understanding with DNR and PCA).

The MOU identified the DOC as the Lead Agency, and MDNR and MPCA as Assisting Agencies for EIS preparation.²⁰⁸

115. On March 9, 2016, FOH filed a Motion to Order the DOC to Renegotiate the MOU, and to Establish an Expert Advisory Council Under Minn. Stat. § 116D.03.²⁰⁹ Applicant responded to the motion.²¹⁰

116. The Environmental Quality Board (EQB) received a request for the EQB to replace the Commission with MDNR and MPCA as joint RGUs for the Project on March 10, 2016.²¹¹ The EQB accepted comments from applicable agencies, Applicant, and other commenters regarding this request. The EQB considered the requests at its May 18, 2016 meeting and denied the requests.²¹²

117. On March 10 and 18, 2016, the ALJ issued Orders granting White Earth's Petition to Intervene in both the CN and RP Dockets.²¹³

118. On March 28, 2016, the United States Environmental Protection Agency (EPA) filed a letter stating that it was not advising the United States Army Corps of Engineers (USACE) or any state-level agencies to prepare a joint federal/state EIS for the Project.²¹⁴

119. On March 31, 2016, the Commission issued an Order denying the various petitions for reconsideration; denying FOH's motion to amend the MOU; and referring White Earth and MCEA's Petitions for Intervention to the OAH for determination.²¹⁵

iv. EAW, Draft Scoping Decision, and Scoping Comment Process

²⁰⁸ *Id.*

²⁰⁹ FOH Mot. (Mar. 9, 2016) (eDocket Nos. 20163-119012-03 (CN); 20163-119012-01 (RP)).

²¹⁰ Response to FOH March 9, 2016 Mot. (Mar. 21, 2016) (eDocket Nos. 20163-119312-03 (CN); 20163-119312-04 (RP)).

²¹¹ EQB RGU Decision Letter (June 3, 2016) (eDocket Nos. 20166-121973-08 (CN); 20166-121973-28 (CN); 20166-121973-32 (CN); 20166-121973-36 (CN)).

²¹² EQB RGU Decision Letter, Enclosure B2 (June 3, 2016) (eDocket No. 20166-121973-24 (CN)).

²¹³ Order Granting Pet. to Intervene by White Earth Band (Mar. 10, 2016) (eDocket No. 20163-119043-01 (CN)); Amended Order Granting Petition to Intervene by White Earth Band (Mar. 17, 2016) (eDocket Nos. 20163-119248-01 (CN) and 20163-119250-01 (RP)).

²¹⁴ EPA Letter (Mar. 28, 2016) (eDocket Nos. 20163-119455-01 (CN); 20163-119456-01 (RP)).

²¹⁵ Ex. PUC-9 (Order Denying Petitions for Reconsideration and Motion to Amend Memorandum, and referring Petitions for Intervention to OAH). In a footnote on page 3, the Commission explained that, "[i]n its Motion for Reconsideration, Applicant objected to the Commission's directive that the final EIS be filed prior to the intervenors' direct testimony. Rather, Applicant proposed that only the draft EIS should be filed prior to the intervenors' direct testimony. At hearing, there was extensive discussion of the various issues impacting the coordination of the contested case proceedings with the EIS process in this case, and whether it was premature to set a schedule prior to receiving the Department's recommendations concerning the scope of the EIS and its proposed timeline. Parties to the discussion indicated they would work together to identify the most expeditious contested-case schedule consistent with full record development and applicable statutory requirements."

120. In accordance with Minn. R. 4410.1000 to 4410.1700 (2015), the DOC EERA prepared and filed an Environmental Assessment Worksheet (EAW)²¹⁶ and a Draft Scoping Decision Document (DSDD).²¹⁷ The DSDD outlined the proposed scope of the EIS and identified alternatives to the Proposed Project, a tentative schedule, a proposed outline for the EIS, and impacts of alternatives to be addressed in the EIS.²¹⁸

121. On April 8, 2016, the DOC-EERA published a Notice of Public Comment Period and Public Meetings for the Sandpiper Pipeline and Line 3 Replacement Project EIS Scoping in the *Star Tribune* newspaper, a paper of state-wide publication.²¹⁹

122. On April 11, 2016, the DOC-EERA issued a Notice of Availability of Scoping EAW and Draft Scope for the Sandpiper Pipeline and Line 3 Replacement Projects.²²⁰ Also on April 11, 2016, the DOC-EERA published a notice in the *EQB Monitor* that the EAW and DSDD for the Project were available for review on the DOC website.²²¹ Both notices advised of a 45-day public comment period on the DSDD in accordance with Minn. R. 4410.1500.²²² The public comment period remained open from April 11, 2016, to May 26, 2016.²²³

123. In addition to advising of the 45-day public comment period, the Notice of Availability of Scoping EAW and Draft Scope for the Sandpiper Pipeline and Line 3 Replacement Projects advised of 12 public scoping meetings to be held between April 25, 2016, and May 11, 2016.²²⁴ The Notice was published in the *Star Tribune* and in local newspapers where the scoping meetings were scheduled to be held.²²⁵

124. On April 12, 2016, copies of the Scoping EAW, DSDD, and Notice of Availability of the DSDD and Scoping EAW were mailed to the persons and agencies listed in Minn. R. 4410.1500(A).²²⁶ These items were also made available to the public through the DOC's Line 3 Project website, as required by Minn. R. 4410.1500(B)(2) (2015).²²⁷

²¹⁶ Ex. EERA-6 (Environmental Assessment Worksheet).

²¹⁷ Ex. EERA-7 (Draft Scoping Decision Document).

²¹⁸ *Id.*

²¹⁹ Ex. EERA-9B (Affidavit of Publication for EIS Scoping Meetings).

²²⁰ Ex. EERA-8A (Notice of Availability of Scoping EAW and Draft Scope for Sandpiper Pipeline and Line 3 Replacement Projects).

²²¹ Ex. EERA-8B (Scoping EAW in EQB Monitor).

²²² Ex. EERA-8A (Notice of Availability of Scoping EAW and Draft Scope for Sandpiper Pipeline and Line 3 Replacement Projects); Ex. EERA-8B (Scoping EAW in EQB Monitor).

²²³ Ex. EERA-8A (Notice of Availability of Scoping EAW and Draft Scope for Sandpiper Pipeline and Line 3 Replacement Projects); Ex. EERA-8B (Scoping EAW in EQB Monitor).

²²⁴ Ex. EERA-8A (Notice of Availability of Scoping EAW and Draft Scope for Sandpiper Pipeline and Line 3 Replacement Projects); Ex. EERA-8B (Scoping EAW in EQB Monitor).

²²⁵ Ex. EERA-9B (Affidavit of Publication for EIS Scoping Meetings).

²²⁶ Ex. EERA-10 (Distribution of Scoping EAW to Agencies and Local Governments).

²²⁷ *Id.*

125. The following parties filed scoping comments: Applicant, Sierra Club, Mille Lacs, and the MDNR.²²⁸ In addition, non-parties submitted 322 scoping comment letters and 1,118 comment cards to DOC-EERA.²²⁹

126. Between April 25, 2016, and May 11, 2016, the DOC-EERA held 12 scoping meetings in seven counties in the Project area.²³⁰

127. On April 29, 2016, the ALJ issued an Order granting the Petitions to Intervene by White Earth, FOH, and MCEA.²³¹ The Order gave all three organizations full party status in both the CN and RP Dockets.²³²

128. On May 9, 2016, the United Association filed a Petition to Intervene in the CN Docket.²³³ The Petition was unopposed and United Association was granted full party status in the CN and RP Dockets on May 25, 2016.²³⁴

129. A Second Prehearing Conference was held on May 16, 2016.²³⁵ At the Second Prehearing Conference, the parties discussed the scheduling of the joint contested case hearings in the CN and RP Dockets.²³⁶ The DOC-EERA advised that it intended to file its Final Scoping Decision Documents (FSDD) by the end of June 2016.²³⁷ Using that date, Applicant agreed to prepare two proposed prehearing schedules: one with the deadline for filing intervenor direct testimony after the issuance of the DEIS but before the FEIS; and the second having the deadline for filing intervenor direct testimony after the issuance of the FEIS.²³⁸ The parties agreed to discuss scheduling at the next prehearing conference.²³⁹

130. On June 3, 2016, the EQB filed a letter notifying the Commission that it denied a petition to designate a different RGU for environmental review of the Sandpiper

²²⁸ Comment by Applicant (May 26, 2017) (eDocket Nos. 20165-121692-01 (CN); 20165-121692-02 (RP)); Comment by Sierra Club (May 26, 2017) (eDocket Nos. 20165-121701-01 (CN); 20165-121701-02 (RP)); Comment by Mille Lacs Band (May 26, 2017) (eDocket Nos. 20165-121697-03 (CN); 20165-121697-01 (RP)); Comment by MNDNR (May 27, 2017) (eDocket Nos. 20165-121700-01 (CN); 20165-121702-01 (RP)).

²²⁹ Ex. EERA-14 at 2 (Scoping Summary Report).

²³⁰ Ex. EERA-16 (Final Scoping Decision Document); see also Ex. EERA-11 (Public Comments and Transcripts on the Draft Scoping Decision Document).

²³¹ Order Granting Pet. to Intervene (Apr. 29, 2016) (eDocket Nos. 20164-120852-02 (CN); 20164-120852-01 (RP)).

²³² *Id.*

²³³ United Association Pet. to Intervene (May 9, 2016) (eDocket No. 20165-121159-01 (CN)).

²³⁴ Order Granting Pet. to Intervene by United Association (May 25, 2016) (eDocket No. 20165-121627-02 (CN)).

²³⁵ Order for Prehearing Conference (eDocket No. 20164-120377-02 (CN); 20164-120377-01 (RP)).

²³⁶ Second Prehearing Order (June 7, 2016) (eDocket Nos. 20166-122067-02 (CN); 20166-122067-01 (RP)).

²³⁷ *Id.*

²³⁸ *Id.*

²³⁹ *Id.*

and Line 3 Projects.²⁴⁰ The EQB's letter included enclosures containing comments and information gathered during the period EQB was reviewing the petition.²⁴¹

131. On June 7, 2016, a Second Prehearing Order was issued that directed Applicant to file two proposed prehearing schedules: the first with a deadline for filing intervenor direct testimony after the issuance of the DEIS but before the FEIS; and the second with a deadline for filing intervenor direct testimony after the issuance of the FEIS.²⁴² The Order explained that decisions on scheduling would be made at the Third Prehearing Conference.²⁴³

v. Delay in the Issuance of the Final Scoping Decision

132. After the issuance of the Second Prehearing Order, the DOC-EERA notified the ALJ and parties that it would not be filing the FSDD until the end of July 2016.²⁴⁴

133. As a result, on June 13, 2016, FOH and MCEA filed a Motion to Reschedule Third Prehearing Conference.²⁴⁵ Applicant responded but did not object to the motion.²⁴⁶

134. As requested by the parties, on July 1, 2016, the ALJ issued an Order Rescheduling the Third Prehearing Conference to August 10, 2016.²⁴⁷ This date was predicated on the estimate that the FSDD would be issued by the end of July 2016.²⁴⁸ In addition, the Third Prehearing Conference was rescheduled to correlate with a prehearing conference scheduled in the Sandpiper Project.²⁴⁹

135. The DOC-EERA did not issue the FDSS by the end of July 2016, as it had anticipated. As a result, the DOC-EERA advised the ALJ and parties that it intended to issue the FDSS by the end of September 2016.²⁵⁰

²⁴⁰ EQB RGU Decision Letter (June 3, 2016) (eDocket Nos. 20166-121973-04 (CN); 20166-121973-03 (RP)).

²⁴¹ *Id.*

²⁴² Second Prehearing Order (June 7, 2016) (eDocket Nos. 20166-122067-02 (CN); 20166-122067-01(RP)).

²⁴³ *Id.*

²⁴⁴ See Order Rescheduling Third Prehearing Conference (July 1, 2016) (eDocket Nos. 20167-122989-01 (CN); 20167-122989-02 (RP)).

²⁴⁵ Motion to Reschedule Third Prehearing Conference (June 13, 2016) (eDocket Nos. 20166-122193-02 (CN); 20166-122193-01 (RP)). At the Second Prehearing Conference, the DOC-EERA indicated that the Scoping Decision would be issued in June 2016. The DOC-EERA later extended that deadline to late July 2016. See Order Scheduling Third Prehearing Conference (July 1, 2016) (eDocket Nos. 20167-122989-01 (CN); 20167-122989-02 (RP)).

²⁴⁶ Response to Motion to Reschedule Third Prehearing Conference (June 24, 2016) (eDocket Nos. 20166-122578-01 (CN); 20166-122579-01 (RP)).

²⁴⁷ Order Rescheduling Third Prehearing Conference (July 1, 2016) (eDocket Nos. 20167-122989-01 (CN); 20167-122989-02 (RP)).

²⁴⁸ *Id.*

²⁴⁹ *Id.*

²⁵⁰ Order Continuing Third Prehearing Conference (Aug. 9, 2016) (eDocket Nos. 20168-124027-02 (CN); 20168-124027-01 (RP)).

136. Consequently, on August 9, 2016 the ALJ issued an Order Continuing the Third Prehearing Conference to September 27, 2016.²⁵¹

137. On July 21, 2016, Applicant filed a copy of the proposed Consent Decree issued on July 20, 2016, in the matter of *United States of America v. Applicant Enbridge Energy, Limited Partnership*, No. 1:16-CV-914 (W.D. Mich. July 20, 2016).²⁵²

vi Withdrawal of the Sandpiper Project

138. On August 26, 2016, the DOC filed a letter informing the Commission that, due to a recent announcement by Applicant regarding the uncertainty of the Sandpiper Project, the DOC would not be submitting the FSDD for the Sandpiper and Line 3 Projects until Applicant clarified its intentions regarding the projects or until the agency received further direction from the Commission.²⁵³

139. That same day, August 26, 2016, the Commission filed comments related to the proposed Consent Decree.²⁵⁴ The Commission noted that the Consent Decree imposed certain obligations on Applicant's operation of existing Line 3 if it is not removed by December 31, 2017.²⁵⁵ The letter advised that the Commission could not estimate whether the permitting proceedings for proposed Line 3 would be completed by that date, or whether the proposed Line 3 Project would ultimately be approved, modified, or rejected.²⁵⁶

140. On September 1, 2016, Applicant officially notified the Commission that the North Dakota Pipeline Company LLC would no longer pursue the regulatory approvals necessary to construct the Sandpiper Project.²⁵⁷ The Commission later issued a Notice and Order Approving Petition to Withdraw Filing in the Sandpiper matter, thereby ending that project.²⁵⁸

²⁵¹ *Id.* In cancelling the August 10, 2016, Prehearing Conference, the ALJ noted "the close association of the issues and parties in the Sandpiper Pipeline Project currently pending before the Commission" such that "any prehearing conference and scheduling order in these dockets should correlate with the prehearing conference and scheduling order issued in the Sandpiper Pipeline Project." *Id.* The Third Prehearing conference was rescheduled to September 27, 2016, to occur immediately after the prehearing conference in the Sandpiper matter on that same date. *Id.*

²⁵² Consent Decree (July 21, 2016) (eDocket Nos. 20167-123488-03 (CN); 20167-123488-04) (RP)). Although the Consent Decree arises out of a spill from Applicant's Line 6B near Marshall, Michigan, the agreement includes obligations related to Applicant's current Line 3.

²⁵³ Letter from DOC to PUC (Aug. 26, 2016) (eDocket Nos. 20168-124424-04 (CN); 20168-124424-03 (RP)).

²⁵⁴ Ex. PUC-10 (PUC Comments on Dept. of Justice Consent Decree).

²⁵⁵ *Id.*

²⁵⁶ *Id.*

²⁵⁷ Requesting PUC and DOC Proceed with Issuance of the EIS Scope Decision Document for the Line 3 Replacement Project (Sept. 1, 2016) (eDocket Nos. 20169-124584-02 (CN); 20169-124584-01 (RP)).

²⁵⁸ *In re Applications of N. Dakota Pipeline Co. LLC for a Certificate of Need and a Pipeline Routing Permit for the Sandpiper Pipeline Project in Minn.*, MPUC Docket Nos. PL-6668/CN-13-473, PL-6668/PPL-13-474 (Nov. 18, 2016).

141. On September 15, 2016, DOC-EERA filed a letter indicating that it had suspended work on the Sandpiper EIS, but that it was continuing work on the FSDD for the Line 3 Project.²⁵⁹ The DOC-EERA stated that it expected to complete the FSDD by September 21, 2016, prior to the re-scheduled Third Prehearing Conference.²⁶⁰

142. On September 19, 2016, Honor the Earth filed a Petition to Intervene in both the CN and RP Documents.²⁶¹ HTE's Petition was unopposed.

143. On September 22, 2016, DOC-EERA filed its Comments and Recommendation on the Scope of the Line 3 EIS, Proposed FSDD, Scoping Summary Report, and Alternatives Screening Report.²⁶² That same day, the DOC-EERA filed public comments and transcripts from the EIS scoping meetings and posted them on the Line 3 Project webpage.²⁶³

vii. Motions to Extend or Reopen the EIS Scoping Period

144. FOH and MCEA filed a Motion to Extend or Reopen the EIS Scoping Period on September 26, 2016.²⁶⁴ Similarly, Sierra Club filed a motion to supplement the scoping comment period.²⁶⁵ The motions argued that, as a result of the withdrawal of the Sandpiper Project, the Line 3 EIS scoping and comment period should be extended or reopened to evaluate the Line 3 Proposed Route and alternatives in isolation from the Sandpiper Project.

145. Applicant, United Association, Chamber, and Laborers' Council filed responses in opposition to FOH's and MCEA's Motion to Extend or Reopen the EIS Scoping Period and Sierra Club's Motion for Supplemental Scoping Comment Period.²⁶⁶

²⁵⁹ DOC-EERA Letter (Sept. 15, 2016) (eDocket Nos. 20169-124908-02 (CN); 20169-124908-01 (RP)).

²⁶⁰ *Id.*

²⁶¹ HTE Pet. to Intervene (Sept. 19, 2016) (eDocket Nos. 20169-124977-02 (CN); 20169-124977-01 (RP)).

²⁶² Ex. EERA-12 (Comments and Recommendations on the Proposed Final Scoping Decision Document); Ex. EERA-13 (Proposed Final Scoping Decision Document); Ex. EERA-14 (Scoping Summary Report); Ex. EERA-15 (Alternatives Screening Report).

²⁶³ Ex. EERA-11 (Public Comments and Transcripts on the Draft Scoping Decision Document).

²⁶⁴ Mot. for New Scoping Period (Sept. 26, 2016) (eDocket Nos. 20169-125169-02 (CN); 20169-125170-01 (RP)).

²⁶⁵ Mot. for Supplemental Comment Period (Sept. 27, 2016) (eDocket Nos. 20169-125187-01 (CN); 20169-125187-02 (RP)). Sierra Club filed an Amended Motion for Supplemental Scoping Comment Period on September 30, 2016. See Amended Mot. for Supplemental Scoping Period (Sept. 30, 2016) (eDocket Nos. 20169-125304-02 (CN); 20169-125304-01 (RP)).

²⁶⁶ Applicant Response to Mot. to Reopen Scoping (Oct. 7, 2016) (eDocket Nos. 201610-125506-03 (CN); 201610-125506-04 (RP)); United Association Response to Mot. regarding EIS Scoping Comments (Oct. 10, 2016) (eDocket No. 201610-125544-01 (CN)); Chamber Letter (Oct. 10, 2016) (eDocket No. 201610-125538-01 (CN)); Laborers' Council Response to Mot. Submitted by FOH, MCEA, and Sierra Club Regarding EIS Scoping Period (Oct. 10, 2016) (eDocket Nos. 201610-125542-03 (CN); 201610-125542-04 (RP)).

HTE filed a response in support of the motions²⁶⁷ and Applicant filed a reply to HTE.²⁶⁸ The DOC-EERA filed a letter providing context and information on the scoping process.²⁶⁹

146. On October 14, 2016, the ALJ issued an Order which certified to the Commission the Motions of FOH, MCEA, and Sierra Club related to the extension or reopening of the EIS scoping and comment periods.²⁷⁰

147. Thereafter, FOH and MCEA filed a letter with the Commission outlining their preferred decision options with respect to their motions to extend or reopen the scoping period.²⁷¹

viii. Prehearing and Hearing Schedule Finalized

148. As directed by the ALJ in the Second Prehearing Order, on September 26, 2016, Applicant filed a letter proposing two different schedules for the contested case proceedings to be discussed at the Third Prehearing Conference.²⁷²

149. A Third Prehearing Conference was held on September 27, 2016.²⁷³ At that conference, the parties discussed the two proposed schedules offered by Applicant.²⁷⁴ Both Applicant's proposed schedules assumed a DEIS issuance date of April 3, 2017, and a FEIS issuance date of August 10, 2017, as suggested by the DOC-EERA at that time.²⁷⁵ In addition, both proposed schedules set the deadline for filing intervenor direct testimony before the issuance of the FEIS.²⁷⁶ The ALJ rejected both of Applicant's proposals based upon the Commission's express direction that the ALJ require the completion of the FEIS prior to the filing of intervenor direct testimony, as set forth in the Commission's February 1, 2016 Order referring the CN and RP Dockets to the OAH for a joint contested case hearing,²⁷⁷ which precluded acceptance of either of the schedules proposed by Applicant.²⁷⁸

²⁶⁷ HTE Response in Support of Mot. to Extend or Reopen Scoping Period by FOH and MCEA and Mot. for Supplemental Scoping Comment Period by Sierra Club (Oct. 10, 2016) (eDocket Nos. 201610-125548-01 (CN); 201610-125548-02 (RP)).

²⁶⁸ Response to HTE Response in Support of Mot. to Extend EIS Scoping Period (Oct. 24, 2016) (eDocket Nos. 201610-125947-02 (CN); 201610-125947-01 (RP)).

²⁶⁹ DOC-EERA Letter (Oct. 10, 2016) (eDocket Nos. 201610-125540-01 (CN); 201610-125539-01 (RP)).

²⁷⁰ Order Certifying Mot. to Commission for Determination (Oct. 14, 2016) (eDocket Nos. 201610-125730-01 (CN); 201610-125730-02 (RP)); see also Amended Order Certifying Mot. to Commission for Determination (Oct. 18, 2016) (eDocket Nos. 201610-125821-01 (CN); 201610-125821-02 (RP)).

²⁷¹ Preferred Decision Options (Oct. 27, 2016) (eDocket Nos. 201610-126032-02 (CN); 201610-126033-02 (RP)).

²⁷² Applicant's Line 3 Scheduling Proposals (Sept. 26, 2016) (eDocket Nos. 20169-125174-02 (CN); 20169-125174-01 (RP)).

²⁷³ Third Prehearing Order (Oct. 12, 2016) (eDocket Nos. 201610-125629-02 (CN); 201610-125629-01 (RP)).

²⁷⁴ *Id.*

²⁷⁵ *Id.*

²⁷⁶ *Id.*

²⁷⁷ *Id.*

²⁷⁸ *Id.*

150. On September 29, 2016, FOH and MCEA filed a letter responding to the prehearing schedules proposed by Applicant.²⁷⁹

151. On October 12, 2016, the ALJ issued the Third Prehearing Order.²⁸⁰ The Order granted HTE's Petition to Intervene, giving HTE full party status in both the CN and RP Dockets.²⁸¹

152. The Third Prehearing Order also established a prehearing schedule based upon the issuance of a DEIS on April 3, 2017, and the issuance of the FEIS on August 10, 2017, as represented by the DOC-EERA.²⁸² As directed by the Commission, the schedule ordered the filing of intervenor direct testimony after the issuance of the FEIS.²⁸³ The date for filing of intervenor direct testimony was scheduled to occur on September 11, 2017, approximately one month after the anticipated release of the FEIS.²⁸⁴

153. Using the anticipated completion dates for the DEIS and FEIS, the ALJ scheduled public hearings to occur between August 15 and October 31, 2017; and scheduled the evidentiary hearing from November 6 to 10, 2017.²⁸⁵ The scheduling order did not address the EIS adequacy determination, as that matter had not been referred to or delegated to the ALJ for a recommendation or hearing.

154. On October 13, 2016, Applicant filed a letter requesting two clarifications to the Third Prehearing Order.²⁸⁶

155. On October 14, 2017, the ALJ issued an Amended Third Prehearing Order, which corrected a date and paragraph 10 of the Order.²⁸⁷ Paragraph 10 was amended to state:

The Applicant acknowledges that the schedule set forth above extended the timeline for a Commission decision beyond the 12-month timeline set forth

²⁷⁹ FOH and MCEA Objection and Request for Clarification for Upcoming Prehearing Order (Sept. 29, 2016) (eDocket Nos. 20169-125244-01 (CN); 20169-125243-01 (RP)).

²⁸⁰ Third Prehearing Order (Oct. 12, 2016) (eDocket Nos. 201610-125629-02 (CN); 201610-125629-01 (RP)).

²⁸¹ *Id.*

²⁸² *Id.*; see also Amended Third Prehearing Order (Oct. 14, 2016) (eDocket Nos. 201610-125715-02 (CN); 201610-125715-01 (RP)); Second Amended Third Prehearing Order (Oct. 31, 2016) (eDocket Nos. 201610-126100-01 (CN); 201610-126100-02 (RP)).

²⁸³ Third Prehearing Order (Oct. 12, 2016) (eDocket Nos. 201610-125629-02 (CN); 201610-125629-01 (RP)). At page 3 of the Third Prehearing Order, the ALJ notes, "If the Commission issues an order directing the Administrative Law Judge to amend the schedule set forth below to require the filing of Intervenor direct testimony prior to the issuance of the FEIS or DEIS, the Judge will schedule another prehearing conference to amend this scheduling order accordingly. However, unless and until that occurs, the following is the hearing schedule for these proceedings."

²⁸⁴ *Id.*

²⁸⁵ *Id.*

²⁸⁶ Letter from Applicant to ALJ (Oct. 13, 2016) (eDocket Nos. 201610-125677-02 (CN); 201610-125677-01 (RP)).

²⁸⁷ Amended Third Prehearing Order (Oct. 14, 2016) (eDocket Nos. 201610-125715-02 (CN); 201610-125715-01 (RP)).

in statute. Other timeliness issues may arise depending on the date of issuance for the DEIS and FEIS, as well as the EIS adequacy decision.²⁸⁸

156. On October 25, 2016, the United Association and Laborers' Council filed a letter requesting clarification of the Amended Third Prehearing Order.²⁸⁹

157. A Second Amended Third Prehearing Order was issued, which did not change the filing or hearing deadlines but made the clarification suggested by the United Association and Laborers' Council.²⁹⁰

ix. Commission Decision on Extending or Reopening Scoping Period

158. On October 28, 2016, the Commission convened to discuss the FOH, MCEA, and Sierra Club motions to extend, reopen, or supplement the EIS Period in the light of the withdrawal of the Sandpiper Project, as well as approval of the DOC-EERA's proposed FSDD.²⁹¹

159. On November 30, 2016, the Commission issued an Order Denying Motions, Approving Scoping Decision as Modified, and Requiring Expanded Notice.²⁹² The Order: (1) denied the FOH, MCEA, and Sierra Club motions to expand, reopen, or supplement the scoping period; (2) approved the proposed FSDD with one additional route segment alternative; and (3) ordered the expanded notice of the FSDD.²⁹³ The Commission's Order forwarded the following route alternatives for further analysis:

- System Alternative (SA) SA-04;
- Route Alternatives (RA) RA-03, RA-06, RA-07, and RA-08;
- 23 Route Segment Alternatives (RSAs) identified by the DOC-EERA in the FDSS; and
- RSA-CS.²⁹⁴

²⁸⁸ *Id.* at 8.

²⁸⁹ Request to Clarify Amended Third Prehearing Order (Oct. 25, 2016) (eDocket No. 201610-125976-01 (CN)). The requested change related to a sentence that said that "all parties" other than Applicant supported an intervenor direct testimony deadline after the issuance of the FEIS.

²⁹⁰ Second Amended Third Prehearing Order (Oct. 31, 2016) (eDocket Nos. 201610-126100-01 (CN); 201610-126100-02 (RP)).

²⁹¹ Minutes October 28, 2016 Agenda (Dec. 21, 2016) (eDocket Nos. 201612-127517-06 (CN); 201612-127517-03 (RP)).

²⁹² Ex. PUC-12 (Order Denying Motions, Approving Scoping Decision as Modified, and Requiring Expanded Notice).

²⁹³ *Id.*

²⁹⁴ *Id.*

x. Final Scoping Decision

160. On December 5, 2016, DOC-EERA issued the FSDD²⁹⁵ and EIS Preparation Notice for the Line 3 Project,²⁹⁶ in accordance with Minn. R. 4410.2100, subp. 9. That same day, the EIS Preparation Notice was published in the *EQB Monitor*,²⁹⁷ and a press release containing the Notice²⁹⁸ was delivered to newspapers of general circulation in the areas affected by the Project as required in Minn. R. 4410.2100, subp. 9.²⁹⁹ The publication of the EIS Preparation Notice triggered the start of the statutory, 280-day time period for determining the adequacy of the EIS.³⁰⁰

161. On December 16, 2016, Applicant filed a Motion for a Protective Order in the RP Docket.³⁰¹ A Protective Order was later issued.³⁰²

xi. Motions for Reconsideration of Scoping Decision

162. On December 20, 2016, FOH and MCEA filed a Petition for Rehearing requesting reconsideration of the Commission's November 30, 2016 Order Denying Motions, Approving Scoping Decision as Modified, and Requiring Expanded Notice.³⁰³ On the same day, Sierra Club also filed a Petition for Rehearing and Reconsideration of Order Approving Scoping Decision and for Amendment of Proposed Final Scoping Decision Document.³⁰⁴

163. Applicant answered and opposed the FOH, MCEA, and Sierra Club Petitions.³⁰⁵ The Laborers' Council and the United Association also answered and opposed the Petitions.³⁰⁶

164. On January 17, 2017, HTE filed a "Notice of Lack of Confidence," asserting that Chippewa rights were not being properly identified, recognized, or considered.³⁰⁷

²⁹⁵ Ex. EERA-16 (Final Scoping Decision Document).

²⁹⁶ Ex. EERA-17 (EIS Preparation Notice); Ex. EERA-18 (EIS Preparation Notice Press Release).

²⁹⁷ Ex. EERA-19 (EIS Preparation Notice in EQB Monitor).

²⁹⁸ Ex. EERA-18 (EIS Preparation Notice Press Release).

²⁹⁹ *Id.*

³⁰⁰ Minn. Stat. § 116D.04, subd. 2a(j) (2016) (formerly subd. 2a(h)).

³⁰¹ Mot. for Protective Order (Dec. 16, 2016) (eDocket No. 201612-127372-01 (RP)).

³⁰² Protective Order (Jan. 10, 2017) (eDocket No. 20171-127982-01 (RP)). The Protective Order was subsequently amended to apply to certain additional Minnesota agencies. See Amended Protective Order (Jan. 13, 2017) (eDocket No. 20171-128114-01 (RP)).

³⁰³ Pet. for Rehearing (Dec. 20, 2016) (eDocket Nos. 201612-127444-02 (CN); 201612-127445-02 (RP)).

³⁰⁴ Pet. for Reconsideration of Scoping Decision Document (Dec. 20, 2016) (eDocket Nos. 201612-127463-02 (CN); 201612-127463-01 (RP)).

³⁰⁵ Applicant Answer to FOH and MCEA Pet. for Rehearing (Jan. 3, 2017) (eDocket Nos. 20171-127790-01 (CN); 20171-127792-01 (RP)); Applicant Answer to Sierra Club Petition for Rehearing and Reconsideration of Order (Jan. 3, 2017) (eDocket Nos. 20171-127792-02 (CN); 20171-127792-01 (RP)).

³⁰⁶ Laborers' Council Response to Mot. for Reconsideration Submitted FOH (Jan. 3, 2017) (eDocket Nos. 20171-127796-04 (CN); 20171-127796-03 (RP)); United Association Answer to FOH, MCEA, and Sierra Club Pet. for Rehearing (Jan. 3, 2017) (eDocket No. 20171-127798-01 (CN)).

³⁰⁷ Notice of Lack of Confidence and Other Concerns for DOC Scoping for Line 3 (Jan. 17, 2017) (eDocket Nos. 20171-128164-01 (CN); 20171-128164-02 (RP)).

165. On February 10, 2017, the Commission issued an Order Denying Reconsideration.³⁰⁸ The Order denied the motions for rehearing and reconsideration filed by FOH, MCEA, and Sierra Club related to the scoping decision.³⁰⁹

xii. DEIS Public Information Meetings

166. On February 15, 2017, the DOC-EERA filed comments requesting Commission direction regarding the scheduling and format of the DEIS public information meetings.³¹⁰

167. On February 17, 2017, the Commission issued a Notice Requesting Comments from Parties related to DOC-EERA's request for direction and clarification on the public information meetings.³¹¹ The Notice opened a comment period ending on March 3, 2017.³¹² Comments were filed by the following parties: DOC-EERA, Applicant, HTE, Laborers' Council, FOH, Mille Lacs, United Association, and Chamber.³¹³ Five comment letters were also filed by members of the public.³¹⁴

168. On March 14, 2017, DOC-EERA filed comments stating that it no longer requested Commission direction on the number and location of public meetings, and instead requested clarification only on whether public meetings should be held on System Alternative SA-04.³¹⁵

169. The Commission met on March 16, 2017, and decided that public meetings must be held in each Minnesota county through which a route alternative is proposed for Line 3, resulting in the requirement of 22 public meetings.³¹⁶

170. On March 24, 2017, the Commission issued an Order Clarifying Process, explaining that public meetings required under Minn. R. 7852.1300, subp. 1B, and Minn. R. 4410.2600, subp. 2, would not be held in the counties in which System Alternative

SA-04 is located.³¹⁷ The Commission reasoned that SA-04 is a System Alternative related to the CN Docket, not a pipeline route alternative.³¹⁸ Because there is no proposal

³⁰⁸ Ex. PUC-13 (Order Denying Reconsideration).

³⁰⁹ *Id.*

³¹⁰ Comment by DOC-EERA (Feb. 15, 2017) (eDocket Nos. 20172-129104-01 (CN); 20172-129103-01 (RP)).

³¹¹ Ex. PUC-14 (Notice Requesting Comments from Parties on the DOC Request for Direction and Clarification on Public Information Meetings).

³¹² *Id.*

³¹³ Briefing Papers March 16, 2017 Agenda (Mar. 8, 2017) (eDocket Nos. 20173-129731-01 (CN); 20173-129731-02 (RP)).

³¹⁴ *Id.*

³¹⁵ Supplemental Comment by DOC-EERA (Mar. 14, 2017) (eDocket Nos. 20173-129881-01 (CN); 20173-129882-01 (RP)).

³¹⁶ Ex. PUC-15 (Press Release: Minnesota Public Utilities Commission Determines Public Meeting Locations for Proposed Line 3 Project).

³¹⁷ Ex. PUC-16 (Order Clarifying Process).

³¹⁸ Ex. PUC-15 (Press Release: Minnesota Public Utilities Commission Determines Public Meeting Locations for Proposed Line 3 Project).

to locate any part of the Proposed Line 3 in the counties where SA-04 is located, there would be no requirement to hold informational meetings in those counties.³¹⁹

171. On April 3, 2017, DOC-EERA filed a letter advising that it would issue the DEIS on May 15, 2017, instead of April 3, 2017, as originally anticipated.³²⁰

172. On April 12, 2017, HTE filed a Motion for Reconsideration of the Commission's decision regarding the locations of the EIS public information hearings.³²¹ Applicant replied in opposition to HTE's motion.³²²

173. On April 14, 2017, DOC-DER filed a request for authority from the Commission to obtain specialized technical professional investigative services.³²³

174. On May 24, 2017, the Commission issued an Order denying HTE's Motion for Reconsideration related to the DEIS informational meetings.³²⁴ The Commission also granted authorization to DOC-DER to obtain specialized technical services in its analysis of Applicant's CN Application.³²⁵

xiii. Extension of Intervention Deadline

175. On April 19, 2017, citizen John Munter (Munter) filed a request to extend the intervention deadline from May 15, 2017 to June 15, 2017, due to the later-than-anticipated filing of the DEIS.³²⁶ FOH filed a response supporting Munter's request.³²⁷ Applicant opposed the request.³²⁸

176. HTE also filed a motion to extend the intervention deadline, as well as other prehearing deadlines.³²⁹ Applicant opposed HTE's motion.³³⁰

177. On May 5, 2017, DOC-EERA filed a letter in support of scheduling the draft EIS Information Meetings in May and June 2017, and extending the intervention

³¹⁹ *Id.*

³²⁰ DOC-EERA Letter (Apr. 3, 2017) (eDocket Nos. 20174-130453-01 (CN); 20174-130454-01 (RP)).

³²¹ Mot. for Reconsideration (Apr. 12, 2017) (eDocket Nos. 20174-130732-02 (CN); 20174-130732-01 (RP)).

³²² Reply to HTE's Mot. for Reconsideration (Apr. 24, 2017) (eDocket Nos. 20174-131145-04 (CN); 20174-131145-03 (RP)).

³²³ Request for Authority to Seek Specialized Technical Consultant (Apr. 14, 2017) (eDocket No. 20174-130783-01 (CN)).

³²⁴ Ex. PUC-17 (Order Denying Motion for Reconsideration and Granting Authority to the DOC to Obtain Investigative Services).

³²⁵ *Id.*

³²⁶ Line 3 Citizen Intervenor Deadline Request (Apr. 19, 2017) (eDocket Nos. 20174-130931-01 (CN); 20174-130931-02 (RP)).

³²⁷ FOH Response to Applicant's Response to John Munter Request to Extend Deadline for Citizen Intervention (May 10, 2017) (eDocket No. 20175-131737-01 (CN); 20175-131737-02 (RP)).

³²⁸ Applicant Response to Request to Extend Deadline for Citizen Intervention (May 3, 2017) (eDocket Nos. 20175-131563-03 (CN); 20175-131563-04 (RP)).

³²⁹ Mot. for Extension of Intervenor Deadline and Milestones (May 8, 2017) (eDocket Nos. 20175-131631-01 (CN); 20175-131631-02 (RP)).

³³⁰ Response in Opposition to Mot. (May 12, 2017) (eDocket No. 20175-131833-03 (CN)).

deadline.³³¹ On May 8, 2017, DOC-EERA filed a letter clarifying its support of the intervention deadline extension, but noting that all other deadlines would not need to be extended because the agency intended to release the FEIS on August 10, 2017 as originally anticipated.³³²

178. Between May 5, 2017, and May 15, 2017, 11 petitions to intervene were filed by the following parties: Munter, James W. Reents, Mysti Babineau, Jean F. Ross, Youth Climate Intervenors (Youth Climate), Carlton County Land Stewards, Mark Herwig, Fond du Lac, Shippers, Wichahpi (Bonnie) Otto, and Willis Mattison.³³³

179. Timely objections were filed by Applicant with respect to the petitions of Munter, Mysti Babineau, Mark Herwig, Youth Climate, and Jean Ross.³³⁴ No objections were filed to the intervention petitions of Fond du Lac, Carlton County, or Shippers. Mark Herwig ultimately withdrew his petition to intervene.³³⁵

180. On May 12, 2017, MCEA withdrew as counsel for FOH and as an intervening party.³³⁶

181. A Fourth Prehearing Conference was held on May 15, 2017. At that hearing, the ALJ ruled that the Intervention deadline would be extended to June 30, 2017.³³⁷

C. DEIS, Classification of Data, and Setting of Prehearing Schedule

i. Issuance of Draft Environmental Impact Statement

182. On May 15, 2017, the DOC-EERA filed the DEIS.³³⁸ The DEIS was over 1,000 pages, including over 10,000 pages of appendices. In all, it comprised 11 volumes of documents. The DEIS incorporated by reference two other reports prepared by outside

³³¹ DOC-EERA Letter (May 5, 2017) (eDocket Nos. 20175-131626-01 (CN); 20175-131627-01 (RP)).

³³² DOC-EERA Letter (May 8, 2017) (eDocket Nos. 20175-131691-01 (CN); 20175-131690-01 (RP)).

³³³ Munter Pet. to Intervene (May 5, 2017) (eDocket No. 20175-131592-02 (CN)); Reents Pet. to Intervene (May 10, 2017) (eDocket No. 20175-131729-01 (CN)); Babineau Pet. to Intervene (May 11, 2017) (eDocket No. 20175-131798-01 (CN)); Ross Pet. to Intervene (May 12, 2017) (eDocket No. 20175-131839-01 (CN)); Youth Climate Pet. to Intervene (May 12, 2017) (eDocket No. 20175-131806-02 (CN)); Carlton County Land Stewards Pet. to Intervene (May 12, 2017) (eDocket No. 20175-131822-01 (CN)); Herwig Pet. to Intervene (May 12, 2017) (eDocket No. 20175-131804-02 (CN)); Fond du Lac Pet. to Intervene (May 12, 2017) (eDocket No. 20175-131803-02 (CN)); Shippers Pet. to Intervene (May 15, 2017) (eDocket No. 20175-131886-01 (CN)); Otto Pet. to Intervene (May 15, 2017) (eDocket No. 20175-131844-02 (CN)); Mattison Pet. to Intervene (May 14, 2017) (eDocket No. 20175-131848-02 (CN)).

³³⁴ Applicant Energy's Response in Opposition to Pet. to Intervene of John Munter and Mot. to Strike (May 11, 2017) (eDocket Nos. 20175-131799-03 (CN); 20175-131799-04 (RP)); Applicant Energy's Response in Opposition to Pet. to Intervene of Mysti Babineau, Jean Ross, Youth Climate Intervenors, and Mark Herwig (May 18, 2017) (eDocket Nos. 20175-132016-02 (CN); 20175-132016-04 (RP)).

³³⁵ Letter to Administrative Law Judge from Herwig (May 30, 2017) (eDocket No. 20175-132323-01 (RP)).

³³⁶ MCEA Letter (May 12, 2017) (eDocket No. 20175-131830-01 (CN)).

³³⁷ Fourth Prehearing Order (May 31, 2017) (eDocket No. 20175-132405-01 (CN)).

³³⁸ Ex. EERA-23 (DEIS).

experts retained by Applicant: an Accidental Release Report³³⁹ and a Pinhole Release Report.³⁴⁰

183. On the same day, the DOC-EERA issued a Notice of Availability of the Draft EIS and Public Information Meetings; published the notice in the *EQB Monitor*; and issued a Notice of Draft EIS Availability Press Release, in accordance with Minn. R. 4410.2600, subp. 5, 7 and 7852.1300, subp. 1, 2.³⁴¹ The Notice advised that the deadline for public comments on the Draft EIS was July 10, 2017.³⁴² The Notice further advised of 22 public information meetings scheduled to occur between June 6 and June 22, 2017.³⁴³

184. On May 16, 2017, DOC-EERA filed a Revised Notice of Availability of the Draft EIS and Public Information Meetings.³⁴⁴ At the same time, electronic copies of the DEIS were made available on the DOC-EERA's Line 3 Project webpage, the Commission's website, and through the e-Dockets system.³⁴⁵ The DOC-EERA also provided copies of the DEIS to public libraries and regional development commissions.³⁴⁶

185. On May 19 and June 16, 2017, Notices of the Availability of the DEIS and Notice of the Public Meetings were mailed to landowners.³⁴⁷

186. The DOC-EERA provided published notices in the counties where the Project and alternatives are proposed in accordance with Minn. R. 7852. 1600.³⁴⁸ An informational meeting was held as part of each DEIS meeting to explain the route designation process, present major issues, and respond to questions raised by the public pursuant to Minn. R. 7852.1300 subp. 1 (2017).³⁴⁹

187. Between June 2 and June 5, 2017, the DOC-EERA provided copies of the DEIS to federal, state, and tribal agencies and to tribal libraries.³⁵⁰ On June 6, 2017, DOC-EERA provided copies of the DEIS to local government units, additional public libraries, and the EQB distribution list.³⁵¹ On the same day, DOC-EERA provided copies of the DEIS summary to commenters.³⁵² On June 8, 2017, DOC-EERA provided copies

³³⁹ Ex. EERA-24 (Accidental Release Report).

³⁴⁰ Ex. EERA-25 (Pinhole Release Report).

³⁴¹ Ex. EERA-20 (Notice of Draft EIS Public Meetings in *EQB Monitor* and Notice of Draft EIS Availability); Ex. EERA-22A (Notice of Draft EIS Availability Press Release).

³⁴² Ex. EERA-20 (Notice of Draft EIS Public Meetings in *EQB Monitor* and Notice of Draft EIS Availability).
³⁴³ *Id.*

³⁴⁴ Ex. EERA-21 (Revised Notice of Draft EIS Availability).

³⁴⁵ *Id.*

³⁴⁶ Ex. EERA-26, App. A2-4 (Distribution of Draft EIS and DEIS Summary).

³⁴⁷ Ex. EERA-22C (Notice of Draft EIS Availability and Mailing).

³⁴⁸ Ex. EERA-22B (Draft EIS Newspaper Publications and Affidavits of Publication).

³⁴⁹ Ex. EERA-20 (Notice of DEIS Public Meetings in *EQB Monitor* and Notice of DEIS Availability); Ex. EERA-21 (Revised Notice DEIS Availability); Ex. EERA-22D (Draft EIS Public Meeting Guide).

³⁵⁰ Ex. EERA-26, App. A2-2 (Distribution of DEIS and DEIS Summary).

³⁵¹ Ex. EERA-26, App. A2-1 (Distribution of DEIS and DEIS Summary).

³⁵² Ex. EERA-26, App. A2-6 (Distribution of DEIS and DEIS Summary).

of the DEIS summary to commenters who had submitted comments by way of electronic mail.³⁵³

188. Public information meetings on the DEIS were held June 6, 2017, through June 22, 2017. Twenty-two public meetings were held in counties along the Applicant's Preferred Route and the route alternatives under consideration in the DEIS, as is required by Minn. R. 4410. 2600 subp. 2.³⁵⁴

ii. Motion to Classify Spill Data as Public

189. On May 16, 2017, DOC-EERA filed a motion requesting the ALJ to hold an *in camera* review to determine whether predicted release data from spill modeling set forth in the DEIS at Table 10.3.1 was public or nonpublic under the Minnesota Government Data Practices Act (MGDPA).³⁵⁵ The subject data was provided to the DOC-EERA by Applicant in the Accidental Release Report.³⁵⁶ Briefs, responses, and letters were filed on the data designation from the DOC, Applicant, the United States Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA), HTE, and FOH.³⁵⁷ Oral argument was heard on June 12, 2017.³⁵⁸

190. On August 10, 2017, the ALJ issued an Order on Request for Data Determination.³⁵⁹ In her Order, the Judge ruled that the modeled spill "volume out" data was public and ordered the DOC-EERA to reclassify the data as public in the DEIS.³⁶⁰ Applicant filed a Motion to Stay the Order and Certify the issue to the Commission for final determination.³⁶¹ The ALJ granted the requested stay.³⁶²

191. On September 22, 2017, the ALJ issued an Order Certifying Data Determination and Staying Release of Data.³⁶³ The Order certified to the Commission the question of whether the data was public or non-public under the MGDPA, and stayed

³⁵³ Ex. EERA-26, App. A2-7 (Distribution of DEIS and DEIS Summary).

³⁵⁴ Ex. EERA-20 (Notice of DEIS Public Meetings in EQB Monitor and Notice of DEIS Availability; Ex. EERA-21 (Revised Notice of DEIS Availability)).

³⁵⁵ DOC-EERA Mot. (May 16, 2017) (eDocket No. 20175-131946-02 (CN)).

³⁵⁶ See Ex. EERA-24 (Accidental Release Report).

³⁵⁷ Applicant Response to DOC-EERA Mot. for ALJ to Classify Data (May 23, 2017) (eDocket No. 20175-132146-03 (CN)); DOC-EERA Reply Br. (May 25, 2017) (eDocket No. 20175-132224-01 (CN)); FOH Response to Applicant Response to ALJ Regarding DOC-EERA Mot. to Classify Data (May 24, 2017) (eDocket No. 20175-132171-01 (CN)); HTE Letter (May 22, 2017) (eDocket No. 20175-132129-01 (CN)).

³⁵⁸ Order Granting Request for Oral Argument (May 31, 2017) (eDocket No. 20176-132435-01 (CN)).

³⁵⁹ Order on Request for Data Designation (Aug. 10, 2017) (eDocket No. 20178-134606-01 (CN)).

³⁶⁰ *Id.*

³⁶¹ Applicant Mot. to Certify and Stay Order (Aug. 14, 2017) (eDocket No. 20178-134691-04 (CN)); see also DOC-EERA Reply to Applicant's Mot. to Certify and Stay (Aug. 28, 2017) (eDocket No. 20178-135046-01 (CN)).

³⁶² Order Staying Disclosure of Data (Aug. 17, 2017) (eDocket No. 20178-134797-01 (CN)).

³⁶³ Order Certifying Data Determination and Staying Release (Sept. 22, 2017) (eDocket No. 20179-135745-05 (CN)).

the public release of the data until the Commission issued a final decision on the question.³⁶⁴

192. The Commission met to consider the data designation on October 26, 2107.³⁶⁵ Like the ALJ, the Commission determined that the data was public and ordered its public release.³⁶⁶

193. Applicant re-filed, as public, the full Assessment of Accidental Releases Report on October 27, 2017.³⁶⁷ Similarly, on November 9, 2017, the DOC-EERA filed the data as public in the DEIS (Table 10.3.1) and FEIS (Table 10.3-7 and Appendix S, Table 26).³⁶⁸

iii. Fourth Prehearing Order

193. A Fourth Prehearing Order was issued on May 31, 2017.³⁶⁹ The Order granted the Petitions to Intervene filed by Fond du Lac and Shippers.³⁷⁰ The remaining Petitions were taken under advisement.³⁷¹

194. The Fourth Prehearing Order also set forth the dates, times, and anticipated locations of the public hearings scheduled between September 25, 2017 and October 31, 2017.³⁷²

D. Issue Arises Related to EIS Adequacy Determination

195. On June 6, 2017, the Commission issued a Notice requesting comments from the parties on the appropriate process to use to bring the EIS before the Commission to make a timely determination on the EIS's adequacy.³⁷³ Under Minn. Stat. § 116D.04, subd. 2a(j) (2017), the adequacy determination was required to be completed by September 11, 2017, 280 days from the publication of the Notice of EIS Preparation (published on December 5, 2016). Notably at this time, the FEIS had not been completed and was not expected to be completed until at least August 10, 2017, just one month prior to the 280-day deadline for the EIS adequacy determination (September 11, 2017).

196. The length of time necessary to complete the extensive DEIS (December 5, 2016 – May 15, 2017) and the fact that an FEIS was not expected until mid-August 2017, left little time for the Commission to complete its adequacy determination before September 11, 2017, the statutory deadline (absent party consent or governor extension).

³⁶⁴ *Id.*

³⁶⁵ Notice of Commission Meeting October 26, 2017 (Oct. 13, 2017) (eDocket No. 201710-136458-03 (CN)).

³⁶⁶ Order Finding Certain Data Public and Requiring Refiling (Nov. 9, 2017) (eDocket No. 201711-137253-01 (CN)).

³⁶⁷ Ex. EN-65 (Assessment of Accidental Release).

³⁶⁸ DEIS Table 10.3.1 (eDocket No. 201711-137263-01 (CN)); FEIS Table 10.3-7 (eDocket No. 201711-137263-05 (CN)); FEIS Appendix S, Table 26 (eDocket No. 201711-137263-03 (CN)).

³⁶⁹ Fourth Prehearing Order (May 31, 2017) (eDocket No. 20175-132405-01 (CN)).

³⁷⁰ *Id.*

³⁷¹ *Id.*

³⁷² *Id.*

³⁷³ Ex. PUC-18 (Notice Requesting Comments from Parties).

Consequently, the Commission sought comments from the parties on the appropriate process in which to make a timely adequacy decision. An initial comment period was open until June 20, 2017, and a reply comment period was open until June 27, 2017.³⁷⁴

197. The following parties provided initial comments and/or reply comments in response to the Commission's request: DOC, Applicant, Fond du Lac, FOH, HTE, Laborers' Council, Mille Lacs, the Sierra Club, and the United Association.³⁷⁵

198. On August 3, 2017, the Commission met and requested the assignment of a second Administrative Law Judge to oversee development of the record on the adequacy of the EIS, and issue a report and recommendation to the Commission.³⁷⁶ The necessity for a second Administrative Law Judge was due to the overlapping schedule of the FEIS adequacy determination and the public and evidentiary hearings in the CN and RP Dockets.

199. The Commission also voted to extend the 280-day adequacy determination deadline.³⁷⁷ Applicant consented to the extension.³⁷⁸

200. On August 14, 2017, the Commission issued an Order: (1) extending the deadline for determining the adequacy of the EIS by consent of the parties; (2) referring the matter of the adequacy of the EIS to Administrative Law Judge Eric L. Lipman for the purpose of developing the record and issuing a report and recommendation to the Commission; and (3) establishing the procedural schedule for the EIS adequacy determination.³⁷⁹ The Order indicated that a final EIS adequacy determination would be made by the Commission between November 30, 2017 and December 11, 2017.³⁸⁰

201. After the issuance of the Commission's Order, Administrative Law Judge Lipman issued the First EIS Scheduling Order, setting a status and scheduling conference on August 28, 2017.³⁸¹

202. Shortly thereafter, Administrative Law Judge Lipman issued a Second EIS Scheduling Order, directing DOC-EERA to file a notice of filing of certain required items by September 6, 2017.³⁸² DOC-EERA complied with the Order.³⁸³

³⁷⁴ Briefing Papers August 3, 2017 Agenda (August 14, 2017) (eDocket No. 20177-134270-02 (CN)).

³⁷⁵ *Id.*

³⁷⁶ Minutes August 3, 2017 Agenda (Oct. 27, 2017) (eDocket No. 201710-136891-04 (CN)).

³⁷⁷ *Id.*

³⁷⁸ *Id.*

³⁷⁹ Ex. PUC-19 (Order Extending Deadline and Setting Procedural Schedule).

³⁸⁰ *Id.*

³⁸¹ First FEIS Scheduling Order (Aug. 14, 2017) (eDocket No. 20178-134687-01 (CN)).

³⁸² Second FEIS Scheduling Order (Aug. 31, 2017) (eDocket No. 20178-135150-01 (CN)).

³⁸³ Notice of Filing (Sept. 6, 2017) (eDocket No. 20179-135298-04 (CN)).

E. Additional Interventions and Revision of Public Hearing Schedule

203. Between June 19 and 30, 2017, eight parties filed Petitions to Intervene or renewed their previously-filed Petitions to Intervene: Wichahpi (Bonnie) Otto;³⁸⁴ the Red Lake Band of Chippewa Indians (Red Lake);³⁸⁵ the Northern Water Alliance of Minnesota (NWAM),³⁸⁶ Willis Mattison,³⁸⁷ Dawn Goodwin,³⁸⁸ Donovan and Anna Dyrdal (the Dyrdals),³⁸⁹ Leech Lake,³⁹⁰ and Susan Kedzie.³⁹¹ Applicant objected to the Petitions filed by Otto,³⁹² NWA,³⁹³ Mattison, Goodwin, and Kedzie.³⁹⁴ Applicant did not object to the Petitions filed by Red Lake,³⁹⁵ Leech Lake, or the Dyrdals.³⁹⁶

204. Carlton County Land Stewards withdrew its Petition to Intervene on June 30, 2017.³⁹⁷

205. On July 3, 2017, the ALJ issued an Order granting the Petitions to Intervene filed by Red Lake and Youth Climate; denying the Petitions to Intervene filed by Munter, Mysti Bibineau, Jean Ross, and Wichahpi Otto; denying Applicant's Motions to Strike the Responses of Munter, Mysti Bibineau, and Youth Climate; and dismissing the Petition to Intervene filed by James Reents.³⁹⁸ Red Lake and Youth Climate were granted full party status in both the CN and RP Dockets.³⁹⁹

³⁸⁴ Otto Letter (June 19, 2017) (eDocket No. 20176-132904-02 (CN)).

³⁸⁵ Red Lake Pet. to Intervene (June 26, 2017) (eDocket Nos. 20176-133091-01 (CN); 20176-133092-01 (RP)).

³⁸⁶ NWA Pet. to Intervene (June 27, 2017) (eDocket Nos. 20176-133164-01 (CN); 20176-133164-02 (RP)).

³⁸⁷ Mattison Pet. to Intervene (June 30, 2017) (eDocket Nos. 20176-133434-03 (CN); 20176-133434-04 (RP)).

³⁸⁸ Goodwin Pet. to Intervene (June 30, 2017) (eDocket Nos. 20176-133406-01 (CN); 20176-133406-02 (RP)).

³⁸⁹ Dyrdal Pet. to Intervene (June 30, 2017) (eDocket Nos. 20176-133394-02 (CN); 20176-133394-04 (CN); 20176-133394-06 (CN); 20176-133394-01 (RP); 20176-133394-05 (RP); 20176-133394-03 (RP)).

³⁹⁰ Leech Lake Pet. to Intervene (June 30, 2017) (eDocket Nos. 20176-133391-02 (CN); 20176-133391-01 (RP)).

³⁹¹ Kedzie Pet. to Intervene (June 30, 2017) (eDocket Nos. 20176-133364-02 (CN); 20176-133364-01 (RP)).

³⁹² Applicant Response to Otto Pet. to Intervene (June 26, 2017) (eDocket No. 20176-133112-01 (CN)).

³⁹³ Applicant Response to NWA Pet. to Intervene (July 5, 2017) (eDocket No. 20177-133526-03 (CN)).

³⁹⁴ Applicant Response to June 30, 2017 Pet. to Intervene (July 7, 2017) (eDocket No. 20177-133645-03 (CN)).

³⁹⁵ Applicant responded to the Red Lake Petition to Intervene but did not oppose it. See Applicant Response to Red Lake Pet. to Intervene (June 29, 2017) (eDocket No. 20176-133327-01 (CN)).

³⁹⁶ Applicant Response to June 30, 2017 Pet. to Intervene (July 7, 2017) (eDocket No. 20177-133645-03 (CN)).

³⁹⁷ Carlton County Land Stewards Letter Withdrawing Pet. to Intervene (June 30, 2017) (eDocket No. 20176-133388-01 (CN)). The Petition was then dismissed by the ALJ. See Second Amended Order on Pet. to Intervene (July 13, 2017) (eDocket No. 20177-133825-01 (CN)).

³⁹⁸ Order on Pet. to Intervene (July 3, 2017) (eDocket No. 20177-133484-01 (CN)). James Reents is the Executive Director of NWA, which became an intervening party to this action.

³⁹⁹ Order on Pet. to Intervene (July 3, 2017) (eDocket No. 20177-133484-01 (CN)).

206. On July 7, 2017, Sierra Club and HTE filed a joint Motion for Reconsideration of the public hearing schedule to add a Twin Cities location,⁴⁰⁰ which was supported by Youth Climate.⁴⁰¹

207. A Fifth Prehearing Conference was held on July 12, 2017.⁴⁰²

208. On August 3, 2017, the ALJ issued an Order granting the Petitions to Intervene of Leech Lake, the Dyrdals, and the NWAM.⁴⁰³ The Order denied the Petitions to Intervene of Dawn Goodwin, Susan Kedzie, and Willis Mattison.⁴⁰⁴

209. A Fifth Prehearing Order was issued on August 7, 2017.⁴⁰⁵ The Order granted the motion to add a St. Paul public hearing and revised the public hearing schedule to accommodate suitable venues able to handle large crowds of people.⁴⁰⁶ Eighteen public hearings (two per day) were scheduled to occur at nine different locations in or near the Project area.⁴⁰⁷ The public hearings were scheduled from September 26, 2017 to October 26, 2017, in the following locations: Thief River Falls, St. Paul, Grand Rapids, McGregor, Hinckley, Bemidji, Duluth, Cross Lake, and St. Cloud.⁴⁰⁸

210. An Amended Fifth Prehearing Order was later issued that changed the dates of the evidentiary hearing in acknowledgment of Election Day and Veteran's Day, two dates on which a hearing could not be held under state law.⁴⁰⁹ The Amended Order changed the evidentiary hearing dates to November 1, 2, 3, 6, 8, 9, 13, 14, and 15, 2017, thus allowing one additional week of hearing.⁴¹⁰

F. Issuance of FEIS and ALJ Adequacy Recommendation

i. Issuance of FEIS

211. On August 9, 2017, Minnesota Governor Mark Dayton issued a statement announcing that DOC-EERA would release the FEIS on August 17, 2017, as opposed to August 10, 2017, as originally anticipated.⁴¹¹

⁴⁰⁰ Sierra Club and HTE Joint Mot. for Reconsideration of Public Hearing Schedule (July 7, 2017) (eDocket No. 20177-133608-01 (CN)).

⁴⁰¹ Youth Climate Letter in Support of Joint Mot. for Reconsideration of Public Hearing Schedule (July 12, 2017) (eDocket No. 20177-133779-02 (CN)).

⁴⁰² The ALJ denied the last-minute Joint Motion of White Earth, Red Lake, Leech Lake, and HTE to appear by telephone at the Fifth Prehearing Conference. See Order Denying Mot. for Telephone Appearance (July 12, 2017) (eDocket No. 20177-133801-01 (CN)).

⁴⁰³ Order on Pet. to Intervene (Aug. 3, 2017) (eDocket No. 20178-134498-01 (CN)).

⁴⁰⁴ *Id.*

⁴⁰⁵ Fifth Prehearing Order (Aug. 7, 2017) (eDocket No. 20178-134538-01 (CN)).

⁴⁰⁶ *Id.*

⁴⁰⁷ *Id.*

⁴⁰⁸ *Id.*

⁴⁰⁹ Amended Fifth Prehearing Order (Aug. 29, 2017) (eDocket No. 20178-135071-01 (CN)); Letter to Parties from ALJ (Aug. 14, 2017) (eDocket No. 20178-134685-01 (CN)).

⁴¹⁰ Amended Fifth Prehearing Order (Aug. 29, 2017) (eDocket No. 20178-135071-01 (CN)).

⁴¹¹ Ex. PUC-20 (Statement from Governor Mark Dayton on Proposed Applicant Line 3 Pipeline).

212. On August 17, 2017, DOC-EERA issued the FEIS.⁴¹²

213. As a result of the one-week delay in the release of the FEIS, on August 25, 2017 the Commission issued an Order Modifying the Procedural Schedule for the EIS adequacy determination.⁴¹³ The Order extended out, by one week, the dates for the close of comments, the due date for the filing of the ALJ report, and the deadline to file exceptions to the ALJ's report.⁴¹⁴ The Order did not extend the anticipated date of the Commission's adequacy decision (between November 20, 2017 and December 11, 2017).⁴¹⁵

214. DOC-EERA issued an Announcement of the Availability of the FEIS on August 30, 2017.⁴¹⁶ DOC-EERA also issued a Press Release Notice of FEIS Availability; filed Affidavits of Publication for the FEIS; and published notice of the FEIS in the *EQB Monitor* pursuant to Minn. R. 4410-2700 (2017).⁴¹⁷ Electronic copies of the FEIS were also made available on the DOC's website, through the Commission's eDockets system, and at public libraries in the Twin Cities and throughout the Project Area.⁴¹⁸

ii. Motion for Reconsideration of EIS Adequacy Process and Motion to Amend Contested Case Hearing Schedule

215. On August 22, 2017, the Commission met to consider whether to revise the EIS adequacy determination schedule set forth in its August 14, 2017 Order.⁴¹⁹ The Commission received oral comments from the parties at the meeting; and on August 25, 2017, the Commission issued an Order modifying the procedural schedule for the EIS adequacy determination.⁴²⁰

216. After the Commission meeting on August 22, 2017, FOH filed a Petition for Reconsideration of the Commission's Order on the FEIS adequacy determination process and schedule.⁴²¹

217. At the same time, FOH filed with the OAH a Motion for Reconsideration and Amendment of the Fifth Prehearing Order, or, in the alternative, a Motion to Certify the issues to the Commission.⁴²² FOH's Motion argued that that all hearing and prehearing

⁴¹² Ex. EERA-29 (FEIS).

⁴¹³ Ex. PUC-22 (Order Modifying Procedural Schedule).

⁴¹⁴ *Id.*

⁴¹⁵ *Id.*

⁴¹⁶ Announcement of Availability of FEIS (Aug. 30, 2017) (eDocket No. 20178-135120-02 (CN)).

⁴¹⁷ Ex. EERA-28 (Notice of FEIS Availability Press Release); Ex. EERA-28A (Affidavits of Publication for FEIS); Ex. EERA-28B (Announcement of FEIS Availability Mailing); Ex. EERA-27 (Notice of FEIS in *EQB Monitor*); Ex. EERA-30 (Distribution of FEIS).

⁴¹⁸ Ex. EERA-28 (Notice of FEIS Availability Press Release).

⁴¹⁹ Ex. PUC-22 (Order Modifying Procedural Schedule).

⁴²⁰ Ex. PUC-22 (Order Modifying Procedural Schedule).

⁴²¹ FOH Pet. for Reconsideration and Amendment (Aug. 23, 2017) (eDocket No. 20178-134941-04 (CN)).

⁴²² FOH Mot. for Reconsideration and Amendment and Mot. to Certify (Aug. 23, 2017) (eDocket No. 20178-134941-03 (CN)); Mem. (Aug. 23, 2017) (eDocket No. 20178-134941-02 (CN)).

deadlines should be continued until after the FEIS adequacy determination.⁴²³ FOH's Petition to the Commission and Motion to the ALJ were supported by HTE,⁴²⁴ Fond du Lac,⁴²⁵ Youth Climate,⁴²⁶ White Earth⁴²⁷ Sierra Club,⁴²⁸ and NWAM.⁴²⁹ Applicant filed a Response in Opposition to both the Petition and Motion.⁴³⁰

218. On September 11, 2017, the ALJ issued an Order Denying FOH's Motion to Amend the Scheduling Order or Certify the issue to the Commission.⁴³¹ This Order sets forth, in detail, the basis for denying the Motion to extend out the prehearing and hearing deadlines until after the FEIS adequacy determination.⁴³²

219. On October 10, 2017, the Commission issued an Order Denying FOH's Motion for Reconsideration of the procedural schedule applicable to the FEIS adequacy determination.⁴³³

iii. Motion to Disqualify ALJ Lipman

220. On September 1, 2017, FOH filed a Motion to Disqualify ALJ Lipman and to appoint a different Administrative Law Judge to make the report and recommendation to the Commission on the adequacy of the FEIS.⁴³⁴ Red Lake,⁴³⁵ White Earth,⁴³⁶ and HTE⁴³⁷ filed similar motions or joined in support of the motions to disqualify Administrative Law

⁴²³ FOH Mot. for Reconsideration and Amendment and Mot. to Certify (Aug. 23, 2017) (eDocket No. 20178-134941-03 (CN)); Mem. (Aug. 23, 2017) (eDocket No. 20178-134941-02 (CN)).

⁴²⁴ HTE Pet. for Reconsideration (Sept. 1, 2017) (eDocket No. 20179-135234-01 (CN)).

⁴²⁵ Fond du Lac Response to FOH Mot. (Sept. 1, 2017) (eDocket No. 20179-135233-01 (CN)).

⁴²⁶ Youth Climate Letter in Support of FOH Petition and Mot. (Sept. 5, 2017) (eDocket No. 20179-135265-01 (CN)).

⁴²⁷ White Earth Pet. in Support of FOH Pet. and Motion (Sept. 1, 2017) (eDocket No. 20178-135169-01 (CN)).

⁴²⁸ Sierra Club Response to FOH Pet. and Mot. (Sept. 5, 2017) (eDocket No. 20179-135264-01 (CN)).

⁴²⁹ NWAM Answer to FOH Pet. and Mot. (Sept. 6, 2017) (eDocket No. 20179-135283-01 (CN)).

⁴³⁰ Applicant Response to FOH Pet. and Mot. (Sept. 1, 2017) (eDocket No. 20179-135226-03 (CN)).

⁴³¹ Order Denying Mot. to Amend Scheduling Order or Certify Issue to Commission (Sept. 11, 2017) (eDocket No. 20179-135435-02 (CN)).

⁴³² *Id.*

⁴³³ Ex. PUC-24 (Order Denying Reconsideration [of August 25 Order]).

⁴³⁴ FOH Mot. to Disqualify ALJ (Sept. 1, 2017) (eDocket No. 20179-135221-02 (CN)); FOH Mem. in Support of Mot. to Disqualify ALJ (Sept. 1, 2017) (eDocket No. 20179-135221-04 (CN)); FOH Aff. of Prejudice (Sept. 1, 2017) (eDocket No. 20179-135221-06 (CN)).

⁴³⁵ Red Lake Mot. (Sept. 6, 2017) (eDocket No. 20179-135267-01 (CN)); Red Lake Mem. (Sept. 6, 2017) (eDocket No. 20179-135267-05 (CN)); Red. Lake Aff. in Support (Sept. 6, 2017) (eDocket No. 20179-135267-03 (CN)).

⁴³⁶ White Earth Band Mot. (Sept. 6, 2017) (eDocket No. 20179-135266-02 (CN)); White Earth Band Mem. (Sept. 6, 2017) (eDocket No. 20179-135266-06 (CN)); White Earth Band Aff. in Support (Sept. 6, 2017) (eDocket No. 20179-135266-04 (CN)).

⁴³⁷ HTE Aff. of Counsel in Support of Mot. (Sept. 18, 2017) (eDocket No. 20179-135585-02 (CN)).

Judge Lipman. Applicant⁴³⁸ and the Laborers' Council⁴³⁹ filed responses in opposition to the motions.

221. Chief Administrative Law Judge Tammy L. Pust ultimately denied the motions to disqualify Administrative Law Judge Lipman.⁴⁴⁰

G. Public Hearings

i. Notice of Public Hearings

222. On September 8, 2017, the Commission issued a Notice of Public and Evidentiary Hearings announcing the dates, times, and locations of the public and evidentiary hearings.⁴⁴¹ Consistent with the Amended Fifth Prehearing Order, the Notice advised that 18 public hearings would be held in nine locations (two per day, per location) between September 26, 2017 and October 26, 2017.⁴⁴² The locations of the public hearings included: Thief River Falls, St. Paul, Grand Rapids, McGregor, Hinckley, Bemidji, Duluth, Cross Lake, and St. Cloud.⁴⁴³ In addition, the Notice advised that evidentiary hearings would be held at the Commission offices in St. Paul on November 1, 2, 3, 6, 8, and 9, 2017, and, if needed, November 13, 14, and 15, 2017.⁴⁴⁴ The Notice further advised that the public comment period would be open until November 22, 2017.⁴⁴⁵

223. The Notice of Public and Evidentiary Hearings was mailed to 7,092 parties on the Commission's Project list on September 13, 2017,⁴⁴⁶ and filed on the Commission's eDocket system on October 31, 2017.⁴⁴⁷ In addition, the Notice was published in the *Star Tribune* and *Pioneer Press* on August 28, 2017.⁴⁴⁸

224. A Sixth Prehearing Order was issued on September 18, 2017, addressing various logistical matters and the evidentiary hearings.⁴⁴⁹ An Amended Sixth Prehearing Order was issued on September 22, 2017, to address Highly Sensitive Trade Secret

⁴³⁸ Applicant Response in Opposition to Mot. to Disqualify ALJ (Sept. 15, 2017) (eDocket Do. 20179-135580-03 (CN)).

⁴³⁹ Laborers' Council Response in Opposition to Disqualification Pet. (Sept. 19, 2017) (eDocket No. 20179-135630-01 (CN)).

⁴⁴⁰ Order on Mot. for Disqualification (Oct. 5, 2017) (eDocket No. 201710-136167-01 (CN)).

⁴⁴¹ Ex. PUC-23 (Notice of Public and Evidentiary Hearings for the Proposed Line 3 Replacement Project).

⁴⁴² *Id.*

⁴⁴³ *Id.*

⁴⁴⁴ *Id.*

⁴⁴⁵ *Id.*

⁴⁴⁶ PUC-25 (Aff. of Mailing – Notice of Public and Evidentiary Hearings for the Proposed Line 3 Replacement Project).

⁴⁴⁷ Affidavit of Mailing (Oct. 31, 2017) (eDocket Nos. 201710-136975-01 (CN));

⁴⁴⁸ Ex. PUC-26 (Aff. of Publication – *StarTribune* and *Pioneer Press* – Notice of Public and Evidentiary Hearings for the Proposed Line 3 Replacement Project).

⁴⁴⁹ Sixth Prehearing Order (Sept. 18, 2017) (eDocket No. 20179-135612-01 (CN)).

documents and to include the option for a “lottery system” of calling on speakers at the public hearings.⁴⁵⁰

ii. Public Hearings

225. Between September 26 and October 25, 2017, sixteen public hearings were held in the following eight locations: Thief River Falls; St. Paul; Grand Rapids; McGregor; Hinckley; Bemidji; Duluth; and Cross Lake. A separate hearing was held at 1 p.m. and 6 p.m. at each location.

226. The 6 p.m. hearing in Duluth was adjourned abruptly after approximately two hours due to members of the crowd charging the Administrative Law Judge’s table, commandeering the microphones, and acting in a loud, threatening, and boisterous manner.⁴⁵¹ The Judge and all members of the panel were forced to evacuate the room, as members of the Duluth Police Department worked to contain the crowd and resulting protests. Due to the interruption, the resulting protests, and the associated security risks, the hearing was adjourned. As a result of the Duluth hearing and the large crowds attending the hearings, the Commission increased security and police presence at the subsequent public hearings, and additional security safeguards were instituted.

227. On October 25, 2017, the Commission issued a Notice that the two public hearings scheduled in St. Cloud on October 26, 2017, had been canceled.⁴⁵² According to the Commission, “[t]he cancellation was based on the advice of the St. Cloud Police and the City of St. Cloud that the public hearing could not be efficiently and safely conducted at the convention center that day.”⁴⁵³ The Commission later determined that the two public hearings in St. Cloud would not be rescheduled.⁴⁵⁴

228. In sum, over 4,000 individuals registered their names on the public hearing sign-in sheets and total attendance at the public hearings was estimated at over 5,500. Seven-hundred-twenty-four (724) speakers were heard during the 16 public hearings, resulting in over 2,600 pages of public hearing transcripts.

229. A summary of the comments received at the public hearings is set forth in the Public Comments Section below.

⁴⁵⁰ Am. Sixth Prehearing Order (Sept. 22, 2017) (eDocket No. 20179-135728-01 (CN)).

⁴⁵¹ Evid. Hrg. Tr. (Vol. 7B) at 95-98 (Oct. 18, 2017).

⁴⁵² Press Release – PUC Line 3 Public Hearings in St. Cloud Cancelled (Oct. 25, 2017) (eDocket No. 201710-136834-01 (CN)).

⁴⁵³ *Id.*

⁴⁵⁴ Press Release - PUC Line 3 Hearings in St. Cloud Will Not be Rescheduled (Nov. 9, 2017) (eDocket No. 201711-137271-01 (CN)).

H. Evidentiary Hearing/Public Comment Period and Close of Hearing Record

i. Hearing Preparation

230. In conformity with the prehearing orders, Applicant timely filed the direct testimony of its witnesses on January 31, 2017.⁴⁵⁵

231. Also in conformity with the prehearing orders, Youth Climate,⁴⁵⁶ the Dyrdals,⁴⁵⁷ HTE,⁴⁵⁸ Mille Lacs,⁴⁵⁹ United Association,⁴⁶⁰ Red Lake,⁴⁶¹ Shippers,⁴⁶² Sierra Club,⁴⁶³ FOH,⁴⁶⁴ Fond du Lac,⁴⁶⁵ Kennecott,⁴⁶⁶ Laborers' Council,⁴⁶⁷ and DOC-DER⁴⁶⁸ timely filed their witnesses' direct testimony on September 11, 2017.

⁴⁵⁵ Ex. EN-6 (McKay Direct); Ex. EN-7 (Haskins Direct); Ex. EN-8 (Bergman Direct); Ex. EN-9 (Bergland Direct); Ex. EN-10 (Rennicke Direct); Ex. EN-11 (Lichty Direct); Ex. EN-12 (Kennett Direct); Ex. EN-13 (Gerard Direct); Ex. EN-14 (Fleeton Direct); Ex. EN-15 (Earnest Direct); Ex. EN-16 (Baumgartner Direct); Ex. EN-17 (Wuolo Direct); Ex. EN-18 (Lee Direct); Ex. EN-19 (Glanzer Direct); Ex. EN-20 (TS Glanzer Sched. 4, 6); Ex. 21 (HSTS Glanzer Sched. 5); Ex. EN-22 (Simonson Direct); Ex. 23 (TS Simonson Sched. 2); Ex. EN-24 (Eberth Direct).

⁴⁵⁶ Ex. YC-22 (Otto Direct); Ex. YC-20 (Paulson Direct); Ex. YC-19 (Lamb Direct); Ex. YC-23 (Manning Direct); Ex. YC-1 (Swift Direct); Ex. YC-16 (Snyder Direct); Ex. YC-17 (Attachment 1, Snyder Direct); Ex. YC-18 (Attachment 2, Snyder Direct); Ex. YC-2 (Scott Direct); Ex. YC-3 (Attach. 1, Scott Direct); Ex. YC-4 (Attach. 2, Scott Direct); Ex. YC-5 (Attach. 3, Scott Direct); Ex. YC-6 (Attach. 4, Scott Direct); Ex. YC-7 (Attach. 5, Scott Direct); Ex. YC-8 (Attach. 6, Scott Direct); Ex. YC-9 (Attach. 7, Scott Direct); Ex. YC-10 (Attach. 8, Scott Direct); Ex. YC-11 (Attach. 9, Scott Direct); Ex. YC-12 (Attach. 10, Scott Direct); Ex. YC-13 (Attach. 11, Scott Direct); Ex. YC-14 (Abraham Direct); Ex. YC-15 (Douglas Direct); Ex. YC-21 (Reich Direct).

⁴⁵⁷ Ex. DY-1 (Dyrdal Direct).

⁴⁵⁸ Ex. HTE-1 (Merritt Direct and Attach.); Ex. HTE-2 (Stockman Direct and Attach. LS-01 to LS-34).

⁴⁵⁹ Ex. ML-1 (Kemper Direct).

⁴⁶⁰ Ex. UA-1 (Barnett Direct).

⁴⁶¹ Ferris Direct (Sept. 11, 2017) (eDocket No. 20179-135399-01 (CN)).

⁴⁶² Ex. SH-1 (Shippers Grp. Direct).

⁴⁶³ Ex. SC-1 (Kornheiser Direct); Ex. SC-2 (Kornheiser Direct – App. 1); Ex. SC-3 (Kornheiser Direct – App. 2).

⁴⁶⁴ Ex. FOH-1 (Kuprewicz Direct); Ex. FOH-3 (Sched. 2); Ex. FOH-4 (Sched. 3); Ex. FOH-5 (Sched. 4); Ex. FOH-6 (Joseph Direct); Ex. FOH-7 (Smith Direct).

⁴⁶⁵ Ex. FDL-1 (Dupuis Direct); Ex. FDL-2 (Schuldt Direct).

⁴⁶⁶ Ex. KN-1 (Best Direct).

⁴⁶⁷ Ex. LC-1 (Whiteford Direct); Ex. LC-1 (Engen Direct).

⁴⁶⁸ Ex. DER-1 (O'Connell Direct); Ex. DER-2 (TS O'Connell Direct); Ex. DER-3 (HSTS O'Connell Direct); Ex. DER-4 (Fagan Direct); Ex. DER-5 (Dybdahl Direct). O'Connell's highly-sensitive trade secret testimony was filed in Docket No. 15-340. The DOC-DER subsequently filed corrections.

232. The following parties timely filed Rebuttal Testimony on October 11, 2017: Applicant;⁴⁶⁹ Fond du Lac;⁴⁷⁰ Sierra Club;⁴⁷¹ HTE⁴⁷² United Association;⁴⁷³ Laborers' Council;⁴⁷⁴ and Shippers.⁴⁷⁵

233. In compliance with the prehearing orders, on October 23, 2017, the following parties timely filed Surrebuttal Testimony: Applicant;⁴⁷⁶ the DOC-DER;⁴⁷⁷ HTE;⁴⁷⁸ Youth Climate;⁴⁷⁹ Fond du Lac;⁴⁸⁰ FOH;⁴⁸¹ Shippers;⁴⁸² and the Dyrda's.⁴⁸³

234. On October 27, 2017, the DOC-DER filed "Supplemental" Surrebuttal Testimony of Dr. Marie Fagan.⁴⁸⁴ Supplemental surrebuttal was not provided for in the prehearing orders; the DOC-DER's filing was actually late-filed surrebuttal testimony.

235. On October 30, 2017, Applicant filed a motion to strike Dr. Fagen's "Supplemental Surrebuttal Testimony".⁴⁸⁵ The DOC-DER responded to the motion.⁴⁸⁶ At the hearing, the ALJ ruled that Dr. Fagen's "Supplemental Surrebuttal" would be permitted into the hearing record, but granted Applicant's request to submit Supplemental Surrebuttal Testimony from Neil Earnest to respond to Dr. Fagen's late-filed testimony.⁴⁸⁷

⁴⁶⁹ Ex. EN-30 (Eberth Rebuttal); Ex. EN-32 (Kennett Rebuttal); Ex. EN-33 (Haskins Rebuttal); Ex. EN-34 (Baumgartner Rebuttal); Ex. EN-35 (Philipenko Rebuttal); Ex. EN-36 (Gerard Rebuttal); Ex. EN-37 (Earnest Rebuttal); Ex. EN-38 (Glanzer Rebuttal); Ex. EN-39 (Fleeton Rebuttal); Ex. EN-40 (Rennicke Rebuttal); Ex. EN-41 (Lichty Rebuttal); Ex. EN-42 (Johnston Rebuttal); Ex. EN-43 (Lim Rebuttal); Ex. EN-45 (Simonson Rebuttal); Ex. EN-46 (Bergland Rebuttal); Ex. EN-47 (Kinder Rebuttal); Ex. EN-48 (Bergman Rebuttal); Ex. EN-49 (Wuolo Rebuttal); Ex. EN-50 (Lee Rebuttal); Ex. EN-51 (Mittelstadt Rebuttal); Ex. EN-52 (Horn Rebuttal); Ex. EN-54 (Stephenson Rebuttal); Ex. EN-55 (Tillquist Rebuttal).

⁴⁷⁰ Ex. FDL-3 (Schuldt Rebuttal).

⁴⁷¹ Ex. SC-4 (Twite Rebuttal); Ex. SC-5 (Twite Rebuttal, Sched. 1); Ex. SC-6 (Twite Rebuttal, Sched. 2); Ex. SC-7 (Twite Rebuttal, Sched. 3); Ex. SC-8 (Twite Rebuttal, Sched. 4); Ex. SC-9 (Twite Rebuttal, Sched. 5); Ex. SC-10 (Twite Rebuttal, Sched. 6); Ex. SC-11 (Twite Rebuttal, Sched. 7); Ex. SC-12 (Twite Rebuttal, Sched. 8); Ex. SC-13 (Twite Rebuttal, Sched. 9).

⁴⁷² Ex. HTE-3 (Stockman Rebuttal and Attach. LS-35 to LS-44).

⁴⁷³ Ex. UA-2 (Barnett Rebuttal).

⁴⁷⁴ Ex. LC-3 (Whiteford Rebuttal).

⁴⁷⁵ Ex. SH-2 (Shippers Grp. Rebuttal).

⁴⁷⁶ Ex. EN-56 (Earnest Surrebuttal); Ex. EN-57 (Glanzer Surrebuttal); Ex. EN-58 (Rennicke Surrebuttal); Ex. EN-59 (Wuolo Surrebuttal); Ex. EN-60 (Lee Surrebuttal). Between October 23, 2017 and October 27, 2017, Applicant filed the corrected or updated Surrebuttal Testimony of Allan Baumgartner, Jack Fleeton, Britta Bergland, Heidi Tillquist, and Matthew Horn. See Ex. EN-61 (Baumgartner Corrected Direct); Ex. EN-62 (Fleeton Corrected Rebuttal); Ex. EN-63 (Bergland Corrected Rebuttal); Ex. EN-64 (Tillquist Corrected Rebuttal); Ex. EN-66 (Horn Updated Rebuttal); Ex. EN-67 (Horn Updated Rebuttal, Sched. 2).

⁴⁷⁷ Ex. DER-6 (O'Connell Surrebuttal); Ex. DER-7 (Fagan Surrebuttal); Ex. DER-8 (Dybdahl Surrebuttal).

⁴⁷⁸ Ex. HTE-4 (Stockman Surrebuttal and Attach. LS-45 to 56).

⁴⁷⁹ Ex. YC-25 (Swift Surrebuttal); Ex. YC-26 (Snyder Surrebuttal).

⁴⁸⁰ Ex. FDL-4 (Schuldt Surrebuttal).

⁴⁸¹ Ex. FOH-10 (Joseph Surrebuttal); Ex. FOH-11 (Kuprewicz Surrebuttal); Ex. FOH-12 (Kuprewicz Surrebuttal, Sched. 5).

⁴⁸² Ex. SH-3 (Shippers Group Surrebuttal).

⁴⁸³ Ex. DY-15 (Dyrdal Surrebuttal).

⁴⁸⁴ Ex. DER-9 (Fagan Supplemental Surrebuttal).

⁴⁸⁵ Mot. to Strike (Oct. 30, 2017) (eDocket No. 201710-136918-04 (CN)).

⁴⁸⁶ DOC-DER Response to Mot. to Strike (Oct. 31, 2017) eDocket No. 201710-136978-02 (CN)).

⁴⁸⁷ See Ex. EN-94 (Earnest Supplemental Surrebuttal).

236. A Seventh Prehearing Order was issued on October 30, 2017, which addressed miscellaneous procedural matters applicable to the evidentiary hearing.⁴⁸⁸

237. Prior to the start of the evidentiary hearing, Applicant filed an objection to the admissibility of Attachment AS-6 to the Direct Testimony of Adam Scott (Youth Climate witness) and Exhibit A to the Surrebuttal of Nancy Schuldt (Fond du Lac witness).⁴⁸⁹ Youth Climate and Fond du Lac responded to Applicant's objections.⁴⁹⁰ The ALJ denied Applicant's motion to exclude these documents in the Eighth Prehearing Order issued on October 31, 2017.⁴⁹¹

ii. Evidentiary Hearing

238. An evidentiary hearing was held on November 1, 2, 3, 6, 8, 9, 13, 14, 15, 16, 17, and 20, 2017. The hearing, originally scheduled to end on November 9, extended out an additional six days, until November 20, 2017.

239. Sixty-one witnesses testified at the hearing. All 18 parties to the action engaged in active examination of the various witnesses, spanning a total of 12 full days of hearing.

240. On November 22, 2017, the ALJ issued a First Post-Hearing Order setting forth a post-hearing briefing schedule.⁴⁹²

iii. Close of Public Comment Period

241. On November 22, 2017, the public comment period closed. In addition to the hundreds of public comments made at the public hearing, over 72,000 written comments were received during the comment period.

242. A summary of the public comments received is set forth in Attachment C.

iv. Post-Hearing Receipt of Exhibits

243. After the evidentiary hearing, the hearing record was left open to receive the following exhibits: Ex. DER 20 (Request for Proposal); Ex. DER-21 (Request for Proposal); Ex. LL-4 (Official Statement); Ex. LL-5 (Pre-2009 Easement Documents); Ex. LL-6 (Pre-2009 Easement Documents); Ex. LL-7 (Resolution No. 6); Ex. LL-8 (Resolution No. 2016-26); Ex. LL-9 (Resolution No. 2009-122); LL-10 (Resolution No. LD2018-073);

⁴⁸⁸ Seventh Prehearing Order (Oct. 30, 2017) (eDocket No. 201710-136945-01 (CN)).

⁴⁸⁹ Objection to Admissibility of Certain Pre-filed Evidence (Oct. 25, 2017) (eDocket No. 201710-136832-03 (CN)).

⁴⁹⁰ Youth Climate Reply to Applicant Objection to Admissibility of Certain Pre Filed Testimony (Oct. 30, 2017) (eDocket No. 201710-136934-02 (CN)); Fond du Lac Reply to Applicant's Objection to Admissibility of Certain Pre Filed Testimony (Oct. 30, 2017) (eDocket No. 201710-136933-01 (CN)).

⁴⁹¹ Eighth Prehearing Order (Oct. 31, 2017) (eDocket No. 201710-137021-01 (CN)).

⁴⁹² First Post-Hearing Order (Nov. 22, 2017) (eDocket Nos. 201711-137610-01 (CN); 201711-137609 (RP)).

Ex. EERA 42 (Notice of Availability and Revised FEIS); and Ex. EERA 43 (Service Documents for Revised FEIS).

244. On November 28, 2017, Leech Lake provided only four of the documents requested at hearing (Exs. LL-4, LL-8, LL-9, and LL-10). As a result, on November 28, 2017, the ALJ issued a Second Post-Hearing Order again ordering Leech Lake to provide the remaining requested documents (Exs. LL-5, LL-6, LL-7).⁴⁹³ The Order directed Leech Lake to provide the documents by November 30, 2017.⁴⁹⁴

245. Leech Lake failed to provide the documents as directed. As a result, on February 16, 2018, the ALJ issued a Fifth Post-Hearing Order directing that Applicant provide the requested documents by February 28, 2018.⁴⁹⁵ Applicant complied with the Order and provided the requested documents on February 28, 2018.⁴⁹⁶

246. On March 22, 2018, the ALJ issued a Sixth Post-Hearing Order receiving Exs. LL-5, LL-6, and LL-7 into the hearing record.⁴⁹⁷ The same day, the ALJ issued a notice to the parties that she was taking administrative notice of certain judicially cognizable facts, maps, and treaties referenced in the hearing record or necessary to clarify facts in the record.⁴⁹⁸ Only Applicant filed an objection to the judicially-noticed facts.⁴⁹⁹

247. In addition, on March 23, 2018, the ALJ issued a Seventh Post-Hearing Order officially receiving Exs. EERA-42 (the Notice of Availability of Revised EIS and Revised EIS) and EERA-43 (Affidavits of Service) into the hearing record.⁵⁰⁰

248. The hearing record closed on April 5, 2018, the deadline to file objections to the ALJ's taking judicial notice of various facts.

⁴⁹³ Second Post-Hearing Order (Nov. 29, 2017) (eDocket Nos. 201711-137752-01 (CN); 201711-137753-01 (RP)). See also, Am. Second Post-Hearing Order (Mar. 27, 2018) (eDocket No. 20183-141428-01 (CN)) (attaching a full copy of Ex. LL-8). *Id.*

⁴⁹⁴ Second Post-Hearing Order (Nov. 29, 2017) (eDocket Nos. 201711-137752-01 (CN); 201711-137753-01 (RP)).

⁴⁹⁵ Fifth Post-Hearing Order (Feb. 16, 2018) (eDocket No. 20182-140259-01 (CN)).

⁴⁹⁶ Applicant Cover Letter (Feb. 28, 2018) (eDocket No. 20182-140627-02 (RP)); Exs. LL-5; LL-6; LL-7 (Easements, Resolutions, and Agreements).

⁴⁹⁷ Sixth Post-Hearing Order (Mar. 23, 2018) (eDocket No. 20183-141276-01 (CN)). On March 27, 2018, the ALJ issued an Amended Second Post-Hearing Order to receive missing pages from Ex. LL-8 into the hearing record. Amended Second Post-Hearing Order (Mar. 27, 2018) (eDocket No. 20183-141427-02 (CN)).

⁴⁹⁸ Notice of Taking Administrative Notice & Opportunity to Object (Mar. 22, 2018) (eDocket No. 20183-141289-01 (CN)). See also, Am. Notice of Taking Administrative Notice & Opportunity to Object (Mar. 28, 2018) (eDocket No. 20183-141441-01 (CN)), Second Am. Notice of Taking Administrative Notice & Opportunity to Object (Mar. 29, 2018) (eDocket No. 20183-141510-01 (CN)).

⁴⁹⁹ Applicant Objections to Proposed Taking of Admin. Notice (Apr. 5, 2018) (eDocket No. 20184-141717-01 (CN)).

⁵⁰⁰ Seventh Post-Hearing Order (Mar. 23, 2018) (eDocket No. 20183-141296-01 (CN)).

I. FEIS Adequacy Determination and Post-Hearing Matters

i. FEIS Adequacy Recommendation

249. On August 23, 2017, the Commission issued a Notice of the Comment Period on the Adequacy of the FEIS.⁵⁰¹ The comment period extended from August 23, 2017 to October 2, 2017.⁵⁰² During that time, the following parties submitted comments: Applicant; Sierra Club, Red Lake, HTE, Mille Lacs, FOH, Laborers' Council, and the Dyrdals.⁵⁰³

250. On November 1, 2017, Administrative Law Judge Lipman issued his Report on the Adequacy of the FEIS.⁵⁰⁴ The Report recommended that the Commission find the FEIS to be adequate.⁵⁰⁵

251. Exceptions to Administrative Law Judge Lipman's Report were timely filed by the DOC-EERA, Youth Climate, HTE, Mille Lacs, FOH, Sierra Club, Fond du Lac, and the Dyrdals.⁵⁰⁶

ii. Commission Declares FEIS Inadequate

252. On December 7, 2017, the Commission met to consider the adequacy of the FEIS.⁵⁰⁷

253. The Commission issued a Notice of Final Environmental Impact Statement Adequacy Determination on December 13, 2017.⁵⁰⁸

⁵⁰¹ Ex. PUC-21 (Notice of Comment Period on Adequacy of FEIS for the proposed Line 3 Replacement Project).

⁵⁰² *Id.*

⁵⁰³ Comment by Applicant (Oct. 2, 2017) (eDocket No. 201710-136019-04 (CN)); Comment by Sierra Club (Oct. 2, 2017) (eDocket No. 201710-136028-01 (CN)); Comment by HTE (Oct. 2, 2017) (eDocket No. 201710-136026-02 (CN)); Comment by Mille Lacs Band (Oct. 2, 2017) (eDocket No. 201710-136025-02 (CN)); Comment by FOH (Oct. 2, 2017) (eDocket No. 201710-136024-02 (CN)); Comment by LDC (Oct. 2, 2017) (eDocket Nos. 201710-136020-02 (CN)); Comment by Dyrdals (Oct. 2, 2017) (eDocket Nos. 201710-136067-02 (CN); 201710-136067-01 (RP)).

⁵⁰⁴ Report of the Administrative Law Judge (Nov. 1, 2017) (eDocket No. 201711-137079-01 (CN)).

⁵⁰⁵ *Id.*

⁵⁰⁶ DOC-EERA Exceptions to ALJ Report (Nov. 21, 2017) (eDocket No. 201711-137576-01 (CN)); Youth Climate Exceptions to ALJ Report (Nov. 21, 2017) (eDocket No. 201711-137596-02 (CN)); HTE Exceptions to ALJ Report (Nov. 21, 2017) (eDocket No. 201711-137595-02 (CN)); Mille Lacs Exceptions to ALJ Report (Nov. 21, 2017) (eDocket No. 201711-137593-02 (CN)); FOH Exceptions to ALJ Report (Nov. 21, 2017) (eDocket No. 201711-137587-04 (CN)); Sierra Club Exceptions to ALJ Report (Nov. 21, 2017) (eDocket No. 201711-137581-01 (CN)); Fond du Lac Exceptions to ALJ report (Nov. 21, 2017) (eDocket No. 201711-137568-02 (CN)); Dyrdals Exceptions to ALJ Report (Nov. 21, 2017) (eDocket No. 201711-137591-02 (CN)).

⁵⁰⁷ Order Finding Environmental Impact Statement Inadequate (Dec. 14, 2017) (eDocket Nos. 201712-138168-02 (CN); 201712-138168-01 (RP)).

⁵⁰⁸ Notice of Final Environmental Impact Statement Adequacy Determination (Dec. 13, 2017) (eDocket Nos. 201712-138116-01 (CN); 201712-138116-02 (RP)).

254. On December 14, 2017, the Commission issued an Order Finding the Environmental Impact Statement Inadequate.⁵⁰⁹ The Commission found the FEIS inadequate on the following four grounds:

- The EIS needs to (i) indicate how far and where SA-04 would need to be moved to avoid the karst topography it would otherwise traverse and (ii) provide a revised environmental-impact analysis of SA-04 specifically to reflect the resulting relocation of that alternative.
- The EIS needs to clarify that quantitative representations of route and system alternatives do not necessarily reflect the actual qualitative impacts of those alternatives....
- The EIS needs to clearly identify the extent to which resource impacts of route alternatives in the existing Line 3 corridor are or are not additive –i.e., the extent to which that route alternative would introduce new or additional impacts beyond the impacts of the existing pipelines in that corridor.
- The EIS needs to clarify that the traditional cultural properties survey must be completed before the state of any construction pursuant to any permit granted in this proceeding.⁵¹⁰

255. The Order gave the DOC-EERA 60 days from the date of the Notice (December 13, 2017) to supplement the EIS to include the information set forth above.⁵¹¹

256. On December 20, 2017, the Commission provided notice of its adequacy decision in the *EQB Monitor*.⁵¹²

iii. Motions to Extend Briefing Schedule due to Inadequate EIS

257. As a result of the Commission's decision finding the EIS inadequate, on December 14, 2017, Sierra Club, FOH, HTE, Fond du Lac, White Earth, Leech Lake, Mille Lacs, NWAM, and Youth Climate filed a Joint Motion for the Adjustment of the Briefing Schedule.⁵¹³ In their Motion, the parties requested a stay of the post-hearing briefing deadlines until a final determination was made by the Commission on the adequacy of the FEIS.⁵¹⁴

⁵⁰⁹ Order Finding Environmental Impact Statement Inadequate (Dec. 14, 2017) (eDocket Nos. 201712-138168-02 (CN); 201712-138168-01 (RP)).

⁵¹⁰ *Id.*

⁵¹¹ *Id.*

⁵¹² EQB Monitor Notice of FEIS Adequacy Determination (Dec. 20, 2017) (eDocket No. 201712-138313-02 (CN)).

⁵¹³ Joint Mot. for Adjustment of Briefing Schedule (Dec. 14, 2017) (eDocket Nos. 201712-138191-01 (CN); 201712-138191-01(RP)).

⁵¹⁴ *Id.*

258. On December 15, 2017, the ALJ issued a Third Post-Hearing requesting responses to the Motion for Adjustment of the Briefing Schedule.⁵¹⁵

259. The Dyrdals filed a response in support of the Motion.⁵¹⁶ Applicant, Shippers, United Association, and Laborers' Council opposed the Motion.⁵¹⁷

260. On December 22, 2017, the ALJ granted the Motion to Adjust the Briefing Schedule.⁵¹⁸ The Order extended the date to file initial briefs to two weeks after an order by the Commission finding the EIS adequate.⁵¹⁹

261. On December 28, 2017, Applicant, the United Association, Laborers' Council and Shippers filed a Joint Motion to Certify the issue of the post-hearing briefing schedule to the Commission.⁵²⁰

262. The next day, the Commission issued a Notice of Request for Immediate Certification of the Joint Motion and a Notice of Special Commission Meeting to address the issue.⁵²¹ In its Notice, the Commission directed the ALJ to immediately certify the Joint Motion to the Commission so that the issues raised could be promptly addressed at a special Commission meeting scheduled for January 9, 2018.⁵²²

263. As requested by the Commission, the ALJ issued an Order Granting the Commission's Request for Certification on January 2, 2018;⁵²³ and the Commission convened a special meeting to discuss the matter.⁵²⁴

264. On January 10, 2018, the Commission issued an Order directing the ALJ to provide her report to the Commission by April 23, 2018, and to adjust the parties' briefing schedule accordingly.⁵²⁵

⁵¹⁵ Third Post-Hearing Order (Dec. 15, 2017) (eDocket No. 201712-138197-01 (CN)).

⁵¹⁶ Dyrdal Response in Support of the Joint Mot. (Dec. 18, 2017) (eDocket No. 201712-138262-01 (RP)).

⁵¹⁷ Applicant Response in Opposition to Joint Mot. for Adjustment of Briefing Schedule (Dec. 18, 2017) (eDocket No. 201712-138263-04 (RP)); Laborers' Council Response in Opposition to Joint Mot. to Delay Schedule (Dec. 18, 2017) (eDocket No. 201712-138264-02 (RP)); Shippers Response in Opposition to Joint Mot. for Adjustment of Briefing Schedule (Dec. 18, 2017) (eDocket No. 201712-138266-01 (CN)); United Association Response in Opposition to Joint Mot. for Adjustment of Briefing Schedule (Dec. 18, 2017) (eDocket No. 201712-138267-01 (CN)).

⁵¹⁸ Order Granting Mot. to Extend Briefing Schedule (Dec. 22, 2017) (eDocket No. 201712-138416-02 (RP)).

⁵¹⁹ *Id.*

⁵²⁰ Joint Mot. to Certify (Dec. 29, 2017) (eDocket No. 201712-138480-03 (CN)).

⁵²¹ Notice of Request for Immediate Certification of Mot. (Dec. 29, 2017) (eDocket No. 201712-138495-02 (CN)); Notice of Special Commission Meeting (Dec. 29, 2017) (eDocket No. 201712-138496-02 (CN)).

⁵²² *Id.*

⁵²³ Order Requesting ALJ Report by April 23, 2018 (Jan. 10, 2018) (eDocket No. 20181-138782-02 (CN)).

⁵²⁴ Notice of Special Commission Meeting (Dec. 29, 2017) (eDocket No. 201712-138496-02 (CN)).

⁵²⁵ *Id.*

265. Based upon the directive from the Commission, the ALJ issued a Fourth Post-Hearing Order with a briefing schedule that would permit submission of a final report by the April 23, 2018 deadline.⁵²⁶

266. On January 11, 2018, the Sierra Club, HTE, Fond du Lac, and Youth Climate filed a Joint Motion for Reconsideration and a Post-Hearing Conference in response to the Fourth Post-Hearing Order.⁵²⁷ The ALJ denied the Motion on January 17, 2018.⁵²⁸

iv. Post-Hearing Briefing

267. On January 16, 2018, Applicant filed its Proposed Findings of Fact, Conclusions of Law, and Recommendations.⁵²⁹ The DOC-EERA subsequently filed its proposed changes to Applicant's Proposed Findings.⁵³⁰

268. The parties timely filed their initial briefs on January 23, 2018.⁵³¹

269. On February 8, 2018, HTE, Fond du Lac, Leech Lake, Red Lake, White Earth Band, NWAM, Sierra Club, and Youth Climate filed a Joint Motion to Extend Schedule for Submission of Proposed Findings of Fact, Conclusions of Law, and Recommendations.⁵³² The ALJ granted the Motion, giving the requesting parties a one-week extension to file proposed findings.⁵³³

⁵²⁶ Fourth Post-Hearing Order (Jan. 11, 2018) (eDocket No. 20181-138800-01 (RP)).

⁵²⁷ Joint Mot. to Reconsider and for Post-Hearing Conference (Jan. 11, 2018) (eDocket No. 20181-138802-01 (RP)).

⁵²⁸ Order Denying Joint Mot. for Reconsideration and Post-Hearing Conference (Jan. 17, 2018) (eDocket No. 20181-139032-01 (CN)).

⁵²⁹ Applicant's Proposed Findings of Fact, Conclusions of Law, & Recommendations (Jan. 16, 2018) (eDocket No. 20181-138991-02 (CN)).

⁵³⁰ EERA Redlined Revision of Applicant's Proposed Findings (Jan. 23, 2018) (eDocket No. 20181-139250-01 (CN)).

⁵³¹ Applicant Initial Br. (Jan. 23, 2018) (eDocket No. 20181-139252-03 (CN)); Fond du Lac Band Initial Br. (Jan. 23, 2018) (eDocket No. 20181-139268-01 (CN)); Sierra Club Initial Br. (Jan. 23, 2018) (eDocket No. 20181-139263-04 (CN)); HTE Initial Br. (Jan. 23, 2018) (eDocket No. 20181-139262-02 (CN)); DOC-DER Initial Br. (Jan. 23, 2018) (eDocket No. 20181-139259-03 (CN)); FOH Initial Br. (Jan. 23, 2018) (eDocket No. 20181-139258-02 (CN)); Shippers Initial Br. (Jan. 23, 2018) (eDocket No. 20181-139257-01 (CN)); United Association Initial Br. (Jan. 23, 2018) (eDocket No. 20181-139255-01 (CN)); White Earth and Red Lake Initial Br. (Jan. 23, 2018) (eDocket No. 20181-139237-01 (CN)); Mille Lacs Initial Br. (Jan. 23, 2018) (eDocket No. 20181-139245-01 (CN)); NWAM Initial Br. (Jan. 23, 2018) (eDocket No. 20181-139231-02 (CN)); Laborers' Council Initial Br. (Jan. 23, 2018) (eDocket No. 20181-139277-02 (CN)); Leech Lake Initial Br. (Jan. 23, 2018) (eDocket No. 20181-139275-01 (CN)); Youth Climate Initial Br. (Jan. 23, 2018) (eDocket No. 20181-139273-02 (CN)).

⁵³² Motion to Extend Schedule for Submission of Proposed Findings of Fact, Conclusions of Law, and Recommendations (Feb. 8, 2018) (eDocket Nos. 20182-139903-01 (CN); 20182-139903-02 (RP)).

⁵³³ Order Granting Joint Motion for Briefing Extension (Feb. 9, 2018) (eDocket No. 20182-139928-01 (CN)); Amended Order Granting Joint Motion for Briefing Extension (Feb. 12, 2018) (eDocket No. 20182-139989-01 (CN)).

270. On February 16, 2018, the parties timely filed their Reply Briefs.⁵³⁴⁵³⁵ Applicant and Kennecott filed revised Findings of Fact⁵³⁶ and DOC-DER filed proposed Findings of Fact.⁵³⁷

271. On February 23, 2018, the remaining parties filed their Proposed Findings and the briefing record closed.⁵³⁸ ⁵³⁹

v. Motions to Reconsider FEIS Adequacy Decision

272. On January 2, 2018, Fond du Lac and Sierra Club filed Petitions for Reconsideration of the Commission's adequacy determination and a Request for a Supplemental EIS.⁵⁴⁰ On January 3, 2018, Applicant also filed a Petition to Reconsider the EIS determination.⁵⁴¹

273. Youth Climate, HTE, the DOC-EERA, Applicant, Sierra Club, and Fond du Lac submitted responses to the various requests for reconsideration of the FEIS adequacy determination.⁵⁴² In addition, on January 16, 2018, Youth Climate, Mille Lacs,

⁵³⁴ Applicant's Reply Br. (Feb. 16, 2018) (eDocket No. 20182-140212-03(CN)); Youth Climate Reply Br. (Feb. 16, 2018) (eDocket No. 20182-140258-03 (CN)); Dyrda's Reply Br. (Feb. 16, 2016) (eDocket No. 20182-140253-01 (RP)); Fond du Lac Band Reply Br. (Feb. 16, 2018) (eDocket No. 20182-140255-01 (CN)); HTE Reply Br. (Feb. 16, 2018) (eDocket No. 20182-140250-02 (CN)); Leech Lake Band Reply Br. (Feb. 16, 2018) (eDocket No. 20182-140246-01 (CN)); FOH Reply Br. (Feb. 16, 2018) (eDocket No. 20182-140247-01 (CN)); Sierra Club Reply Br. (Feb. 16, 2018) (eDocket No. 20182-140237-02 (CN)); Mille Lacs Band Reply Br. (Feb. 16, 2018) (20182-140217-01(CN)); Shippers Reply Br. (Feb. 16, 2018) (eDocket No. 20182-140249-02(CN)); United Association Reply Br. (Feb. 16, 2018) (eDocket No. 20182-140244-01 (CN)); Laborers' Council Reply Br. (Feb. 20, 2018) (eDocket No. 20182-140264-01 (CN)); DOC-DER Reply Br. (Feb. 16, 2018) (eDocket No. 20182-140226-01(CN)).

⁵³⁵ While the Laborers' Council Revised Reply Br. was filed in eDockets after 4:30 on Feb. 16, 2018, the ALJ nonetheless accepts and receives these documents into the hearing record of this case.

⁵³⁶ Applicant's Revised Proposed Findings of Fact, Conclusions of Law, and Recommendations (Feb. 16, 2018) (eDocket No. 20182-140212-05 (CN)); Kennecott Revisions to Applicant's Proposed Findings (Feb. 16, 2018) (eDocket No. 20182-140227-01 (RP)).

⁵³⁷ DOC-DER Proposed Findings (Feb. 16, 2018) (eDocket No. 20182-140226-02 (CN)).

⁵³⁸ HTE, Sierra Club, Youth Climate Intervenors, NWAM Joint Proposed Findings of Fact, Conclusions of Law, and Recommendations (Feb. 23, 2018) (eDocket No. 20182-140450-04 (CN)); Fond du Lac Band Proposed Edits to Applicant's Proposed Findings of Fact, Conclusions of Law, and Recommendations (Feb. 23, 2018) (eDocket No. 20182-140448-01 (CN)); Mille Lacs Band Revised Proposed Findings of Fact, Conclusions of Law, and Recommendations (Feb. 23, 2018) (eDocket No. 20182-140447-01 (CN)); Laborers' Council Edits to Applicant's Proposed Findings (Feb. 20, 2018) (eDocket No. 20182-140264-03 (CN)); FOH Revised Proposed Findings of Fact, Conclusions of Law, and Recommendations (Feb. 26, 2018) (eDocket No 20182-140492-02 (CN)).

⁵³⁹ While the FOH Revised Proposed Findings were filed past 4:30 on Feb. 23, 2018, the ALJ nonetheless accepts and receives these documents into the hearing record of this case.

⁵⁴⁰ Joint Tribal Petition to Reconsider (Jan. 2, 2018) (eDocket No. 20181-138561-01 (CN)); Sierra Club Petition for Reconsideration and Request for Supplemental EIS (Jan. 2, 2018) (eDocket No. 20181-138549-03 (CN)).

⁵⁴¹ Applicant Petition for Reconsideration (Jan. 3, 2018) (eDocket No. 20181-138620-03 (CN)).

⁵⁴² Youth Climate Reply to Tribes Joint Petition for Reconsideration (Jan. 12, 2018) (eDocket No. 20181-138892-02 (RP)); HTE Response to Joint Tribal Petition for Reconsideration (Jan. 12, 2018) (eDocket No. 20181-138891-03 (RP)); DOC-EERA Reply (Jan. 12, 2018) (eDocket No. 20181-138890-01 (RP)); Applicant Reply to Petitions for Reconsideration of Tribes and Sierra Club (Jan. 12, 2018) (eDocket No. 20181-138884-04(RP)); Fond du Lac Response to Sierra Club Petition for Reconsideration and Hearing

Sierra Club, Fond du Lac, and HTE filed responses to Applicant's Petition for Reconsideration.⁵⁴³

274. The Commission met on February 22, 2018, to consider the various Petitions for Reconsideration of its EIS adequacy determination.⁵⁴⁴ On March 1, 2018, the Commission issued an Order Denying Reconsideration.⁵⁴⁵

vi. Issuance of Revised EIS and Adequacy Determined

275. On February 12, 2018, the DOC-EERA filed a Revised Environmental Impact Statement and published the Notice of Availability of Revised EIS.⁵⁴⁶ The Notice gave parties and the public until February 27, 2018, to comment on the Revised EIS.⁵⁴⁷ The Revised EIS was also served on the parties listed in the Commission's Project list.⁵⁴⁸

276. The DOC-EERA received tens of thousands of comments on the Revised Environmental Impact Statement.⁵⁴⁹

277. The Commission met on March 15, 2018, to determine the adequacy of the Revised EIS.⁵⁵⁰ As of the date of release of this Report (April 23, 2018), the Commission had not yet issued an order finding the Revised EIS adequate. However, it appears that the Commission determined that the Revised EIS was adequate at its meeting on March 15, 2018.⁵⁵¹

and Request for Supplement to the EIS (Jan. 12, 2018) (eDocket No. 20181-138868-01 (RP)); Sierra Club Reply to Joint Tribal Petition (Jan. 12, 2018) (eDocket No. 20181-138859-02 (RP)); Youth Climate Response to Sierra Club Petition for Reconsideration (Jan. 16, 2018) (eDocket No. 20181-138893-02 (RP)).
⁵⁴³ Youth Climate Reply to Applicant Petition for Reconsideration (Jan. 16, 2018) (eDocket No. 20181-138999-01 (CN)); Mille Lacs Reply to Applicant Petition for Reconsideration (Jan. 16, 2018) (eDocket No. 20181-138962-02 (CN)); Sierra Club Answer to Applicant Petition for Reconsideration (Jan. 16, 2018) (eDocket No. 20181-138990-04 (CN)); Fond du Lac Band Answer to Applicant Petition for Reconsideration (Jan. 16, 2018) (eDocket No. 20181-138998-01 (CN)); HTE Reply to Applicant Petition for Reconsideration (Jan. 16, 2018) (eDocket No. 20181-139002-01 (CN)).

⁵⁴⁴ Notice of Commission Meeting (Feb. 9, 2018) (eDocket No. 20182-139920-03 (RP)).

⁵⁴⁵ Order Denying Reconsideration (Mar. 1, 2018) (eDocket No. 20183-140635-02 (RP)).

⁵⁴⁶ Ex. EERA-42 (Revised FEIS and Notice of Availability of Revised FEIS).

⁵⁴⁷ *Id.*

⁵⁴⁸ Ex. EERA-43 (Affidavit of Service).

⁵⁴⁹ See Public Comments on Revised Final EIS (Mar. 1, 2018) (eDocket No. 20183-140651-02 (CN)); Public Comments on Revised Final EIS (Mar. 1, 2018) (eDocket No. 20183-140650-04 (CN)); Public Comments on Revised Final EIS (Mar. 1, 2018) (eDocket No. 20183-140650-02 (CN)); Public Comments on Revised Final EIS (Mar. 1, 2018) (eDocket No. 20183-140648-02 (CN)); Public Comments on Revised Final EIS (Mar. 1, 2018) (eDocket No. 20183-140647-01 (CN)).

⁵⁵⁰ Notice of Commission Meeting (Mar. 1, 2018) (eDocket No. 20183-140729-02 (CN)).

⁵⁵¹ See <https://minnesotapuc.legistar.com/MeetingDetail.aspx?ID=596065&GUID=8C47857B-8BC6-4A2C-8FA2-F02323806694&Options=&Search>.

III. PUBLIC COMMENTS SUMMARY

A. Public Hearing Comments

278. Between September 26 and October 25, 2017, sixteen public hearings were conducted in the following eight cities: Thief River Falls; St. Paul; Grand Rapids; McGregor; Hinckley; Bemidji; Duluth; and Cross Lake.

279. At the public hearings in Thief River Falls on September 26, 2017, 44 members of the public spoke at the 1 p.m. hearing and 36 spoke at the 6 p.m. hearing.⁵⁵² Approximately 300 people attended the Thief River Falls hearings.⁵⁵³

280. At the public hearings in St. Paul on September 28, 2017, 52 members of the public spoke at the 1 p.m. hearing and 77 spoke at the 6 p.m. hearing.⁵⁵⁴ Approximately 1,000 people attended the St. Paul hearings.⁵⁵⁵

281. At the public hearings in Grand Rapids on October 10, 2017, 51 members of the public spoke at the 1 p.m. hearing and 27 spoke at the 6 p.m. hearing.⁵⁵⁶ Approximately 385 people attended the Grand Rapids hearings.⁵⁵⁷

282. At the public hearings in McGregor on October 11, 2017, 39 members of the public spoke at the 1 p.m. hearing and 42 spoke at the 6 p.m. hearing.⁵⁵⁸ Approximately 300 people attended the McGregor hearings.⁵⁵⁹

283. At the public hearings in Hinckley on October 12, 2017, 38 members of the public spoke at the 1 p.m. hearing and 43 spoke at the 6 p.m. hearing.⁵⁶⁰ Approximately 340 people attended the Hinckley hearings.⁵⁶¹

284. At the public hearings in Bemidji on October 17, 2017, 53 members of the public spoke at the 1 p.m. hearing and 52 spoke at the 6 p.m. hearing.⁵⁶² Approximately 675 people attended the Bemidji hearings.⁵⁶³

⁵⁵² Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 1-135 (Sept. 26, 2017); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 1-118 (Sept. 26, 2017).

⁵⁵³ See attachment A, Public Hearings Summary prepared by the Court Reporter.

⁵⁵⁴ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 1-167 (Sept. 28, 2017); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 1-246 (Sept. 28, 2017).

⁵⁵⁵ Attachment A.

⁵⁵⁶ Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 1-169 (Oct. 10, 2017); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 1-117 (Oct. 10, 2017).

⁵⁵⁷ Attachment A.

⁵⁵⁸ McGregor Pub. Hrg. Tr. (Vol. 4A) at 1-146 (Oct. 11, 2017); McGregor Pub. Hrg. Tr. (Vol. 4B) at 1-180 (Oct. 11, 2017).

⁵⁵⁹ Attachment A.

⁵⁶⁰ Hinckley Pub. Hrg. Tr. (Vol. 5A) at 1-148 (Oct. 12, 2017); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 1-178 (Oct. 12, 2017).

⁵⁶¹ Attachment A.

⁵⁶² Bemidji Pub. Hrg. Tr. (Vol. 6A) at 1-185 (Oct. 17, 2017); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 1-207 (Oct. 17, 2017).

⁵⁶³ Attachment A.

285. At the public hearings in Duluth on October 18, 2017, 51 members of the public spoke at the 1 p.m. hearing and 23 spoke at the 6 p.m. hearing.⁵⁶⁴ Approximately 2,000 people attended the Duluth hearings.⁵⁶⁵ A public disturbance forced the evening hearing to adjourn early.⁵⁶⁶

286. At the public hearings in Cross Lake on October 25, 2017, 49 members of the public spoke at the 1 p.m. hearing and 47 spoke at the 6 p.m. hearing.⁵⁶⁷ Approximately 450 people attended the Cross Lake hearings.⁵⁶⁸

287. In sum, over 4,000 individuals registered their names on the public hearing sign-in sheets,⁵⁶⁹ and total attendance at the public hearings was estimated at over 5,500.⁵⁷⁰ There were 724 speakers during the 16 public hearings, resulting in over 2,600 pages of public hearing transcripts.⁵⁷¹

288. Commenters at the public hearings fell into two general categories: those opposed to the Project and those in favor of it. Because many of the commenters made similar or related points, the general content of the public hearing comments are summarized below in an effort to avoid duplicity and repetition.

B. Comments in Opposition to Line 3 Project

289. Commenters at the public hearings who voiced opposition to the Line 3 Project made comments which are organized into the following categories: Environmental Impacts; Abandonment; Future Viability; Lack of Need or Benefit for Minnesota; Removal of Line 3; Establishment of a New Pipeline Corridor; Need for Reduction in Fossil Fuels and Climate Change; Effects on Indigenous Interests; Alternatives to the Project; Concerns About Construction; Applicant as a Corporate Partner to State; Dangers of Tar Sands Oil; and Alternative Modes of Transportation.

290. A summary of the public hearing comments in opposition to the Project is set forth below.

i. Environmental Impacts

- The APR and route alternatives all go through Minnesota's most pristine and water-rich areas, which puts those areas at risk. Approximately 40 percent of Minnesota's waters are currently impaired. Most of the remaining unimpaired waters

⁵⁶⁴ Duluth Pub. Hrg. Tr. (Vol. 7A) at 1-186 (Oct. 18, 2017); Duluth Pub. Hrg. Tr. (Vol. 7B) at 1-99 (Oct. 18, 2017).

⁵⁶⁵ Attachment A.

⁵⁶⁶ Duluth Pub. Hrg. Tr. (Vol. 7B) at 98 (Oct. 18, 2017).

⁵⁶⁷ Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 1-176 (Oct. 25, 2017); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 1-192 (Oct. 25, 2017).

⁵⁶⁸ Attachment A.

⁵⁶⁹ Members of the public were not required to sign in or register their attendance on the attendance record.

⁵⁷⁰ Attachment A. Not all people attending the public hearings entered their names on the sign-in sheets.

⁵⁷¹ *Id.*

are along the APR. Minnesota should not put its most pristine water resources at risk for this Project.⁵⁷²

- It is more expensive to try to restore polluted waters than to protect them from impacts in the first instance. Minnesota's highest quality natural resources (lakes, wild rice waters, watersheds) are potentially impacted by the APR and route alternatives.⁵⁷³
- As the "Land of 10,000 Lakes," Minnesota's clean water is its most valuable resource that must be protected. It brings in millions of dollars per year in tourism, recreation, fishing, and lakeshore property taxes to the state. These economic benefits outweigh the "temporary" economic benefits of the Project. The APR passes through or near some of Minnesota's most valued lake areas, including the Whitefish chain of lakes.⁵⁷⁴
- Because the APR and route alternatives traverse areas of the Mississippi Headwaters, the Project puts at risk one of Minnesota's most significant sources of drinking water. Once drinking water resources are polluted, Minnesota cannot get that valuable resource back.⁵⁷⁵

⁵⁷² St. Paul Pub. Hrg. Tr. (Vol. 2A) at 54-57 (Sept. 28, 2017) (Kunesh-Podein); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 144-148 (Sept. 28, 2017) (O'Keefe); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 33-38 (Oct. 12, 2017) (Lamb); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 98-101 (Oct. 17, 2017) (Northbird); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 67-74 (Oct. 25, 2017) (Elkins); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 183-188 (Oct. 25, 2017) (Christensen).

⁵⁷³ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 61-64 (Sept. 28, 2017) (Dolph); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 103-105 (Sept. 28, 2017) (Hulstrand).

⁵⁷⁴ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 136-141 (Sept. 28, 2017) (Christenson); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 236-241 (Sept. 28, 2017) (Jeffrey); McGregor Pub. Hrg. Tr. (Vol. 4A) at 37-39 (Oct. 11, 2017) (LaBerge); McGregor Pub. Hrg. Tr. (Vol. 4A) at 44-48 (Oct. 11, 2017) (McFarlane); McGregor Pub. Hrg. Tr. (Vol. 4A) at 84-87 (Oct. 11, 2017) (Mushkooub); McGregor Pub. Hrg. Tr. (Vol. 4B) at 44-47 (Oct. 11, 2017) (Skinaway); McGregor Pub. Hrg. Tr. (Vol. 4B) at 64-67 (Oct. 11, 2017) (Reed); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 75-76 (Oct. 12, 2017) (Nazareth); Duluth Pub. Hrg. Tr. (Vol. 7A) at 128-130 (Oct. 18, 2017) (Thomsen); Duluth Pub. Hrg. Tr. (Vol. 7B) at 47-50 (Oct. 18, 2017) (Spencer); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 48-52 (Oct. 25, 2017) (Pepek); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 73-75 (Oct. 25, 2017) (Thyen); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 92-96 (Oct. 25, 2017) (Coffrey); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 96-99 (Oct. 25, 2017) (Laurel); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 102-104 (Oct. 25, 2017) (Brodil); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 126-129 (Oct. 25, 2017) (Krueger); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 45-47 (Oct. 25, 2017) (Murphy); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 62-65 (Oct. 25, 2017) (Eide); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 90-94 (Oct. 25, 2017) (Steen); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 158-164 (Oct. 25, 2017) (Watson); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 169-173 (Oct. 25, 2017) (Ketchel).

⁵⁷⁵ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 110-112 (Sept. 28, 2017) (Shields); McGregor Pub. Hrg. Tr. (Vol. 4B) at 54-57 (Oct. 11, 2017) (Gonzales); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 134-138 (Oct. 17, 2017) (Brown); Duluth Pub. Hrg. Tr. (Vol. 7B) at 63-65 (Oct. 18, 2017) (Lee); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 116-118 (Oct. 25, 2017) (Roe).

- Even a minor spill in a water-rich environment, like the Headwaters of the Mississippi, could be catastrophic to the environment and drinking water resources.⁵⁷⁶
- Major and minor (i.e., “pinhole”) releases are inevitable with any oil pipeline. The location of the APR near Minnesota’s most pristine water resources puts Minnesota’s waters at risk.⁵⁷⁷
- Leaks and spills are inevitable with a pipeline. Thus, the question is when, not if, an unintended release will occur. Given this inevitability, Minnesota should not place a pipeline in an area where its most pristine and valuable natural resources are at risk.⁵⁷⁸
- The risk of harm from the Project, given the location of the APR through Minnesota’s most pristine water and wilderness resources, far outweigh the benefits to Minnesota arising from the oil being transported.⁵⁷⁹

⁵⁷⁶ Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 79-81 (Sept. 26, 2017) (Aman); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 222-223 (Sept. 28, 2017) (Rodkewich); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 119-122 (Oct. 17, 2017) (Crocker); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 115-118 (Oct. 25, 2017) (Rodriquez).

⁵⁷⁷ St. Paul Pub. Hrg. Tr. (Vol. 2B) at 226-229 (Sept. 28, 2017) (Hollander); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 116-118 (Oct. 12, 2017) (Day); Duluth Pub. Hrg. Tr. (Vol. 7B) at 34-37 (Oct. 18, 2017) (Pearson); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 89-92 (Oct. 25, 2017) (Wannebo); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 164-166 (Oct. 25, 2017) (Aubid).

⁵⁷⁸ St. Paul Pub. Hrg. Tr. (Vol. 2B) at 138-141 (Sept. 28, 2017) (Hauser); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 158-160 (Sept. 28, 2017) (Sowash); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 216-219 (Sept. 28, 2017) (Steffel); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 99-100 (Oct. 10, 2017) (Turman); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 159-164 (Oct. 10, 2017) (Fahlstrom); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 27-29 (Oct. 10, 2017) (Martell); McGregor Pub. Hrg. Tr. (Vol. 4B) at 40-44 (Oct. 11, 2017) (Boyd); McGregor Pub. Hrg. Tr. (Vol. 4B) at 84-88 (Oct. 11, 2017) (Good Cane Milk); McGregor Pub. Hrg. Tr. (Vol. 4B) at 121-123 (Oct. 11, 2017) (Goodsky); McGregor Pub. Hrg. Tr. (Vol. 4B) at 123-128 (Oct. 11, 2017) (Aubid); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 74-76 (Oct. 17, 2017) (Sweedman); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 80-82 (Oct. 25, 2017) (Meyer); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 38-40 (Oct. 25, 2017) (Nix); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 109-112 (Oct. 25, 2017) (Mosman).

⁵⁷⁹ Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 75-76 (Oct. 10, 2017) (Mizner); McGregor Pub. Hrg. Tr. (Vol. 4B) at 73-76 (Oct. 11, 2017) (Barber); McGregor Pub. Hrg. Tr. (Vol. 4B) at 117-121 (Oct. 11, 2017) (Martell Segura); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 72-75 (Oct. 12, 2017) (Nazareth); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 63-64 (Oct. 12, 2017) (Smith); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 39-44 (Oct. 17, 2017) (Sorensen); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 39-41 (Oct. 25, 2017) (Mandler); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 64-66 (Oct. 25, 2017) (Kunz); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 88-89 (Oct. 25, 2017) (Ingebrightson); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 104-107 (Oct. 25, 2017) (Neihart); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 111-116 (Oct. 25, 2017) (Fischer); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 118-121 (Oct. 25, 2017) (Krysel).

ii. Abandonment

- The easements with landowners for the existing Line 3 do not allow for the abandonment of the pipeline and abandonment will breach those agreements.⁵⁸⁰
- Landowners should be allowed to decide whether to have the abandoned line removed from their property or left in place.⁵⁸¹
- Abandonment of the pipeline will result in a risk of contamination, collapse, exposed, floating, or heaving pipe, as well as burdens on landowners including decreased property values, and interference with property owners' use of the land, including farming/agricultural uses. Minnesotan citizens cannot simply discard their waste into the environment; Applicant should not be allowed to do so either.⁵⁸²
- If a pipeline is abandoned or "decommissioned" in Canada, Canada makes the company contribute into a "decommissioning fund" to pay for the future removal or decommissioning of new pipelines. If the Project is approved, Minnesota should do the same to ensure that Minnesota taxpayers are not financially responsible for decommissioning or removing the new Line 3 should Applicant cease to exist in the future. This is especially true given the anticipated future reduction in the use of fossil fuels, which could make Applicant and its pipelines obsolete.⁵⁸³
- Minnesota has no established fund to pay for abandoned pipelines if they fail or cause problems, including the spread of pollution. There have not been enough deactivated/abandoned pipelines in the United States (approximately 400 miles) to truly understand the future

⁵⁸⁰ Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 61-64 (Sept. 26, 2017) (Peterson); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 75-80 (Oct. 10, 2017) (Struble).

⁵⁸¹ McGregor Pub. Hrg. Tr. (Vol. 4A) at 118-121 (Oct. 11, 2017) (Munter); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 162-167 (Oct. 17, 2017) (Richardson).

⁵⁸² Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 102-106 (Sept. 26, 2017) (Munter); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 169-172 (Sept. 28, 2017) (Richardson); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 40-42 (Oct. 10, 2017) (Hill); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 76-78 (Oct. 10, 2017) (Zasata); McGregor Pub. Hrg. Tr. (Vol. 4B) at 51-54 (Oct. 11, 2017) (Howes); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 153-160 (Oct. 12, 2017) (Martell Segura); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 178-181 (Oct. 17, 2017) (Hovde); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 92-95 (Oct. 17, 2017) (Ballard-Ryan); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 125-127 (Oct. 17, 2017) (Liberty); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 138-141 (Oct. 17, 2017) (Atkinson); Duluth Pub. Hrg. Tr. (Vol. 7B) at 65-68 (Oct. 18, 2017) (Farrell).

⁵⁸³ Bemidji Pub. Hrg. Tr. (Vol. 6B) at 55-59 (Oct. 17, 2017) (Gaston); Duluth Pub. Hrg. Tr. (Vol. 7A) at 61-63 (Oct. 18, 2017) (Herron).

impacts that an abandoned line may have on the environment and/or landowners.⁵⁸⁴

- Landowners could be faced with legal battles if problems arise as a result of the abandoned pipelines and Applicant is not responsive to those claims. After abandonment, landowners are left with diminished property values and no mechanism to ensure that Applicant maintains the abandoned lines if they do become problematic. If Applicant abandons its pipelines, Minnesota taxpayers and landowners will be ultimately responsible for any clean-up or removal necessary once Applicant is gone.⁵⁸⁵
- Allowing Applicant to abandon existing Line 3 sets a dangerous precedent for other pipelines that could be simply abandoned in Minnesota, including the possibility that Applicant will seek to abandon even this new line in 50 or 60 years. Applicant should clean up its own “trash” and not leave it to landowners and taxpayers to do so.⁵⁸⁶
- An abandoned pipeline will last hundreds, if not thousands, of years. Applicant should be required to remove its waste rather than simply abandon it in the ground for future generations to care for and/or remove. This abandoned pipeline will survive Applicant by many lifetimes.⁵⁸⁷

iii. Future Viability

- It is claimed that a new Line 3 will last at least 60 years, like its predecessor. There are no assurances that Applicant will be a viable company in 60+ years, leaving questions as to how future actions and costs will be addressed.⁵⁸⁸

⁵⁸⁴ Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 72-76 (Sept. 26, 2017) (Myhrer); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 29-35 (Sept. 26, 2017) (LaPlante); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 160-165 (Oct. 12, 2017) (Topping).

⁵⁸⁵ Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 81-84 (Sept. 26, 2017) (Munter).

⁵⁸⁶ St. Paul Pub. Hrg. Tr. (Vol. 2B) at 153-158 (Sept. 28, 2017) (Frink); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 82-92 (Oct. 10, 2017) (Mattison); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 113-116 (Oct. 12, 2017) (Kruse); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 180-185 (Oct. 17, 2017) (Struss); Duluth Pub. Hrg. Tr. (Vol. 7A) at 122-124 (Oct. 18, 2017) (Davis); Duluth Pub. Hrg. Tr. (Vol. 7A) at 145-147 (Oct. 18, 2017) (Bernu); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 150-152 (Oct. 25, 2017) (Thompson).

⁵⁸⁷ Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 47-51 (Oct. 10, 2017) (Durfee).

⁵⁸⁸ St. Paul Pub. Hrg. Tr. (Vol. 2B) at 213-216 (Sept. 28, 2017) (Berglund); Duluth Pub. Hrg. Tr. (Vol. 7A) at 164-167 (Oct. 18, 2017) (Brainard).

- If another catastrophic spill were to occur in Minnesota, there is no assurance that Applicant will have the financial ability to fully remedy the damages or remain in business, This leaves Minnesota taxpayers responsible for the cleanup costs and Minnesotans suffering the lasting (and often permanent) environmental damages.⁵⁸⁹

iv. Lack of Need or Benefit to Minnesota

- The DOC-DER has determined that there is “no need” for the Project and the Commission should accept that determination.⁵⁹⁰
- The demand for oil in Minnesota is decreasing, yet this Project would double the amount of oil being transported through Minnesota with no proof of additional need.⁵⁹¹
- Only a small portion of the oil transported by the line will be used by Minnesota refineries. The rest will be transported through Minnesota, at a risk to Minnesota’s environment, and refined in other states or exported out of the United States. Because only a portion of the oil transported through Minnesota will be used by Minnesota’s refineries, it is clear that the purpose of this Project is not to benefit Minnesota, but to benefit Applicant and the Canadian tar sands oil producers who export the oil.⁵⁹²
- The United States has been exporting oil since 2011 and petroleum sales are decreasing. The true purpose of the Project is to export Canada tar sands oil to foreign countries,

⁵⁸⁹ Hinckley Pub. Hrg. Tr. (Vol. 5A) at 87-91 (Oct. 12, 2017) (Disch); Duluth Pub. Hrg. Tr. (Vol. 7B) at 86-88 (Oct. 18, 2017) (Staten).

⁵⁹⁰ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 85-88 (Sept. 28, 2017) (Marty); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 141-142 (Sept. 28, 2017) (Leussler); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 98-103 (Sept. 28, 2017) (Pearson); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 241-246 (Sept. 28, 2017) (Madden); McGregor Pub. Hrg. Tr. (Vol. 4A) at 104-105 (Oct. 11, 2017) (Hill).

⁵⁹¹ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 44-48 (Sept. 28, 2017) (Squire); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 70-75 (Sept. 28, 2017) (O'Connor); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 100-102 (Sept. 28, 2017) (Butler); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 134-136 (Sept. 28, 2017) (Blitzer); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 61-68 (Sept. 28, 2017) (Anderson); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 146-149 (Sept. 28, 2017) (Pastarr); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 111-116 (Oct. 12, 2017) (Morgan); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 106-109 (Oct. 17, 2017) (Cobenais); Duluth Pub. Hrg. Tr. (Vol. 7B) at 81-84 (Oct. 18, 2017) (Thompson).

⁵⁹² St. Paul Pub. Hrg. Tr. (Vol. 2B) at 122-124 (Sept. 28, 2017) (Buck); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 226-229 (Sept. 28, 2017) (Hollander); McGregor Pub. Hrg. Tr. (Vol. 4A) at 55-59 (Oct. 11, 2017) (Courneya); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 105-110 (Oct. 12, 2017) (Matrious); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 166-169 (Oct. 25, 2017) (Wegscheid).

not to benefit the people of Minnesota who will pay the ultimate price of this Project.⁵⁹³

- Applicant's other Mainline pipelines, including Line 67 (which was recently granted a Presidential Permit to run at full capacity), can meet the current needs for oil. There is no need for a new pipeline or a replacement.⁵⁹⁴
- The oil to be transported through the new Line 3 will be foreign oil, which is the dirtiest oil and carries the highest environmental risk to Minnesota.⁵⁹⁵
- There are no Minnesota benefits to the Project as the oil being transported is from Canada (a foreign country), transported through Minnesota's most pristine wildlife areas, and ultimately exported out of the United States.⁵⁹⁶
- Applicant's economic studies do not take into consideration the costs of the Project to Minnesota, including the full environmental and social costs of the oil transported. Clean water is more valuable than temporary jobs.⁵⁹⁷
- Canadian crude should be transported through Canada, not through Minnesota. As it is Canada that will benefit, Canada should incur a majority of the risk, not Minnesota.⁵⁹⁸

v. Removal of Line 3⁵⁹⁹

- In addition to denying the Project, the Commission should require the removal of Existing Line 3. Removal will result in job creation and economic benefits similar to the projected economic benefits of the construction of a new Line 3. The

⁵⁹³ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 58-61 (Sept. 28, 2017) (Russell); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 96-99 (Sept. 28, 2017) (Wang); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 66-69 (Oct. 25, 2017) (Barton).

⁵⁹⁴ McGregor Pub. Hrg. Tr. (Vol. 4A) at 48-52 (Oct. 11, 2017) (Phillips).

⁵⁹⁵ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 122-124 (Sept. 28, 2017) (Struss); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 164-167 (Oct. 25, 2017) (Ulrich).

⁵⁹⁶ McGregor Pub. Hrg. Tr. (Vol. 4B) at 57-60 (Oct. 11, 2017) (Aubid); McGregor Pub. Hrg. Tr. (Vol. 4B) at 69-73 (Oct. 11, 2017) (Johnson).

⁵⁹⁷ McGregor Pub. Hrg. Tr. (Vol. 4A) at 104-105 (Oct. 11, 2017) (Hill); McGregor Pub. Hrg. Tr. (Vol. 4A) at 106-108 (Oct. 11, 2017) (Goodsky); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 71-74 (Oct. 17, 2017) (Gaither).

⁵⁹⁸ St. Paul Pub. Hrg. Tr. (Vol. 2B) at 122-124 (Sept. 28, 2017) (Buck); McGregor Pub. Hrg. Tr. (Vol. 4B) at 155-172 (Oct. 11, 2017) (Goodsky); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 74-78 (Oct. 12, 2017) (Larson); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 188-191 (Oct. 25, 2017) (Draper).

⁵⁹⁹ These comments were generally in opposition to the Project and argued for the removal of Existing Line 3 altogether.

DOC-EERA should have studied the economic benefit of removal.⁶⁰⁰

- Many, if not more jobs, would be created by the removal of Line 3 than the abandonment of existing Line 3 and the building of an entirely new pipeline.⁶⁰¹
- Existing Line 3 was constructed in its current location decades ago (1950s and 1960s), before significant governmental regulation of pipelines. As a result, the Commission lacks regulatory authority over the removal of Line 3 unless removal is made a condition of a new permit. In addition, Line 3's current route was not decided in a regulatory environment, did not include tribal input, and did not fully evaluate the natural resources impacted by the pipeline, as today's decisions must.⁶⁰²

vi. Establishment of a New Corridor

- Contrary to Applicant's claims that this is a "replacement" project, the Project includes the abandonment of an old pipeline and the construction of a wholly new pipeline within a new pipeline corridor for a majority of its distance. Opening a new corridor through which no pipeline currently exists creates the real possibility for other pipelines to be placed in that new corridor, a corridor rich in Minnesota water and wildlife resources. In addition, because Applicant still owns the easements it purchased for the proposed Sandpiper line, there is a potential that Applicant could later ask for permits for at least one more pipeline through this new corridor if this Project is approved.⁶⁰³
- The APR from Clearbrook to Superior is a new pipeline corridor and primarily follows a HVTL corridor, not a pipeline corridor. The impacts of a HVTL are different than a pipeline.

⁶⁰⁰ Bemidji Pub. Hrg. Tr. (Vol. 6B) at 162-167 (Oct. 17, 2017) (Richardson); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 121-123 (Oct. 25, 2017) (Butcher).

⁶⁰¹ St. Paul Pub. Hrg. Tr. (Vol. 2B) at 40-43 (Sept. 28, 2017) (Clark); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 152-155 (Oct. 10, 2017) (Skinaway); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 76-78 (Oct. 10, 2017) (Zasata).

⁶⁰² Hinckley Pub. Hrg. Tr. (Vol. 5A) at 97-103 (Oct. 12, 2017) (Ross); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 109-113 (Oct. 12, 2017) (St. John).

⁶⁰³ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 122-124 (Sept. 28, 2017) (Struss); McGregor Pub. Hrg. Tr. (Vol. 4A) at 129-145 (Oct. 11, 2017) (Watson); McGregor Pub. Hrg. Tr. (Vol. 4B) at 36-40 (Oct. 11, 2017) (Beaulieu); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 126-129 (Oct. 12, 2017) (Skinaway); Duluth Pub. Hrg. Tr. (Vol. 7A) at 94-97 (Oct. 18, 2017) (Fisher-Merritt); Duluth Pub. Hrg. Tr. (Vol. 7A) at 154-157 (Oct. 18, 2017) (Draper).

In addition, co-locating pipelines with HVTLs subjects pipelines to potential corrosion.⁶⁰⁴

vii. Need for Reduction in Fossil Fuels and Climate Change

- Building a new pipeline will foster Americans' dependence on fossil fuels, which are scientifically proven to contribute significantly to climate change. The future is in renewable energies, not carbon-based energy sources. This Project is in direct contradiction to Minnesota's renewable energy policies and goals.⁶⁰⁵
- The rest of the world is attempting to reduce their dependence on fossil fuels and Minnesota should follow suit. The continued reduction in oil use and dependence, and growing availability of renewable energy sources, make this Project unnecessary for the future.⁶⁰⁶
- The total social costs of carbon must be evaluated as part of this Project. These costs, estimated by some to be over \$287 billion, make the Project unnecessary and dangerous to the world's climatic future.⁶⁰⁷
- Tar sands oil from Alberta, Canada, is some of the "dirtiest" oil in the world, as it is 21 percent more carbon-intensive than other oils due to the extraction method used. Therefore, tar sands oil contributes more to climate change/global warming than other forms of crude. The social costs of the carbon produced by the tar sands oil and its extraction method far exceed the benefits of the oil. This Project facilitates American consumption of carbon-intensive tar sands oil and must be stopped.⁶⁰⁸

⁶⁰⁴ Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 152-154 (Oct. 25, 2017) (Natzel).

⁶⁰⁵ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 37-39 (Sept. 28, 2017) (Sweeney); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 85-88 (Sept. 28, 2017) (Marty); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 126-131 (Oct. 17, 2017) (Beaulieu); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 162-164 (Oct. 17, 2017) (Spangler).

⁶⁰⁶ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 96-99 (Sept. 28, 2017) (Wang); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 78-82 (Oct. 10, 2017) (Burt); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 50-53 (Oct. 25, 2017) (Wells); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 74-76 (Oct. 25, 2017) (Clarke); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 112-115 (Oct. 25, 2017) (Stevens).

⁶⁰⁷ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 58-61 (Sept. 28, 2017) (Russell); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 148-151 (Sept. 28, 2017) (Whelan); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 229-233 (Sept. 28, 2017) (Pearson); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 129-133 (Oct. 25, 2017) (Karvel); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 126-131 (Oct. 25, 2017) (Oxendine Molliver).

⁶⁰⁸ St. Paul Pub. Hrg. Tr. (Vol. 2B) at 87-91 (Sept. 28, 2017) (Sack); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 146-149 (Sept. 28, 2017) (Pastarr); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 162-166 (Sept. 28, 2017) (Dvorak); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 47-51 (Oct. 10, 2017) (Durfee); Duluth Pub. Hrg. Tr. (Vol. 7B) at 42-44 (Oct. 18, 2017) (Newton); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 75-77 (Oct. 25, 2017) (Rutsen).

- Climate change is a real and immediate problem that requires dramatic change, including the reduction or elimination of the use of fossil fuels. The social costs of climate change include the damages resulting from hurricanes, floods, natural disasters, wild fires, draught, and other natural disasters. Future generations depend on the decisions made today to decrease the nation's reliance on fossil fuels.⁶⁰⁹
- The Commission's analysis of "need" must include an analysis of available renewable energy sources.⁶¹⁰
- Minnesota should focus on the future of energy – renewable energy – rather than invest in archaic fossil fuels that are known to be a major contributor to climate change.⁶¹¹
- Minnesota's Governor has vowed to comply with the Paris Climate Accord and reduce the use and dependence on fossil fuels. Production and transportation of fossil fuels must be curbed to reduce dependence and increase use of renewable energy. Extraction of this oil and approval of this Project is directly contrary to the goals of the Paris Accord and

⁶⁰⁹ Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 76-78 (Sept. 26, 2017) (Aman); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 99-100 (Sept. 28, 2017) (Kugler); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 100-102 (Sept. 28, 2017) (Butler); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 148-151 (Sept. 28, 2017) (Whelan); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 25-27 (Sept. 28, 2017) (Stocking); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 111-113 (Sept. 28, 2017) (Sattinger); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 117-120 (Sept. 28, 2017) (Cuthbertson); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 186-188 (Sept. 28, 2017) (Delmain); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 188-191 (Sept. 28, 2017) (Jones); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 115-118 (Oct. 10, 2017) (Andrews); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 55-58 (Oct. 10, 2017) (Bibeau); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 78-82 (Oct. 10, 2017) (Burt); McGregor Pub. Hrg. Tr. (Vol. 4B) at 105-107 (Oct. 11, 2017) (Chinoodin); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 164-168 (Oct. 17, 2017) (Reitan); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 35-39 (Oct. 17, 2017) (Welle); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 78-81 (Oct. 17, 2017) (Foot); Duluth Pub. Hrg. Tr. (Vol. 7A) at 52-56 (Oct. 18, 2017) (Bartlett); Duluth Pub. Hrg. Tr. (Vol. 7A) at 103-106 (Oct. 18, 2017) (Bol); Duluth Pub. Hrg. Tr. (Vol. 7B) at 32-34 (Oct. 18, 2017) (Kolstad); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 147-150 (Oct. 25, 2017) (Friesen); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 172-174 (Oct. 25, 2017) (Sager).

⁶¹⁰ Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 85-89 (Sept. 26, 2017) (Mattison).

⁶¹¹ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 48-51 (Sept. 28, 2017) (Manning); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 103-106 (Sept. 28, 2017) (McNeill); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 110-112 (Sept. 28, 2017) (Shields); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 112-117 (Sept. 28, 2017) (Gay); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 59-61 (Sept. 28, 2017) (Zophy); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 96-98 (Sept. 28, 2017) (Bisgaard); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 149-151 (Sept. 28, 2017) (Kolstad); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 172-175 (Sept. 28, 2017) (Hull); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 175-180 (Sept. 28, 2017) (Exner); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 182-186 (Sept. 28, 2017) (Houska); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 188-191 (Sept. 28, 2017) (Jones); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 196-200 (Sept. 28, 2017) (Hughes); McGregor Pub. Hrg. Tr. (Vol. 4A) at 44-48 (Oct. 11, 2017) (McFarlane); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 129-132 (Oct. 12, 2017) (DeCarlo); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 137-140 (Oct. 12, 2017) (Affi); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 84-86 (Oct. 17, 2017) (Swann); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 159-162 (Oct. 17, 2017) (Humphrey); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 94-99 (Oct. 25, 2017) (Peterson); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 143-146 (Oct. 25, 2017) (Hadley).

Minnesota's policy to increase the use of renewable energy sources.⁶¹²

- The fossil fuel industry is nearing the end of its dominance due to the scientific recognition of climate change and the technological advances of renewable energy sources. Minnesota should not invest in a dying industry, known to contribute to climate change. A new oil pipeline will merely “lock” Minnesota and the U.S. into the use and transportation of Canadian oil for the next 50+ years, the expected life of an oil pipeline. At the end of its lifespan, Applicant will simply abandon this new pipeline, like it is proposing to do for existing Line 3.⁶¹³
- The approval of the Project actually increases the perceived need for oil and the country's dependence on fossil fuels. By making oil cheaper and more abundantly available, this Project will only increase our nation's “thirst” for oil, rather than reduce it, which is what is necessary for protection of the environment.⁶¹⁴
- The Commission has a “moral responsibility” to future generations to protect the environment, support the growth of renewable energy, and deny projects that foster America's dependence on fossil fuels.⁶¹⁵
- The focus on fossil fuels, temporary jobs, and short-term economic gain is shortsighted.⁶¹⁶

⁶¹² St. Paul Pub. Hrg. Tr. (Vol. 2A) at 64-68 (Sept. 28, 2017) (Lamb); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 70-75 (Sept. 28, 2017) (O'Connor); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 85-88 (Sept. 28, 2017) (Marty).

⁶¹³ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 130-132 (Sept. 28, 2017) (Mitchell); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 124-126 (Sept. 28, 2017) (DeCarlo); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 162-166 (Sept. 28, 2017) (Dvorak); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 166-169 (Sept. 28, 2017) (Wenderlich); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 94-97 (Oct. 17, 2017) (Erickson); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 168-169 (Oct. 17, 2017) (Weber); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 101-103 (Oct. 17, 2017) (Chester); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 201-206 (Oct. 17, 2017) (Munter); Duluth Pub. Hrg. Tr. (Vol. 7A) at 147-150 (Oct. 18, 2017) (Johnson); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 47-50 (Oct. 25, 2017) (Bleichner); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 155-158 (Oct. 25, 2017) (Ross).

⁶¹⁴ St. Paul Pub. Hrg. Tr. (Vol. 2B) at 241-246 (Sept. 28, 2017) (Madden); Duluth Pub. Hrg. Tr. (Vol. 7B) at 50-52 (Oct. 18, 2017) (Killsfirst).

⁶¹⁵ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 41-44 (Sept. 28, 2017) (Nilsen); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 121-122 (Sept. 28, 2017) (Knaeble); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 132-134 (Sept. 28, 2017) (Blumenshine); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 134-136 (Sept. 28, 2017) (Blitzer); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 35-38 (Oct. 25, 2017) (Foster); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 76-81 (Oct. 25, 2017) (Fairbanks); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 99-103 (Oct. 25, 2017) (Garcia).

⁶¹⁶ McGregor Pub. Hrg. Tr. (Vol. 4A) at 61-65 (Oct. 11, 2017) (Affi); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 128-129 (Oct. 12, 2017) (Sam); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 100-103 (Oct. 17, 2017) (Wise).

- This Project is in direct contradiction of Governor’s Dayton’s “25 by ’25 Water Quality Goal” of improving Minnesota’s water quality by 25 percent by the year 2025.⁶¹⁷
- As stewards of the Earth, all citizens have an obligation to protect its natural resources, including its water and land, for future generations. This Project puts Minnesota’s natural resources at risk.⁶¹⁸
- As the use and availability of electric vehicles and renewable energies increase, the dependence on fossil fuels decreases, thereby resulting in a steady decrease in the need for oil.⁶¹⁹
- The world is rapidly transitioning to electric vehicles and renewable energy sources. Consequently, the need for fossil fuels will continue to decrease at a snowball’s pace, rendering this Project unnecessary and obsolete in short order. It will become a “stranded asset,” left behind by Applicant when oil is no longer profitable.⁶²⁰
- Minnesota is a leader in environmental policy in the nation. To maintain this status, Minnesota must reject new projects that further the fossil fuel industry, which is the leading contributor to carbon emissions and climate change.⁶²¹
- Climate change is the biggest threat to our nation – larger than any threat to economic security related to oil. The only way to avoid climate change is to reduce dependence on fossil fuels and reject new projects that further the dependence on oil. The time for change is now and cannot wait.⁶²²

⁶¹⁷ Hinckley Pub. Hrg. Tr. (Vol. 5B) at 33-38 (Oct. 12, 2017) (Lamb); Duluth Pub. Hrg. Tr. (Vol. 7A) at 34-37 (Oct. 18, 2017) (Carlson).

⁶¹⁸ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 128-130 (Sept. 28, 2017) (Venable); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 141-142 (Sept. 28, 2017) (Leussler); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 165-167 (Sept. 28, 2017) (Clement); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 133-135 (Sept. 28, 2017) (Norcross); McGregor Pub. Hrg. Tr. (Vol. 4A) at 32-33 (Oct. 11, 2017) (Munneke); McGregor Pub. Hrg. Tr. (Vol. 4A) at 116-118 (Oct. 11, 2017) (Aubid).

⁶¹⁹ Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 73-75 (Oct. 10, 2017) (Tammen); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 164-165 (Oct. 10, 2017) (Lieftring); McGregor Pub. Hrg. Tr. (Vol. 4B) at 29-31 (Oct. 11, 2017) (Butcher); Duluth Pub. Hrg. Tr. (Vol. 7B) at 68-74 (Oct. 18, 2017) (Jaakola); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 177-179 (Oct. 25, 2017) (Munter).

⁶²⁰ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 165-167 (Sept. 28, 2017) (Clement); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 111-114 (Oct. 10, 2017) (Humphrey); McGregor Pub. Hrg. Tr. (Vol. 4B) at 146-155 (Oct. 11, 2017) (Shingobe); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 29-33 (Oct. 12, 2017) (Struss); Duluth Pub. Hrg. Tr. (Vol. 7A) at 108-111 (Oct. 18, 2017) (Mittlefehldt).

⁶²¹ Bemidji Pub. Hrg. Tr. (Vol. 6A) at 42-43 (Oct. 17, 2017) (Manuel); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 43-47 (Oct. 17, 2017) (Gaither); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 109-112 (Oct. 17, 2017) (Melandner).

⁶²² Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 55-58 (Oct. 10, 2017) (Bibeau).

viii. Effects on Tribal Interests

- There has been a lack of meaningful consultation with Indian Tribes throughout the Project process, both by Applicant and the state.⁶²³
- Native American treaty rights to hunt, fish, and gather will be negatively impacted by the Project. Tribes are sovereign nations, and treaties are superior to state and federal law. These treaty rights must be honored and protected.⁶²⁴
- The Project disproportionately impacts Minnesota's Native American population because it impacts the land surrounding reservations, the usufructuary rights ceded to tribes, and the way of life of many Minnesota Native American populations. Minnesota's Native American populations have been prevented from providing material input in this Project.⁶²⁵
- Minnesota's Native American populations rely on clean water, the natural environment, medicinal plants, and wild rice lakes as sacred elements of their culture and traditions. As a result,

⁶²³ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 29-34 (Sept. 28, 2017) (Davis); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 94-96 (Sept. 28, 2017) (Fielder); McGregor Pub. Hrg. Tr. (Vol. 4B) at 31-36 (Oct. 11, 2017) (Marcum); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 133-137 (Oct. 12, 2017) (Boyd); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 121-123 (Oct. 12, 2017) (Boyd); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 103-106 (Oct. 17, 2017) (Strong); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 173-177 (Oct. 25, 2017) (Houska).

⁶²⁴ St. Paul Pub. Hrg. Tr. (Vol. 2B) at 73-76 (Sept. 28, 2017) (Parker Hoof); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 78-80 (Sept. 28, 2017) (Eaquey); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 94-96 (Sept. 28, 2017) (Fielder); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 105-111 (Sept. 28, 2017) (Binsfeld); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 141-146 (Sept. 28, 2017) (Cook); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 166-169 (Sept. 28, 2017) (Wenderlich); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 223-226 (Sept. 28, 2017) (Rios); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 131-134 (Oct. 10, 2017) (Hautala); McGregor Pub. Hrg. Tr. (Vol. 4B) at 47-51 (Oct. 11, 2017) (Sapawin); McGregor Pub. Hrg. Tr. (Vol. 4B) at 51-54 (Oct. 11, 2017) (Howes); McGregor Pub. Hrg. Tr. (Vol. 4B) at 103-105 (Oct. 11, 2017) (Benjamin); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 107-109 (Oct. 12, 2017) (Jensvold); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 110-111 (Oct. 12, 2017) (Boyd); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 123-126 (Oct. 12, 2017) (Nazareth); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 91-94 (Oct. 17, 2017) (Nelson); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 95-98 (Oct. 17, 2017) (Barrett); Duluth Pub. Hrg. Tr. (Vol. 7A) at 167-171 (Oct. 18, 2017) (Ulrich).

⁶²⁵ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 39-41 (Sept. 28, 2017) (Paulson); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 85-88 (Sept. 28, 2017) (Marty); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 151-153 (Sept. 28, 2017) (Gray); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 160-162 (Sept. 28, 2017) (Tuominen); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 206-213 (Sept. 28, 2017) (Katz); McGregor Pub. Hrg. Tr. (Vol. 4A) at 42-44 (Oct. 10, 2017) (Aubid); McGregor Pub. Hrg. Tr. (Vol. 4A) at 121-124 (Oct. 10, 2017) (Affi); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 66-69 (Oct. 17, 2017) (Lane); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 151-153 (Oct. 17, 2017) (Paulson); Duluth Pub. Hrg. Tr. (Vol. 7B) at 88-90 (Oct. 18, 2017) (Gilliam); Duluth Pub. Hrg. Tr. (Vol. 7B) at 92-93 (Oct. 18, 2017) (Xiong).

threats to the integrity of these resources disproportionately affect Minnesota's Native American populations.⁶²⁶

- The Ojibwe culture is based upon the principle that “water is life” – it must, therefore, be protected “at all costs.”⁶²⁷
- The Ojibwe came to Minnesota on a prophecy of food that grows on water (manoomin). In furtherance of that prophecy, the Anishinaabe people migrated to Minnesota and manoomin became a sacred resource to the Ojibwe people. Any project that puts this sacred resource at risk must be rejected.⁶²⁸
- Wild rice, or manoomin, is a sacred component of the Anishinaabe culture. Wild rice is a fragile vegetation that can be severely impacted, if not eliminated, by contamination in wild rice waters. To preserve this precious and sacred resource, the Project must avoid areas where wild rice could be impacted directly or indirectly. It is estimated that as much as 47 percent of Minnesota's wild rice lakes could be impacted by this Project.⁶²⁹
- Wild rice is a fragile type of vegetation that must be protected – it is a rare and valued food source native to Minnesota and only a few other states. It must be protected from all possible threats. Once a wild rice lake is polluted and wild rice is destroyed, it cannot be fully remediated.⁶³⁰

⁶²⁶ St. Paul Pub. Hrg. Tr. (Vol. 2B) at 40-43 (Sept. 28, 2017) (Clark); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 120-121 (Sept. 28, 2017) (Conrad); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 109-112 (Oct. 17, 2017) (Neises); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 41-45 (Oct. 25, 2017) (Hadley); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 146-149 (Oct. 25, 2017) (Goodwin).

⁶²⁷ St. Paul Pub. Hrg. Tr. (Vol. 2B) at 94 (Sept. 28, 2017) (Colombe).

⁶²⁸ McGregor Pub. Hrg. Tr. (Vol. 4A) at 92-95 (Oct. 10, 2017) (Goodsky); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 140-144 (Oct. 12, 2017) (Babineau).

⁶²⁹ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 102-103 (Sept. 28, 2017) (Haskin); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 78-80 (Sept. 28, 2017) (Eaquey); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 135-138 (Sept. 28, 2017) (Hinger); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 191-194 (Sept. 28, 2017) (Whipple); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 47-51 (Oct. 10, 2017) (Durfee); McGregor Pub. Hrg. Tr. (Vol. 4A) at 5-8 (Oct. 11, 2017) (Merrill); McGregor Pub. Hrg. Tr. (Vol. 4B) at 28-29 (Oct. 11, 2017) (Halbert); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 41-45 (Oct. 12, 2017) (Smith); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 152-153 (Oct. 12, 2017) (Leippert); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 54-57 (Oct. 17, 2017) (Schoenborn); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 53-58 (Oct. 25, 2017) (Northrup); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 140-143 (Oct. 25, 2017) (LaRocque); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 152-155 (Oct. 25, 2017) (Skinaway).

⁶³⁰ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 89-94 (Sept. 28, 2017) (Topping); McGregor Pub. Hrg. Tr. (Vol. 4B) at 79-84 (Oct. 11, 2017) (Skinaway); McGregor Pub. Hrg. Tr. (Vol. 4B) at 107-109 (Oct. 11, 2017) (Moose); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 58-60 (Oct. 12, 2017) (Kneeland); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 136-141 (Oct. 17, 2017) (Skinaway-Lawrence).

- Neither Applicant nor the state has engaged in a cultural resources inventory to fully study the impact of this Project on the indigenous people of Minnesota.⁶³¹
- The Project will inflict lasting harm to Native American cultures. Minnesota's Ojibwe tribes have a sacred connection to the land, animals, water, wild rice beds, and natural resources potentially impacted by the Project should a spill occur.⁶³²
- Foreign oil interests should not come before the interests of Minnesota's Native American population.⁶³³
- This Project must be evaluated by the Anishinaabe "Seven Generations" principle whereby every decision must consider its effect on descendants seven generations into the future. Here, future generations will be harmed by the increased use and transportation of fossil fuels, which contribute to climate change and instability; as well as the potential harm to Minnesota's land, water, and natural resources (including wild rice) should a spill occur.⁶³⁴

ix. Alternatives to Project

- SA-04 is a better option, and one supported by the DNR, because it does not pass through water rich environments, wild rice waters, or pristine areas of wilderness. While longer, SA-04 has fewer impacts on the environment because it passes mostly through agricultural or prairie land.⁶³⁵

⁶³¹ Hinckley Pub. Hrg. Tr. (Vol. 5B) at 136-140 (Oct. 12, 2017) (Skinaway); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 107-109 (Oct. 25, 2017) (Smith).

⁶³² St. Paul Pub. Hrg. Tr. (Vol. 2B) at 69-72 (Sept. 28, 2017) (Bonniwell); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 126-128 (Sept. 28, 2017) (Pederson); McGregor Pub. Hrg. Tr. (Vol. 4B) at 90-93 (Oct. 11, 2017) (Iyawbance); McGregor Pub. Hrg. Tr. (Vol. 4B) at 112-114 (Oct. 11, 2017) (Skinaway).

⁶³³ Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 152-155 (Oct. 10, 2017) (Skinaway); McGregor Pub. Hrg. Tr. (Vol. 4B) at 138-140 (Oct. 11, 2017) (Goodsky); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 181-184 (Oct. 17, 2017) (Keezer); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 129-130 (Oct. 17, 2017) (LeClaire).

⁶³⁴ McGregor Pub. Hrg. Tr. (Vol. 4B) at 97-103 (Oct. 11, 2017) (Topping); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 78-80 (Oct. 12, 2017) (Matrious); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 129-131 (Oct. 12, 2017) (St. John); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 31-33 (Oct. 17, 2017) (Humphrey); Duluth Pub. Hrg. Tr. (Vol. 7B) at 84-86 (Oct. 18, 2017) (Hoene).

⁶³⁵ Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 37-39 (Sept. 26, 2017) (Ackerman); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 47-50 (Sept. 26, 2017) (Mattison); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 81-84 (Sept. 26, 2017) (Munter); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 108-112 (Sept. 26, 2017) (Munter); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 61-64 (Sept. 28, 2017) (Dolph); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 119-121 (Oct. 12, 2017) (Vork); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 45-48 (Oct. 12, 2017) (Broadwell); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 190-201 (Oct. 17, 2017) (Babineau); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 157-161 (Oct. 25, 2017) (Wegscheid).

- Rail and truck transportation have quicker response times and less quantity of spills than do pipelines, when accidents occur.⁶³⁶

x. Concerns about Construction

- The influx of temporary, transient, and predominantly male workers during the construction of the Project will increase sex trafficking and other illegal activities harming women and children. Examples given were the “man camps” formed in the Bakken oil fields where incidents of sex trafficking and violence against women were reported to have increased due to the temporary male workforce.⁶³⁷
- Another “Standing Rock” will occur in Minnesota if this Project is approved, resulting in large protests, opposition, and potential violence. The costs for law enforcement in the Project area will be significant.⁶³⁸
- The workers who support the Project do not live in the areas that will be impacted most. They are primarily temporary workers who would not be directly impacted by a spill.⁶³⁹

xi. Applicant as a Corporate “Partner” in the State

- Applicant has been coercive to the state by purchasing all pipe needed for this yet-unpermitted-project, and placing it along the Project’s APR in pipe storage yards. Applicant “improperly” obtained storm water permits from the MPCA for these pipe storage yards. The purchase and storage of pipe qualifies as a “start of construction” of the Project without a permit from the Commission for the Project itself. It also puts

⁶³⁶ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 75-78 (Sept. 28, 2017) (Hornstein); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 94-96 (Sept. 28, 2017) (Spring).

⁶³⁷ St. Paul Pub. Hrg. Tr. (Vol. 2B) at 191-194 (Sept. 28, 2017) (Whipple); McGregor Pub. Hrg. Tr. (Vol. 4B) at 93-95 (Oct. 11, 2017) (Abuid); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 185-188 (Oct. 17, 2017) (Matrell Segura); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 132-137 (Oct. 25, 2017) (Rainbow).

⁶³⁸ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 83-85 (Sept. 28, 2017) (Olson); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 206-213 (Sept. 28, 2017) (Katz); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 233-236 (Sept. 28, 2017) (Nuss); McGregor Pub. Hrg. Tr. (Vol. 4A) at 42-44 (Oct. 11, 2017) (Aubid); McGregor Pub. Hrg. Tr. (Vol. 4B) at 95-97 (Oct. 11, 2017) (Gabo); McGregor Pub. Hrg. Tr. (Vol. 4B) at 128-131 (Oct. 11, 2017) (Sapawin); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 81-83 (Oct. 17, 2017) (Rodriguez); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 130-134 (Oct. 17, 2017) (Sul); Duluth Pub. Hrg. Tr. (Vol. 7A) at 111-116 (Oct. 18, 2017) (Boertje-Obed); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 109-111 (Oct. 25, 2017) (Marchese); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 86-90 (Oct. 25, 2017) (Northrup); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 131-132 (Oct. 25, 2017) (Snowdon).

⁶³⁹ McGregor Pub. Hrg. Tr. (Vol. 4A) at 83-84 (Oct. 11, 2017) (Goodsky).

undue pressure on the Commission (and the state) to approve this Project due to Applicant's pre-permit-approval financial investment.⁶⁴⁰

- Applicant was responsible for one of the most catastrophic inland oil spills in U.S. history just seven years ago in Marshall, Michigan (involving Applicant's Line 6B and the Kalamazoo River). The damages in that case exceeded \$1.2 billion and Applicant took over 17 hours to begin containment. Similarly, Applicant was responsible for another one of the largest inland oil spills near Grand Rapids, Minnesota, in 1991; as well as a less extensive, but nonetheless notable, spill in Cohasset, Minnesota in 2002. Applicant's history of catastrophic spills does not bode well for a new pipeline.⁶⁴¹
- Applicant has filed a lawsuit in Minnesota for the refund of over \$20M in property taxes, which has the potential to cripple some Minnesota counties. Applicant's claim that it is a good "corporate citizen" willing to pay property taxes must be viewed within that backdrop.⁶⁴²
- Applicant attempted to evade full environmental review and the Commission's permitting process by lobbying the legislature for a change in the law to exempt this Project from review. This type of lobbying evidences that Applicant seeks

⁶⁴⁰ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 64-68 (Sept. 28, 2017) (Lamb); McGregor Pub. Hrg. Tr. (Vol. 4B) at 109-112 (Oct. 11, 2017) (Struble); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 80-91 (Oct. 12, 2017) (Maxwell); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 116-121 (Oct. 12, 2017) (Babineau); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 131-136 (Oct. 12, 2017) (Mattison); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 165-171 (Oct. 12, 2017) (Mattison); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 154-157 (Oct. 25, 2017) (Ketchel); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 161-164 (Oct. 25, 2017) (Riordan).

⁶⁴¹ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 128-130 (Sept. 28, 2017) (Venable); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 38-40 (Sept. 28, 2017) (Hammel); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 78-80 (Sept. 28, 2017) (Eaquey); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 80-82 (Sept. 28, 2017) (Pinkham); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 128-131 (Sept. 28, 2017) (Star); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 146-149 (Sept. 28, 2017) (Pastarr); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 180-182 (Sept. 28, 2017) (Seher); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 49-52 (Oct. 10, 2017) (Waller); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 55-58 (Oct. 10, 2017) (Bibeau); McGregor Pub. Hrg. Tr. (Vol. 4A) at 41-42 (Oct. 11, 2017) (LaBerge); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 60-64 (Oct. 12, 2017) (Weberg); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 53-56 (Oct. 12, 2017) (Thurston); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 74-77 (Oct. 17, 2017) (Strowbridge); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 86-89 (Oct. 17, 2017) (Chilson); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 112-116 (Oct. 17, 2017) (Slagle); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 118-120 (Oct. 17, 2017) (Anderson/Spanyard); Duluth Pub. Hrg. Tr. (Vol. 7B) at 44-47 (Oct. 18, 2017) (Naar-Obed); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 85-88 (Oct. 25, 2017) (Johnson); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 99-102 (Oct. 25, 2017) (Martin); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 133-138 (Oct. 25, 2017) (Bibeau); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 107-109 (Oct. 25, 2017) (Perkins).

⁶⁴² St. Paul Pub. Hrg. Tr. (Vol. 2A) at 64-68 (Sept. 28, 2017) (Lamb); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 131-134 (Oct. 10, 2017) (Hautala); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 55-58 (Oct. 10, 2017) (Bibeau); McGregor Pub. Hrg. Tr. (Vol. 4A) at 68-73 (Oct. 11, 2017) (Watson); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 70-74 (Oct. 12, 2017) (Sager); Duluth Pub. Hrg. Tr. (Vol. 7B) at 74-77 (Oct. 18, 2017) (Martini).

to sidestep the critical analysis of the Project established by law in Minnesota's regulatory process.⁶⁴³

xii. Dangers of Tar Sands Oil

- The Canadian heavy crude (i.e., tar sands oil) proposed to be transported through the Proposed Line 3 contains diluted bitumen (or dilbit). Following a spill, the diluents evaporate, leaving the heavy bitumen to sink in water, making it harder to clean up in the event of an accidental release. In addition, potentially toxic chemicals, including known carcinogens, are added to the crude, rendering a spill more dangerous to humans, animals, water, and the environment.⁶⁴⁴
- Benzene, a potentially toxic chemical, is used in the extraction of tar sands oil. In the event of a spill, this chemical could be released and enter into drinking water, potentially polluting drinking water resources with a toxic chemical.⁶⁴⁵
- The long-term health effects of oil spills are not fully known.⁶⁴⁶

C. Comments in Support of Line 3 Project

291. Commenters at the public hearings who voiced support for the Project made comments falling into the following categories: Replacement is in the Interest of Public Safety; Benefits of Applicant's Proposed Route; Removal and Decommissioning; Economic Benefits of the Project; Pipelines as Best Mode of Transportation of Oil; Public Support for the Project in Greater Minnesota; Applicant's Record as a Company; Need for Additional Transportation Capacity for Oil; Benefits of North American Oil; and Frustration with the Regulatory Process.

292. A summary of the public hearing comments in support for the Project are set forth below.

⁶⁴³ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 142-144 (Sept. 28, 2017) (Wetzell); McGregor Pub. Hrg. Tr. (Vol. 4B) at 131-138 (Oct. 11, 2017) (Boyd); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 144-152 (Oct. 12, 2017) (Maxwell); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 118-121 (Oct. 25, 2017) (Wedell).

⁶⁴⁴ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 102-103 (Sept. 28, 2017) (Haskin); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 103-109 (Oct. 17, 2017) (Goodwin); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 159-162 (Oct. 17, 2017) (Goodwin); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 77-80 (Oct. 25, 2017) (Andrews); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 149-152 (Oct. 25, 2017) (Martell Segura).

⁶⁴⁵ St. Paul Pub. Hrg. Tr. (Vol. 2B) at 113-117 (Sept. 28, 2017) (Haste); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 216-219 (Sept. 28, 2017) (Steffel); McGregor Pub. Hrg. Tr. (Vol. 4B) at 172-176 (Oct. 11, 2017) (Reed).

⁶⁴⁶ St. Paul Pub. Hrg. Tr. (Vol. 2B) at 27-30 (Sept. 28, 2017) (Babineau); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 100-105 (Oct. 12, 2017) (Doheny); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 134-136 (Oct. 17, 2017) (Walker); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 127-129 (Oct. 17, 2017) (Thompson).

i. Replacement is in Interest of Public Safety

- Replacing existing Line 3 is in the interest of public safety as the line is old and in urgent need of replacement. Unlike a new Line 3, the old Line 3 was constructed with outdated technologies and is more at risk of leaks and spills. Therefore, the Project protects the environment from the risks presented by the existing Line 3.⁶⁴⁷
- Replacing Line 3 is a public safety issue, making transportation of oil safer and more reliable using the newest technology. It protects the environment by replacing the aging existing Line 3; and will ensure future generations' access to safe, affordable, and reliable energy.⁶⁴⁸
- Line 3 is running at approximately half of its original capacity and needs to be replaced to restore it to the original capacity. In addition, replacement is necessary given the integrity issues associated with existing Line 3.⁶⁴⁹
- With an estimated 7,000+ integrity digs needed in the next 15 years, it is nonsensical to continue fixing the aged Line 3. Existing Line 3 needs to be replaced with a pipeline constructed with today's modern technologies. The 7,000+ anticipated integrity digs are more invasive and disruptive to the environment and landowners than decommissioning the old line and replacing it with a new line. Applicant will remain responsible for monitoring the line after decommissioning.⁶⁵⁰
- Leaving existing Line 3 in service is dangerous to the environment. There is an urgent need for replacement.⁶⁵¹

⁶⁴⁷ Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 31-33 (Sept. 26, 2017) (Jensen); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 33-34 (Sept. 26, 2017) (Sorteberg); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 64-66 (Sept. 26, 2017) (Berg); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 28 (Sept. 26, 2017) (Weins); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 51-53 (Oct. 10, 2017) (Matheson); McGregor Pub. Hrg. Tr. (Vol. 4B) at 67-69 (Oct. 11, 2017) (Laflamme); Duluth Pub. Hrg. Tr. (Vol. 7A) at 130-133 (Oct. 18, 2017) (Yardley).

⁶⁴⁸ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 119-121 (Sept. 28, 2017) (Magee); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 28 -32 (Oct. 10, 2017) (Reynolds); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 91-94 (Oct. 12, 2017) (Carlberg); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 145-146 (Oct. 17, 2017) (Sundbom); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 170-172 (Oct. 25, 2017) (Pechin).

⁶⁴⁹ Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 46-50 (Sept. 26, 2017) (Retka); Duluth Pub. Hrg. Tr. (Vol. 7A) at 171-173 (Oct. 18, 2017) (Schmitz); Duluth Pub. Hrg. Tr. (Vol. 7B) at 58-61 (Oct. 18, 2017) (Barkholz).

⁶⁵⁰ Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 57-59 (Oct. 10, 2017) (Pavlovich); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 61-64 (Oct. 25, 2017) (Lawson); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 84-86 (Oct. 25, 2017) (Bednarczyk).

⁶⁵¹ Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 61-62 (Oct. 10, 2017) (Haubrich); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 34-38 (Oct. 10, 2017) (Wooner); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 51-53 (Oct. 10, 2017) (Matheson).

- Technology in pipeline construction has made significant strides since the 1960s when the existing Line 3 was constructed. Today, advances in leak detection, monitoring devices, pipeline materials, welding methods, and coatings make a new Line 3 much safer to operate and maintain; and will enable the new Line 3 to last hundreds of years into the future.⁶⁵²
- Applicant can effectively mitigate risk of accidental releases by replacing Line 3 with the newest and safest pipeline technology currently available. Replacement is the safest option for the environment.⁶⁵³
- The Project will be constructed with the newest technologies and materials, rendering leaks and spills less likely than with existing Line 3.⁶⁵⁴
- As with any aging infrastructure, Line 3 needs replacement to maintain safety and reliability.⁶⁵⁵
- Like any aging asset, it is often more cost-efficient and wiser to replace the asset than invest in costly and excessive repairs to an unsafe and outdated product. The same is true here, with existing Line 3.⁶⁵⁶
- By way of a federal Consent Order, Applicant is required to replace Line 3. Therefore, the Project is clearly needed.⁶⁵⁷

⁶⁵² Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 106-108 (Sept. 26, 2017) (Krahn); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 114-116 (Sept. 26, 2017) (Holtan); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 126-129 (Oct. 10, 2017) (Shamla); McGregor Pub. Hrg. Tr. (Vol. 4A) at 81-83 (Oct. 11, 2017) (Mudrick); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 91-94 (Oct. 12, 2017) (Fiction); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 141-145 (Oct. 17, 2017) (Holmes); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 157-159 (Oct. 17, 2017) (Holtan).

⁶⁵³ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 124-128 (Sept. 28, 2017) (Meneghini); Duluth Pub. Hrg. Tr. (Vol. 7A) at 69-71 (Oct. 18, 2017) (Evans).

⁶⁵⁴ Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 34-37 (Sept. 26, 2017) (Lerohl); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 118-121 (Oct. 10, 2017) (Voyles).

⁶⁵⁵ Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 71-72 (Sept. 26, 2017) (Sly); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 83-87 (Sept. 28, 2017) (Santori); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 44-46 (Oct. 17, 2017) (Johnson); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 45-47 (Oct. 10, 2017) (Childs); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 64-67 (Oct. 12, 2017) (Perrault); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 44-46 (Oct. 17, 2017) (Johnson); Duluth Pub. Hrg. Tr. (Vol. 7A) at 116-118 (Oct. 18, 2017) (Hodge); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 81-84 (Oct. 25, 2017) (Warfield); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 53-56 (Sept. 26, 2017) (Glover).

⁶⁵⁶ Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 66-69 (Oct. 10, 2017) (Cleveland); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 80-83 (Oct. 10, 2017) (Johnson); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 72-75 (Oct. 10, 2017) (Erickson); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 84-87 (Oct. 12, 2017) (Rice).

⁶⁵⁷ Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 129-132 (Sept. 26, 2017) (Kiel); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 37-38 (Sept. 26, 2017) (Trontvet); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 38-42 (Oct. 10,

- The union employees that will be used to construct this Project are highly skilled workers, trained to ensure that the pipeline is built to the highest of standards. These workers will construct a much safer pipeline, one that will better protect the environment and ensure the safe, efficient, and reliable flow of oil through the state.⁶⁵⁸
- Jobs, the economy, and protection of the environment are not exclusive. Replacing the existing Line 3 with a new Line 3 will achieve all three objectives.⁶⁵⁹
- Line 3 has run through the heart of Minnesota lake country and wild rice lakes for over 50 years and there have been no major spills or leaks affecting those areas. This Project, built with better technology, will help to keep Minnesota's lakes and waterways safe.⁶⁶⁰
- Pipelines are highly regulated, continuously monitored, and regularly inspected to prevent accidental releases, which are extremely rare.⁶⁶¹
- It is in Applicant's own financial interest to prevent spills and leaks. Therefore, Minnesota can rest assured that Applicant will do all that is necessary to build this Project in the safest, most technologically advanced manner possible.⁶⁶²

2017) (Daudt); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 42-45 (Oct. 10, 2017) (Benzer); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 45-47 (Oct. 10, 2017) (Childs).

⁶⁵⁸ St. Paul Pub. Hrg. Tr. (Vol. 2B) at 52-53 (Sept. 28, 2017) (Chastan); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 58-60 (Oct. 10, 2017) (Beighley); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 125-128 (Oct. 12, 2017) (Johnson); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 37-40 (Oct. 17, 2017) (Gilbert).

⁶⁵⁹ Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 59-61 (Oct. 10, 2017) (Uecker); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 67-70 (Oct. 10, 2017) (Chura); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 33-37 (Oct. 25, 2017) (Pischel).

⁶⁶⁰ Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 142-148 (Oct. 10, 2017) (Wetmore); McGregor Pub. Hrg. Tr. (Vol. 4A) at 90-92 (Oct. 10, 2017) (Ruskosky); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 64-68 (Oct. 12, 2017) (Stauber); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 96-100 (Oct. 12, 2017) (Izzard); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 64-68 (Oct. 17, 2017) (Grossell); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 79-84 (Oct. 17, 2017) (Van Vynckt); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 97-100 (Oct. 17, 2017) (Sheldon); Duluth Pub. Hrg. Tr. (Vol. 7A) at 157-164 (Oct. 18, 2017) (Maleitzke); Duluth Pub. Hrg. Tr. (Vol. 7B) at 37-39 (Oct. 18, 2017) (Dittmar); Duluth Pub. Hrg. Tr. (Vol. 7B) at 39-42 (Oct. 18, 2017) (Bauer).

⁶⁶¹ St. Paul Pub. Hrg. Tr. (Vol. 2B) at 53-55 (Sept. 28, 2017) (Proud); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 131-134 (Oct. 17, 2017) (Gordon); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 69-71 (Oct. 17, 2017) (Pierce); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 141-144 (Oct. 17, 2017) (Huston); Duluth Pub. Hrg. Tr. (Vol. 7B) at 52-55 (Oct. 18, 2017) (Bayuk); Duluth Pub. Hrg. Tr. (Vol. 7B) at 61-63 (Oct. 18, 2017) (Tumbleson).

⁶⁶² Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 83-87 (Oct. 10, 2017) (Birkeland); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 52-54 (Oct. 17, 2017) (Grudem).

ii. Benefits of Applicant's Proposed Route

- Over 80 percent of the APR follows an existing pipeline or other utility [HVTL] corridor, making the APR the best option.⁶⁶³
- The APR is the result of extensive review and analysis, and provides the best route possible.⁶⁶⁴
- Unlike the APR, SA-04 will cost three times more, is longer, crosses more waterways, and has all new impacts to Minnesota (i.e., no pipeline corridor sharing). Moreover, it bypasses Clearbrook and Superior, from which Minnesota's two refineries obtain their supply of crude. Consequently, SA-04 is not a viable alternative.⁶⁶⁵

iii. Removal and Decommissioning

- Removal of Line 3 would be disruptive to the environment and landowners. It is better to decommission the line and leave it in the ground, with Applicant monitoring it into the future.⁶⁶⁶
- Decommissioning existing Line 3 is safer and does not involve the risks of removal (such as the risk of breaching surrounding Enbridge Mainline pipelines) and other impacts to landowners. The pipeline would undergo significant cleaning (leaving only approximately one gallon of oil in the line) and regular monitoring by Applicant (as part of the monitoring of Applicant's Mainline system). Moreover, Applicant would remain liable for the line as long as it remains in the ground.⁶⁶⁷
- Decommissioning existing Line 3 and leaving it in-place is the safest option because it results in few new impacts on the

⁶⁶³ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 157-161 (Sept. 28, 2017) (Michela); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 200-204 (Sept. 28, 2017) (Davis); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 57-59 (Oct. 10, 2017) (Pavlovich); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 33-35 (Oct. 12, 2017) (Forsythe); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 146-149 (Oct. 17, 2017) (Unterberger); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 69-73 (Oct. 25, 2017) (Anderson).

⁶⁶⁴ Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 121-123 (Sept. 26, 2017) (D'Aloia); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 39-42 (Oct. 12, 2017) (Ploetz).

⁶⁶⁵ Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 114-117 (Sept. 26, 2017) (Sustad); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 76-80 (Oct. 12, 2017) (Repka); Duluth Pub. Hrg. Tr. (Vol. 7A) at 43-47 (Oct. 18, 2017) (DeLuca).

⁶⁶⁶ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 151-152 (Sept. 28, 2017) (Janiksela).

⁶⁶⁷ Thief River Falls Pub. Hrg. Tr. 1A) at 50-52 (Sept. 26, 2017) (Dennee); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 87-89 (Oct. 10, 2017) (Dzinkonski); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 32-34 (Oct. 10, 2017) (Hansen); Duluth Pub. Hrg. Tr. (Vol. 7A) at 73-75 (Oct. 18, 2017) (Jensen).

land, does not put other lines in the Mainline corridor at risk, and will not cause additional disruption to landowners.⁶⁶⁸

iv. Economic Benefits of the Project

- Applicant has voluntarily agreed to replace existing Line 3 – a line it admits is in need of repair. Applicant is paying for the Project, not taxpayers, therefore Minnesota should be in favor of this infrastructure upgrade paid for, entirely, by a private company.⁶⁶⁹
- The Project will bring tens of millions of dollars in property taxes to northern Minnesota counties in need of a greater tax base. This is a long-term benefit to the communities, which will help to build infrastructure, schools, and community improvement projects in the impacted counties. Moreover, as a result of the millions of dollars in property taxes paid by Applicant, local property owners could see a reduction in their property taxes.⁶⁷⁰
- The Project will provide approximately \$2 billion in economic benefits and the creation of jobs in northern Minnesota communities that are in need of quality, good-paying, union jobs. In addition, the Project will increase the property tax base, benefiting communities, school districts, and residents. It will bring thousands of temporary workers who will spend money in the communities, thereby boosting the local economies. The jobs provided by the Project are highly-paid, skilled jobs needed in northern Minnesota. The wages earned by these workers will be invested back into the area through employee spending, taxes, and Applicant investment in the communities. In addition, the temporary employees provide a significant boost to the hospitality, retail, and food industries in the communities in which the Project is located. Moreover,

⁶⁶⁸ Hinckley Pub. Hrg. Tr. (Vol. 5A) at 67-71 (Oct. 12, 2017) (Wilander); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 88-91 (Oct. 17, 2017) (Sauve).

⁶⁶⁹ Thief River Falls Pub. Hrg. Tr. 1B) at 50-52 (Sept. 26, 2017) (Sustad); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 96-99 (Sept. 26, 2017) (Hasnedl); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 78-81 (Sept. 28, 2017) (Olson); Duluth Pub. Hrg. Tr. (Vol. 7A) at 47-49 (Oct. 18, 2017) (Voorhees).

⁶⁷⁰ Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 88-90 (Sept. 26, 2017) (Peters); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 92-95 (Sept. 26, 2017) (Fabian); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 116-119 (Sept. 26, 2017) (Novacek); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 69-73 (Oct. 10, 2017) (Forsman); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 105-108 (Oct. 10, 2017) (Wilson); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 132-133 (Oct. 12, 2017) (Pope); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 116-119 (Oct. 17, 2017) (Green); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 89-92 (Oct. 17, 2017) (Johnson).

the use of local contractors, companies, and suppliers provides an additional boost to Minnesota's economy.⁶⁷¹

- It is difficult for communities in rural, northern Minnesota to attract good paying jobs and industry, including young workers. Their populations are aging and in need of new, younger workers with good jobs.⁶⁷²
- The DOC did not fully evaluate the economic benefit of the Project for Minnesota. In addition, metropolitan-based agencies and decision-makers (i.e., the Commission) ignore the important economic impact the Project will have on rural, northern Minnesota counties and communities. As the State's Department of *Commerce*, the DOC should support the Project, which brings economic growth to the state, instead of oppose it.⁶⁷³

⁶⁷¹ Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 52-53 (Sept. 26, 2017) (DuChamp); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 56-59 (Sept. 26, 2017) (Tomte); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 64-66 (Sept. 26, 2017) (Berg); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 95-97 (Sept. 26, 2017) (Nerhus); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 100-102 (Sept. 26, 2017) (Stengrim); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 108-111 (Sept. 26, 2017) (Bring); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 112-114 (Sept. 26, 2017) (Kalinowski); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 119-121 (Sept. 26, 2017) (Gezszewski); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 132 (Sept. 26, 2017) (Lillestad); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 35-37 (Sept. 26, 2017) (Ruskosky); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 42-46 (Sept. 26, 2017) (Norr); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 60-62 (Sept. 26, 2017) (Dagg); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 65-68 (Sept. 26, 2017) (Hempel); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 119-121 (Sept. 28, 2017) (Magee); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 155-157 (Sept. 28, 2017) (Haux); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 35-38 (Sept. 28, 2017) (Schott); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 83-87 (Sept. 28, 2017) (Santori); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 204-206 (Sept. 28, 2017) (Johnson); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 38-42 (Oct. 10, 2017) (Daudt); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 103-105 (Oct. 10, 2017) (Eichorn); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 129-131 (Oct. 10, 2017) (Paul); McGregor Pub. Hrg. Tr. (Vol. 4A) at 35-37 (Oct. 11, 2017) (Mangan); McGregor Pub. Hrg. Tr. (Vol. 4A) at 73-76 (Oct. 11, 2017) (Connell); McGregor Pub. Hrg. Tr. (Vol. 4B) at 60-61 (Oct. 11, 2017) (Snidarich); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 42-47 (Oct. 12, 2017) (Ahlgren); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 38-41 (Oct. 12, 2017) (Radtke); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 56-60 (Oct. 12, 2017) (Hanson); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 33-37 (Oct. 17, 2017) (Bliss); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 50-52 (Oct. 17, 2017) (Dennee); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 53-55 (Oct. 17, 2017) (Bessler); Duluth Pub. Hrg. Tr. (Vol. 7A) at 39-41 (Oct. 18, 2017) (Aronson); Duluth Pub. Hrg. Tr. (Vol. 7A) at 71-73 (Oct. 18, 2017) (Misiak); Duluth Pub. Hrg. Tr. (Vol. 7A) at 139-142 (Oct. 18, 2017) (Bennett).

⁶⁷² St. Paul Pub. Hrg. Tr. (Vol. 2A) at 57-58 (Sept. 28, 2017) (Nelson); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 88-89 (Sept. 28, 2017) (Olson); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 163-165 (Sept. 28, 2017) (Johnson); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 32-35 (Oct. 10, 2017) (Lowney); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 124-126 (Oct. 10, 2017) (Martin); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 34-38 (Oct. 10, 2017) (Wooner); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 42-45 (Oct. 10, 2017) (Evans); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 67-70 (Oct. 10, 2017) (Chura); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 94-96 (Oct. 12, 2017) (Bubalo); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 176-178 (Oct. 17, 2017) (Kimmes); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 31-35 (Oct. 17, 2017) (Collins); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 76-78 (Oct. 17, 2017) (Watkins).

⁶⁷³ Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 92-95 (Sept. 26, 2017) (Fabian); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 57-60 (Sept. 26, 2017) (Wetterlund); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 62-65 (Sept. 26, 2017) (Sollom); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 84-85 (Sept. 26, 2017) (Dennee); Thief River

- This is a privately-funded economic development project – larger in scale than the U.S. Bank Stadium and Target Field (which were, in large part, publicly funded) – and provides ongoing economic benefits to communities through which it passes.⁶⁷⁴
- Rejection of this Project will result in higher fuel prices due to lack of a steady supply of oil. These higher fuel prices will directly and indirectly affect all Minnesotans.⁶⁷⁵

v. Pipelines are the Best Mode of Oil Transportation

- Pipelines are the safest, most reliable, efficient, and economical way to transport oil.⁶⁷⁶
- Denying the Project will not stop the supply of Canadian tar sands oil, nor will it reduce the demand for oil in our nation or around the world. It will just require a different mode of transportation (truck or rail) and result in the loss of economic growth for Minnesota.⁶⁷⁷
- Transportation of oil by rail or truck is less efficient, less economical, and more dangerous than by pipeline. Both trucks and trains use gasoline to transport the oil, thereby increasing the carbon footprint of the oil transported. In addition, trucks cause wear and tear on the roadways (paid by taxpayers); and trains pass through and near communities and highly populated areas, making risk of spill more detrimental. Both trains and trucks take longer to deliver the crude, are more expensive, and are more susceptible to accidents causing unintended releases and injury or death to

Falls Pub. Hrg. Tr. (Vol. 1B) at 89-94 (Sept. 26, 2017) (Peters); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 149-152 (Oct. 10, 2017) (Lisi).

⁶⁷⁴ Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 134-138 (Oct. 10, 2017) (Zimmerman); McGregor Pub. Hrg. Tr. (Vol. 4B) at 76-78 (Oct. 11, 2017) (Granke); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 52-55 (Oct. 12, 2017) (Wiklund); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 86-88 (Oct. 17, 2017) (Estrada).

⁶⁷⁵ Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 167-168 (Oct. 10, 2017) (Norr); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 29-31 (Oct. 10, 2017) (Fouts); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 60-64 (Oct. 10, 2017) (Rowe); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 118-119 (Oct. 12, 2017) (Liebelt).

⁶⁷⁶ Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 88-90 (Sept. 26, 2017) (Peters); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 92-95 (Sept. 26, 2017) (Fabian); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 78-81 (Sept. 28, 2017) (Olson); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 32-35 (Sept. 28, 2017) (Macmillan); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 57-59 (Sept. 28, 2017) (Faupel); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 42-45 (Oct. 10, 2017) (Benzer); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 55-57 (Oct. 10, 2017) (Howg); McGregor Pub. Hrg. Tr. (Vol. 4B) at 78-79 (Oct. 11, 2017) (Janssen); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 65-66 (Oct. 17, 2017) (Swenson).

⁶⁷⁷ Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 121-124 (Oct. 10, 2017) (Roth).

humans. Pipelines deliver the crude underground, in a faster, less expensive, and more efficient manner, and have fewer incidents of accidental release. Today's technologies make pipeline transportation the safest mode of transporting large quantities of oil.⁶⁷⁸

- Increased transportation by rail would impose a hardship on Minnesota's agriculture industry, causing a shortage in rail cars for farmers to bring their crops to market and increased prices of food goods. High freight costs caused by rail transportation of oil cripples Minnesota farmers, a situation farmers experienced in 2014. To ensure a strong Minnesota economy, this Project should be approved.⁶⁷⁹
- Over 99.9 percent of the crude transported through Line 3 reaches its final destination, making pipeline transportation the most safe and reliable mode of oil transportation. In Minnesota alone, 2.5M barrels of oil a day are transported across the state by Applicant without incident. These figures prove that accidental releases are extremely rare and should not discourage the approval of this Project.⁶⁸⁰
- A 36-inch pipe is more efficient and requires less energy to transport oil than does a 34-inch pipe.⁶⁸¹

vi. Public Support for the Project in Greater Minnesota

- Applicant has already received easement agreements with approximately 90 percent of the landowners directly affected by the APR. The Commission should pay attention to those

⁶⁷⁸ Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 83-86 (Sept. 26, 2017) (Hall); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 108-111 (Sept. 26, 2017) (Bring); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 123-126 (Sept. 26, 2017) (Wilde); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 74-79 (Sept. 26, 2017) (Scherzer); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 51-54 (Sept. 28, 2017) (Adams); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 155-159 (Oct. 10, 2017) (Tomassoni); McGregor Pub. Hrg. Tr. (Vol. 4A) at 59-61 (Oct. 10, 2017) (Lueck); McGregor Pub. Hrg. Tr. (Vol. 4A) at 105-106 (Oct. 11, 2017) (Larson); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 71-72 (Oct. 12, 2017) (Vevea); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 68-71 (Oct. 17, 2017) (Naastad); Duluth Pub. Hrg. Tr. (Vol. 7A) at 63-69 (Oct. 18, 2017) (Basara).

⁶⁷⁹ Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 38-41 (Sept. 26, 2017) (Isane); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 68-72 (Sept. 26, 2017) (Loeslie); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 81-83 (Sept. 28, 2017) (Zelenka); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 52-55 (Oct. 10, 2017) (Stone); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 64-67 (Oct. 10, 2017) (Solberg); McGregor Pub. Hrg. Tr. (Vol. 4B) at 61-64 (Oct. 11, 2017) (Vogt); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 171-173 (Oct. 17, 2017) (Rasmussen).

⁶⁸⁰ Duluth Pub. Hrg. Tr. (Vol. 7A) at 37-39 (Oct. 18, 2017) (Carlson); Duluth Pub. Hrg. Tr. (Vol. 7A) at 133-136 (Oct. 18, 2017) (Kruse); Duluth Pub. Hrg. Tr. (Vol. 7A) at 175-179 (Oct. 18, 2017) (Zupancich); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 167-170 (Oct. 25, 2017) (Wester).

⁶⁸¹ McGregor Pub. Hrg. Tr. (Vol. 4A) at 76-79 (Oct. 11, 2017) (Ramnes); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 59-61 (Oct. 17, 2017) (Greene).

directly affected by the Project (the communities and landowners in the Project area) who overwhelmingly support it.⁶⁸²

- Opposition to the Project is largely metro-based, and the decision-makers (Commission members) are mainly Twin Cities residents. As a result, the Commission lacks an understanding of the needs of rural, northern communities for the economic development opportunities that this Project offers. Residents and elected officials in Northern Minnesota largely support the Project and they are most impacted by it. The Commission should pay close attention to these voices.⁶⁸³

vii. Applicant's Record as a Company

- Applicant is a responsible company and good corporate "neighbor," having donated funds and emergency response equipment to municipalities, community organizations, and local fire and police departments. Applicant has been responsive to landowner complaints and issues.⁶⁸⁴
- Applicant is a responsible company that is committed to safety, as demonstrated by its comprehensive employee and contractor training programs, emergency responder training, intense maintenance protocols, and state-of-the-art pipeline construction and integrity monitoring.⁶⁸⁵

⁶⁸² Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 93-99 (Oct. 10, 2017) (Undeland).

⁶⁸³ Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 28-29 (Sept. 26, 2017) (Geske); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 62 (Sept. 26, 2017) (Comstock); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 89-94 (Sept. 26, 2017) (Peters); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 94-96 (Sept. 26, 2017) (Kiel); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 57-58 (Sept. 28, 2017) (Nelson); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 68-70 (Sept. 28, 2017) (Kozelouzek); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 155-157 (Sept. 28, 2017) (Haux); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 68-69 (Sept. 28, 2017) (Gore); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 155-159 (Oct. 10, 2017) (Tomassoni); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 71-74 (Oct. 17, 2017) (Illies).

⁶⁸⁴ Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 92-95 (Sept. 26, 2017) (Fabian); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 126-129 (Sept. 26, 2017) (Pederson); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 38-42 (Sept. 26, 2017) (Genereux); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 52 (Sept. 26, 2017) (Litzinger); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 101-102 (Sept. 26, 2017) (Weleski); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 60-64 (Oct. 10, 2017) (Rowe); McGregor Pub. Hrg. Tr. (Vol. 4A) at 127-129 (Oct. 11, 2017) (Haus); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 94-97 (Oct. 12, 2017) (Johnson); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 62-64 (Oct. 17, 2017) (Solee); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 112-114 (Oct. 17, 2017) (Jordan); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 154-157 (Oct. 17, 2017) (Halverson); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 49-53 (Oct. 17, 2017) (Stenseng); Duluth Pub. Hrg. Tr. (Vol. 7A) at 89-91 (Oct. 18, 2017) (Ross); Duluth Pub. Hrg. Tr. (Vol. 7A) at 91-94 (Oct. 18, 2017) (Palmer); Duluth Pub. Hrg. Tr. (Vol. 7A) at 118-122 (Oct. 18, 2017) (Finch); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 58-61 (Oct. 25, 2017) (Gawtry).

⁶⁸⁵ Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 68-71 (Sept. 26, 2017) (Lenz); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 97-100 (Sept. 26, 2017) (Thygesen); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 34-37 (Sept. 28, 2017) (Beck); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 72-73 (Sept. 28, 2017) (Dechant); Grand Rapids Pub. Hrg. Tr.

- Applicant cares about Minnesota and the communities in which its employees live and work. Because Applicant's employees and contractors live and work in the area, it is particularly concerned about ensuring the safety of the pipeline and the environment.⁶⁸⁶
- Since the spill in Marshall, Michigan, Applicant has invested in new technologies, training programs, and emergency response preparedness to prevent a catastrophe like that which occurred Michigan.⁶⁸⁷
- Applicant took responsibility for the spill in Marshall, Michigan, and paid for the remediation costs. It would do the same in Minnesota should a spill occur. In addition, since the 2010 spill near Marshall, Michigan. Using what it learned in Michigan, Applicant is better able to prevent future releases and ensure it can respond most effectively should another breach occur.⁶⁸⁸
- Applicant has paid for and fully remediated the spills that have occurred in Cohasset and Grand Rapids, Minnesota, as well as the major spill in Marshall, Michigan. Spills can and do get remediated, and Applicant is fully able to do that in case of an

(Vol. 3A) at 47-49 (Oct. 10, 2017) (Rothe); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 39-40 (Oct. 10, 2017) (Gunerson); McGregor Pub. Hrg. Tr. (Vol. 4A) at 76-79 (Oct. 11, 2017) (Ramnes); McGregor Pub. Hrg. Tr. (Vol. 4A) at 112-116 (Oct. 11, 2017) (Grumdahl); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 47-49 (Oct. 12, 2017) (Gretzinger); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 80-84 (Oct. 12, 2017) (Beaupre); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 103-107 (Oct. 12, 2017) (Hoskins); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 114-116 (Oct. 17, 2017) (Smith); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 116-118 (Oct. 17, 2017) (Swenson); Duluth Pub. Hrg. Tr. (Vol. 7A) at 97-100 (Oct. 18, 2017) (Langlee); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 82-84 (Oct. 25, 2017) (Schliek); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 138-141 (Oct. 25, 2017) (Kastning); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 65-67 (Oct. 25, 2017) (Sanders); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 123-126 (Oct. 25, 2017) (Kastening).

⁶⁸⁶ Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 80-83 (Sept. 26, 2017) (Reckinger); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 55-57 (Sept. 26, 2017) (Haubrich); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 76-78 (Sept. 28, 2017) (Eliason); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 149-152 (Oct. 17, 2017) (Palmer); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 47-49 (Oct. 17, 2017) (Larson); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 83-86 (Oct. 17, 2017) (Johnson); Duluth Pub. Hrg. Tr. (Vol. 7A) at 56-60 (Oct. 18, 2017) (Murk); Duluth Pub. Hrg. Tr. (Vol. 7A) at 150-154 (Oct. 18, 2017) (Foat).

⁶⁸⁷ Bemidji Pub. Hrg. Tr. (Vol. 6B) at 144-148 (Oct. 17, 2017) (Palazzo); Duluth Pub. Hrg. Tr. (Vol. 7A) at 100-103 (Oct. 18, 2017) (Norman); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 84-85 (Oct. 25, 2017) (Frost).

⁶⁸⁸ St. Paul Pub. Hrg. Tr. (Vol. 2A) at 161-163 (Sept. 28, 2017) (Mackey); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 59-61 (Oct. 10, 2017) (Uecker); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 108-111 (Oct. 10, 2017) (Sparhawk); Duluth Pub. Hrg. Tr. (Vol. 7A) at 79-81 (Oct. 18, 2017) (Hom); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 141-147 (Oct. 25, 2017) (Bohrmann); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 40-45 (Oct. 25, 2017) (Vaura); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 58-62 (Oct. 25, 2017) (Schwarz).

accidental release, as it has shown with other releases in Minnesota and elsewhere.⁶⁸⁹

- Applicant is a strong Minnesota employer, providing well-paying jobs and security to its approximately 500 Minnesota employees.⁶⁹⁰
- Applicant is a quality employer that values community involvement, volunteerism, safety, and the environment in which its employees live and work. Numerous employees and contractors attested to Applicant's commitment to safety and environmental responsibility, as well as its philanthropic work in Minnesota communities. According to these employees and contractors, Applicant is dedicated to its core values of "safety, integrity, and respect."⁶⁹¹
- Applicant has engaged in substantial tribal engagement efforts, including the identification of Native-owned contractors, plans to hire and train Native workers, and the issuance of a Tribal Employee Rights Ordinance to ensure compliance with tribal laws.⁶⁹²

viii. Need for Additional Transportation Capacity for Oil

- Life Takes Energy. The oil transported in Line 3 makes possible the petroleum products that are used in a wide variety of products upon which Americans have become reliant. These products span all areas of life – not just gasoline – such as, tires, asphalt for roads, jet fuel, medical equipment and products, plastics, furniture, flooring, shingles, insulation, heating fuel, appliances, carpet, clothing, and nearly all types of products upon which Americans have

⁶⁸⁹ McGregor Pub. Hrg. Tr. (Vol. 4A) at 33-35 (Oct. 11, 2017) (Carlberg); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 61-65 (Oct. 17, 2017) (Wronka).

⁶⁹⁰ Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 32-34 (Oct. 10, 2017) (Hansen); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 49-52 (Oct. 12, 2017) (Tsinnie); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 60-63 (Oct. 12, 2017) (Anderson).

⁶⁹¹ Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 59-61 (Sept. 26, 2017) (Terry Olson); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 83-87 (Sept. 28, 2017) (Santori); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 53-55 (Oct. 10, 2017) (Packer); McGregor Pub. Hrg. Tr. (Vol. 4A) at 39-41 (Oct. 11, 2017) (Miller); McGregor Pub. Hrg. Tr. (Vol. 4A) at 87-90 (Oct. 11, 2017) (Archambault); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 68-70 (Oct. 12, 2017) (Teitelbaum); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 47-50 (Oct. 17, 2017) (Kircher); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 124-126 (Oct. 17, 2017) (Polo); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 173-176 (Oct. 17, 2017) (Todavich); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 153-157 (Oct. 17, 2017) (Holmes); Duluth Pub. Hrg. Tr. (Vol. 7A) at 75-77 (Oct. 18, 2017) (Byrnes); Duluth Pub. Hrg. Tr. (Vol. 7A) at 87-89 (Oct. 18, 2017) (Dolter); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 37-39 (Oct. 25, 2017) (Laliberte).

⁶⁹² Hinckley Pub. Hrg. Tr. (Vol. 5A) at 125-128 (Oct. 12, 2017) (Johnson); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 122-125 (Oct. 17, 2017) (Johnson); Duluth Pub. Hrg. Tr. (Vol. 7B) at 77-81 (Oct. 18, 2017) (Peigan); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 137-140 (Oct. 25, 2017) (Tsinnie).

become accustomed. In addition, fuel and petroleum products are necessary to our military and national defense. In short, petroleum is an integral part of American lives.⁶⁹³

- While renewable energy sources are currently being developed and improved, these sources are currently unable to meet America's energy needs. Moreover, the costs of these renewable sources make them less affordable or available to average Americans. A change to renewable energy sources and electric cars would require large-scale changes not on the horizon. Until the U.S. has drastically reduced its dependence on oil (which it currently has not), transportation of oil for gas and other petroleum products is needed now and will continue to be necessary into the foreseeable future. Even if there is an increase in the use of renewable energy sources and electric cars, the nation will still need petroleum products.⁶⁹⁴
- Minnesota's two refineries are unable to meet their need for crude and are currently experiencing apportionment on a regular basis. Without a new Line 3, these refineries will need

⁶⁹³ Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 41-47 (Sept. 26, 2017) (Krogstad); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 66-68 (Sept. 26, 2017) (Rice); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 86-88 (Sept. 26, 2017) (Kavajecz); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 100-101 (Sept. 26, 2017) (Sollum); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 34-37 (Sept. 28, 2017) (Beck); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 32-35 (Sept. 28, 2017) (Macmillan); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 43-47 (Sept. 28, 2017) (Bouska); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 55-57 (Sept. 28, 2017) (Archambault); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 82-83 (Sept. 28, 2017) (Kennedy); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 121-122 (Sept. 28, 2017) (Tobin); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 194-196 (Sept. 28, 2017) (O'Connor); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 204-206 (Sept. 28, 2017) (Johnson); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 219-222 (Sept. 28, 2017) (Hodge); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 69-73 (Oct. 10, 2017) (Forsman); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 138-139 (Oct. 10, 2017) (Stock); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 165-167 (Oct. 10, 2017) (MacMillan); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 38 (Oct. 10, 2017) (Keup); McGregor Pub. Hrg. Tr. (Vol. 4A) at 124-127 (Oct. 11, 2017) (Hnatko); McGregor Pub. Hrg. Tr. (Vol. 4B) at 88-90 (Oct. 11, 2017) (Globus); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 29-33 (Oct. 12, 2017) (Hodek); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 121-122 (Oct. 12, 2017) (Nystrom); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 40-42 (Oct. 17, 2017) (Wahlberg); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 188-190 (Oct. 17, 2017) (Sparhawk); Duluth Pub. Hrg. Tr. (Vol. 7A) at 41-43 (Oct. 18, 2017) (Jacobson); Duluth Pub. Hrg. Tr. (Vol. 7B) at 55-58 (Oct. 18, 2017) (Mark); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 54-58 (Oct. 25, 2017) (Compton); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 121-123 (Oct. 25, 2017) (Heldt).

⁶⁹⁴ Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 52-55 (Sept. 26, 2017) (Anderson); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 161-163 (Sept. 28, 2017) (Mackey); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 68-69 (Sept. 28, 2017) (Gore); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 100-103 (Oct. 10, 2017) (Stolp); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 57-62 (Oct. 17, 2017) (Prestby); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 77-79 (Oct. 17, 2017) (Wiens); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 152-154 (Oct. 17, 2017) (Solberg); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 148-151 (Oct. 17, 2017) (Mason); Duluth Pub. Hrg. Tr. (Vol. 7A) at 85-87 (Oct. 18, 2017) (Lejeune); Duluth Pub. Hrg. Tr. (Vol. 7A) at 142-145 (Oct. 18, 2017) (Dahnke).

to rely on other, less safe or efficient means of transportation to meet the State's need for crude.⁶⁹⁵

- Two Minnesota refineries and a Wisconsin refinery depend on Line 3 for their supply of oil. A reduction in the supply of oil increases the cost of gas for Minnesota and the surrounding area. Increased gas prices severely impact the state's economy and all of its residents, particularly those with low incomes.⁶⁹⁶
- In reviewing need, the Commission must not only look to the crude oil needs of Minnesota's two refineries, but also to the need for oil supply in the surrounding region which Applicant's Mainline System serves. The Mainline is and has been in apportionment with respect to heavy crude on a regular basis for the last two years. This fact, alone, signifies the need for a pipeline that can transport a sufficient amount of crude to meet the demand in Minnesota and the surrounding region.⁶⁹⁷
- Applicant, by being willing to invest over \$7 billion in the Project, is in the best position to know whether or not there is a need for the Project. It would not build a new pipeline if there was no need for the oil.⁶⁹⁸
- Applicant is merely a transporter of oil, not a producer. It does not extract the oil nor does it create the need for the oil in the marketplace. It is seeking to replace an old line that has known risks and runs at approximately 50 percent of its original capacity. As long as the marketplace demands oil,

⁶⁹⁵ St. Paul Pub. Hrg. Tr. (Vol. 2B) at 46-48 (Sept. 28, 2017) (Dibble); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 50-52 (Sept. 28, 2017) (Adams); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 82-83 (Sept. 28, 2017) (Kennedy); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 62-66 (Oct. 10, 2017) (George); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 139-142 (Oct. 10, 2017) (Davis); McGregor Pub. Hrg. Tr. (Vol. 4A) at 79-81 (Oct. 11, 2017) (Peterson); Duluth Pub. Hrg. Tr. (Vol. 7A) at 124-128 (Oct. 18, 2017) (Risdaal).

⁶⁹⁶ Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 35-38 (Oct. 10, 2017) (Johnson); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 89-91 (Oct. 10, 2017) (Garner); Duluth Pub. Hrg. Tr. (Vol. 7A) at 106-108 Oct. 18, 2017) (Nelson).

⁶⁹⁷ St. Paul Pub. Hrg. Tr. (Vol. 2B) at 30-32 (Sept. 28, 2017) (Prew); Hinckley Pub. Hrg. Tr. (Vol. 5B) at 50-53 (Oct. 12, 2017) (LaFlamme); Duluth Pub. Hrg. Tr. (Vol. 7A) at 179-182 (Oct. 18, 2017) (Sovari); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 103-107 (Oct. 25, 2017) (McGaver).

⁶⁹⁸ Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 111-112 (Sept. 26, 2017) (Peters); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 117-119 (Sept. 28, 2017) (Theissen); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 68-69 (Sept. 28, 2017) (Gore); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 45-47 (Oct. 10, 2017) (Pierson); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 32-34 (Oct. 10, 2017) (Hansen); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 70-72 (Oct. 10, 2017) (Wick); McGregor Pub. Hrg. Tr. (Vol. 4A) at 52-55 (Oct. 11, 2017) (Saline).

pipelines are the safest, most efficient, and most economical mode in which to transport the oil.⁶⁹⁹

- It is better to build the Project and not need it in the future than to need it and not have it in the future.⁷⁰⁰

ix. Benefits of North American Oil

- The oil transported by Line 3 is North American (Canadian) oil and does not carry with it the national security issues presented by Middle Eastern oil from politically unstable countries. In addition, the ability to reliably and economically transport Canadian and Bakken oil keeps oil prices low in the Midwest and throughout the United States. Affordable energy translates into economic benefits in all other industries, as all industries rely, in some way, on energy and/or petroleum products. Minnesota families need access to affordable, reliable, and safe energy resources, which this pipeline will provide.⁷⁰¹
- Increasing our nation's use and reliable access to North American oil is in the interest of national security as oil is the primary energy source for the United States and its military. National security depends on energy independence and security, and Minnesota owes a duty to the rest of the country to approve the Project.⁷⁰²
- A steady, reliable, and sufficient supply of oil is necessary for national security. Use of North American oil reduces America's dependence on Middle Eastern oil supplies.⁷⁰³

⁶⁹⁹ Hinckley Pub. Hrg. Tr. (Vol. 5A) at 35-39 (Oct. 12, 2017) (Kmecik); Duluth Pub. Hrg. Tr. (Vol. 7A) at 49-52 (Oct. 18, 2017) (Kavajecz); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 52-54 (Oct. 25, 2017) (Gilbertson).

⁷⁰⁰ Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 114-115 (Oct. 10, 2017) (Forrest).

⁷⁰¹ Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 68-71 (Sept. 26, 2017) (Lenz); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 99-100 (Sept. 26, 2017) (Page); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 68-70 (Sept. 28, 2017) (Kozelouzek); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 106-110 (Sept. 28, 2017) (Ross); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 152-155 (Sept. 28, 2017) (Thoma); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 47-50 (Sept. 28, 2017) (Knetter); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 46-47 (Oct. 17, 2017) (Wright); Duluth Pub. Hrg. Tr. (Vol. 7A) at 173-175 (Oct. 18, 2017) (Olson); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 45-48 (Oct. 25, 2017) (Preiner).

⁷⁰² St. Paul Pub. Hrg. Tr. (Vol. 2A) at 117-119 (Sept. 28, 2017) (Theissen); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 52-55 (Oct. 10, 2017) (Stone); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 157-159 (Oct. 17, 2017) (Clauer); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 169-171 (Oct. 17, 2017) (Krigbaum); Duluth Pub. Hrg. Tr. (Vol. 7A) at 81-85 (Oct. 18, 2017) (LePage).

⁷⁰³ Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 78-80 (Sept. 26, 2017) (Urdahl); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 34-37 (Sept. 28, 2017) (Beck); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 163-165 (Sept. 28, 2017) (Johnson); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 43-47 (Sept. 28, 2017) (Bouska); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 53-55 (Sept. 28, 2017) (Proud); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 57-59 (Oct. 10, 2017) (Pavlovich); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 91-93 (Oct. 10, 2017) (Johnson); Grand Rapids Pub. Hrg. Tr. (Vol.

x. Frustration with the Regulatory Process

- Delay and indecision in the public approval process only increase the cost of the Project (and ultimately the oil being transported through the pipeline), which is then passed on to consumers. In addition, it leaves in place existing Line 3, a pipeline with known integrity issues. The slow process has been frustrating to Applicant and people in northern Minnesota.⁷⁰⁴
- Canada, North Dakota, and Wisconsin have all approved the Line 3 Project in their borders. Minnesota is the only hold-up on the Project and should follow suit with its neighbors.⁷⁰⁵

D. Written Comments Received

293. The comment period for this Project began on September 8, 2017, and closed on November 22, 2017.⁷⁰⁶ During that time, approximately 72,249 written comments were received.

294. The comments fell into three main categories: (1) those opposed to the Project; (2) those in support of the Project; and, (3) those in support of SA-04 or other Alternatives.

295. Written comments were submitted from private individuals, elected officials, refineries, industry groups, political subdivisions, special interest organizations, governmental agencies, Indian tribes, corporate entities, and foreign governments.

296. Written comments echoed those articulated at the public hearings. To avoid repetition, a summary of written comments is attached hereto as Attachment C.

297. The following municipalities, local governmental units, and counties submitted written comment, expressing support for the Project:

- Cohasset Fire and Rescue⁷⁰⁷

3A) at 134-138 (Oct. 10, 2017) (Zimmerman); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 122-125 (Oct. 12, 2017) (Mattson).

⁷⁰⁴ Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 88-90 (Sept. 26, 2017) (Peters); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 90-92 (Sept. 26, 2017) (Johnson); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 92-95 (Sept. 26, 2017) (Fabian); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 107-108 (Sept. 26, 2017) (Fabian); McGregor Pub. Hrg. Tr. (Vol. 4A) at 65-68 (Oct. 11, 2017) (Monacelli); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 123-126 (Oct. 25, 2017) (Heintzeman).

⁷⁰⁵ Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 74-79 (Sept. 26, 2017) (Fabian); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 57-59 (Oct. 10, 2017) (Pavlovich); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 55-58 (Oct. 12, 2017) (Bratsch).

⁷⁰⁶ Ex. PUC-23.

⁷⁰⁷ Comment by Cohasset Fire & Rescue (Sept. 20, 2017) (Batch 2) (eDocket No. 20179-135778-01 CN)).

- Marshall County⁷⁰⁸
- Aitkin County⁷⁰⁹
- Pennington County⁷¹⁰
- Red Lake County⁷¹¹
- City of Wrenshall⁷¹²
- Solon Springs Fire Department⁷¹³
- City of Cohasset⁷¹⁴
- Kittson County⁷¹⁵
- St. Louis County⁷¹⁶
- Arbo Township⁷¹⁷
- City of Cromwell⁷¹⁸
- City of Hill City⁷¹⁹
- City of Palisade⁷²⁰
- City of Red Lake Falls⁷²¹
- City of Thief River Falls⁷²²
- Clearwater County Land and Forestry Department⁷²³
- Aitkin County Soil and Water Conservation District⁷²⁴
- Cloquet Economic Development Authority⁷²⁵
- Norden Township⁷²⁶
- Bemidji Regional Airport Authority⁷²⁷

⁷⁰⁸ Comment by Marshall Cnty. Bd. of Comm'rs (Sept. 20, 2017) (Batch 2) (eDocket No. 20179-135778-01 (CN)); Thief River Pub. Hrg. Tr. (Vol. 1B) at 93 (Sept. 26, 2017) (Peters).

⁷⁰⁹ Comment by Aitkin Cnty. Bd. of Comm'rs (Oct. 4, 2017) (Batch 3) (eDocket No. 201710-136134-01 (CN)).

⁷¹⁰ Comment by Pennington Cnty. (Oct. 4, 2017) (Batch 3) (eDocket No. 201710-136134-01 (CN)); Ex. P-34 Written Comment).

⁷¹¹ Comment by Red Lake Cnty. (Oct. 4, 2017) (Batch 3) (eDocket No. 201710-136134-01 (CN)).

⁷¹² Comment by Wrenshall City Council (Oct. 4, 2017) (Batch 3) (eDocket No. 201710-136134-01 (CN)).

⁷¹³ Comment by Solon Springs Fire Dep't (Oct. 4, 2017) (Batch 4) (eDocket No. 201710-136135-02 (CN)).

⁷¹⁴ Comment by City of Cohasset (Oct. 9, 2017) (Batch 5) (eDocket No. 201710-136290-02 (CN)).

⁷¹⁵ Comment by Kittson Cnty. Bd. of Comm'rs (Oct. 9, 2017) (Batch 5) (eDocket No. 201710-136290-02 (CN)); Comment by Kittson Cnty. Bd. of Comm'rs (Nov. 17, 2017) (Batch 14) (eDocket No. 201711-137475-01 (CN)).

⁷¹⁶ Comment by St. Louis Cnty. (Oct. 9, 2017) (Batch 5) (eDocket No. 201710-136290-02 (CN)).

⁷¹⁷ Comment by Arbo Twp. (Oct. 24, 2017) (Batch 7) (eDocket No. 201710-136772-01 (CN)).

⁷¹⁸ Comment by City of Cromwell (Oct. 24, 2017) (Batch 7) (eDocket No. 201710-136772-01 (CN)).

⁷¹⁹ Comment by City of Hill City (Oct. 24, 2017) (Batch 7) (eDocket No. 201710-136772-01 (CN)).

⁷²⁰ Comment by City of Palisade (Oct. 24, 2017) (Batch 7) (eDocket No. 201710-136772-01 (CN)).

⁷²¹ Comment by City of Red Lake Falls (Oct. 24, 2017) (Batch 7) (eDocket No. 201710-136772-01 (CN)).

⁷²² Comment by City of Thief River Falls (Oct. 24, 2017) (Batch 7) (eDocket No. 201710-136772-01 (CN)).

⁷²³ Comment by Clearwater Cnty. Land & Forestry Dev. (Nov. 7, 2017) (Batch 10) (eDocket No. 201711-137191-01 (CN)).

⁷²⁴ Comment by Aitkin Cnty. Soil & Water Conservation District (Nov. 7, 2017) (Batch 10) (eDocket No. 201711-137191-01 (CN)).

⁷²⁵ Comment by Cloquet Econ. Dev. Auth. (Nov. 7, 2017) (Batch 10) (eDocket No. 201711-137191-01 (CN)).

⁷²⁶ Comment by Norden Twp. (Nov. 13, 2017) (Batch 12) (eDocket No. 201711-137314-01 (CN)).

⁷²⁷ Comment by Bemidji Regional Airport Auth. (Nov. 17, 2017) (Batch 14) (eDocket No. 201711-137475-01 (CN)).

- Duluth Seaway Port Authority⁷²⁸
- Gully Township⁷²⁹
- City of Hallock⁷³⁰
- Helga Township⁷³¹
- Lambert Township⁷³²
- Numedal Township⁷³³
- River Falls Township⁷³⁴
- Sanders Township⁷³⁵
- Skelton Township⁷³⁶
- Twin Lakes Township⁷³⁷
- City of Floodwood⁷³⁸
- Gail Lake Township⁷³⁹
- Bear Creek Township⁷⁴⁰
- Carlton County⁷⁴¹
- City of St. Hilaire⁷⁴²
- Moose Creek Township⁷⁴³
- Polk County⁷⁴⁴
- Silver Brook Township⁷⁴⁵
- Buzzle Township⁷⁴⁶
- Eckles Township⁷⁴⁷
- Clearwater County⁷⁴⁸
- Marshall County Board of Commissioners⁷⁴⁹

⁷²⁸ Comment by Duluth Seaway Port Auth. (Nov. 17, 2017) (Batch 14) (eDocket No. 201711-137475-01 (CN)).

⁷²⁹ Comment by Gully Twp. (Nov. 17, 2017) (Batch 14) (eDocket No. 201711-137475-01 (CN)).

⁷³⁰ Comment by Hallock City Council (Nov. 17, 2017) (Batch 14) (eDocket No. 201711-137475-01 (CN)).

⁷³¹ Comment by Helga Twp. (Nov. 17, 2017) (Batch 14) (eDocket No. 201711-137475-01 (CN)).

⁷³² Comment by Lambert Twp. Bd. (Nov. 17, 2017) (Batch 14) (eDocket No. 201711-137475-01 (CN)).

⁷³³ Comment by Numedal Twp. (Nov. 17, 2017) (Batch 14) (eDocket No. 201711-137475-01 (CN)).

⁷³⁴ Comment by River Falls Twp. Bd. (Nov. 17, 2017) (Batch 14) (eDocket No. 201711-137475-01 (CN)).

⁷³⁵ Comment by Sanders Town Bd. (Nov. 17, 2017) (Batch 14) (eDocket No. 201711-137475-01 (CN)).

⁷³⁶ Comment by Skelton Twp. (Nov. 17, 2017) (Batch 14) (eDocket No. 201711-137475-01 (CN)).

⁷³⁷ Comment by Twin Lakes Twp. (Nov. 17, 2017) (Batch 14) (eDocket No. 201711-137475-01 (CN)).

⁷³⁸ Comment by City of Floodwood (Nov. 21, 2017) (Batch 17) (eDocket No. 201711-137577-01 (CN)).

⁷³⁹ Comment by Gail Lake Twp. (Nov. 21, 2017) (Batch 17) (eDocket No. 201711-137577-01 (CN)).

⁷⁴⁰ Comment by Bear Creek Twp. (Nov. 27, 2017) (Batch 18A) (eDocket No. 201711-137680-01 (CN)).

⁷⁴¹ Comment by Carlton Cnty. Bd. of Comm'rs (Nov. 27, 2017) (Batch 18A) (eDocket No. 201711-137680-01 (CN)).

⁷⁴² Comment by City of St. Hilaire (Nov. 27, 2017) (Batch 18A) (eDocket No. 201711-137680-01 (CN)).

⁷⁴³ Comment by Moose Creek Twp. (Nov. 27, 2017) (Batch 18A) (eDocket No. 201711-137680-01 (CN)).

⁷⁴⁴ Comment by Polk Cnty. Bd. of Comm'rs (Nov. 27, 2017) (Batch 18A) (eDocket No. 201711-137680-01 (CN)).

⁷⁴⁵ Comment by Silver Brook Twp. (Nov. 27, 2017) (Batch 18A) (eDocket No. 201711-137680-01 (CN)).

⁷⁴⁶ Comment by Buzzle Twp. (Nov. 28, 2017) (Batch 25) (eDocket No. 201711-137704-02 (CN)).

⁷⁴⁷ Comment by Eckles Twp. (Nov. 28, 2017) (Batch 26) (eDocket No. 201711-137705-02 (CN)).

⁷⁴⁸ Ex. P-9 (Written Comment).

⁷⁴⁹ Ex. P-17 (Written Comment).

- Clearwater County Highway Department⁷⁵⁰
- City of Clearwater⁷⁵¹
- City of Deer River⁷⁵²
- City of Gonvick⁷⁵³
- City of Bagley⁷⁵⁴
- City of Plummer⁷⁵⁵
- Leon Township⁷⁵⁶
- Holst Township⁷⁵⁷
- Greenwood Township⁷⁵⁸
- Northern Counties Land Use Coordinating Board⁷⁵⁹
- Wanger Township⁷⁶⁰

298. The following municipalities, local governmental units, and counties submitted written comment expressing opposition to the Project:

- Ideal Township⁷⁶¹ (in opposition to APR)
- Crooked Lake Township⁷⁶² (in opposition to APR)

299. The Grand Rapids Public Utilities Commission submitted a written comment in support of the City of Grand Rapids' request for removal ⁷⁶³

300. The following foreign governments expressed support of the Project:

- Canada⁷⁶⁴
- Province of Alberta⁷⁶⁵

⁷⁵⁰ Ex. P-190B (Written Comment).

⁷⁵¹ Ex. P-10 (Written Comment).

⁷⁵² Ex. P-100 (Written Comment).

⁷⁵³ Ex. P-4 (Written Comment).

⁷⁵⁴ Ex. P-218 (Written Comment).

⁷⁵⁵ Ex. P-6 (Written Comment).

⁷⁵⁶ Ex. P-217 (Written Comment).

⁷⁵⁷ Ex. P-7 (Written Comment).

⁷⁵⁸ Ex. P-8 (Written Comment).

⁷⁵⁹ Comment by Northern Cntys. Land Use Coordinating Bd. (Nov. 28, 2017) (Batch 26) (eDocket No. 201711-137705-02 (CN)).

⁷⁶⁰ Comment by Wanger Twp. Bd. (Nov. 21, 2017) (Nov. 21, 2017) (Batch 17) (eDocket No. 201711-137577-01 (CN)).

⁷⁶¹ Comment by Ideal Twp. (Nov. 28, 2017) (Batch 25) (eDocket No. 201711-137704-02 (CN)).

⁷⁶² Ex. P-243 (Written Comment).

⁷⁶³ Comment by Grand Rapids Pub. Util. Comm'n. (Nov. 27, 2017) (Batch 18A) (eDocket No. 201711-137680-01 (CN)).

⁷⁶⁴ Comment by Consulate Gen. of Can. (Nov. 21, 2017) (Batch 17) (eDocket No. 201711-137577-01 (CN)).

⁷⁶⁵ Comment by Minister of Gov't of Alta., Can. (Nov. 27, 2017) (Batch 18A) (eDocket No. 201711-137680-01 (CN)).

301. In addition to the five Indian tribes who have intervened in this action to oppose the Project, separate written comments were received from the following tribal organizations:

- White Earth Council of Elders⁷⁶⁶ (opposing Project)
- Sandy Lake Band of Mississippi Chippewa⁷⁶⁷ (opposing Project)
- Leech Lake Band of Ojibwe⁷⁶⁸ (opposing Project)
- Lac Courte Oreilles Band of Lake Superior Chippewa Indians⁷⁶⁹ (attesting to work with Applicant in renewal of pipeline easements)
- Pasqua First Nation #9⁷⁷⁰ (supporting Project)

302. The following organizations, entities, and companies submitted written comment generally in support of the Project:

- Floodwood Business Community Partnership⁷⁷¹
- Minnesota Agrigrowth Council⁷⁷²
- Minnesota Farm Bureau⁷⁷³
- Reif Center⁷⁷⁴
- East Polk County Farm Bureau⁷⁷⁵
- Minnesota Grain and Feed Association⁷⁷⁶
- Association of Oil Pipelines⁷⁷⁷
- Consumer Energy Alliance⁷⁷⁸
- Illinois Manufacturers' Association⁷⁷⁹
- Illinois Chamber of Commerce⁷⁸⁰
- Twin West Chamber of Commerce⁷⁸¹

⁷⁶⁶ Ex. P-192 (Written Comment).

⁷⁶⁷ Ex. P-288 (Written Comment).

⁷⁶⁸ Ex LL-4 at 1.

⁷⁶⁹ Comment by Lac Courte Oreilles Band of Lake Superior (Nov. 28, 2017) (Batch 26) (eDocket No. 201711-137705-02 (CN)).

⁷⁷⁰ Ex. P-347 (Written Comment).

⁷⁷¹ Comment by Floodwood Bus. Cmty. P'ship (Oct. 4, 2017) (Batch 3) (eDocket No. 201710-136134-01 (CN)).

⁷⁷² Comment by Minn. Agrigrowth Council (Nov. 17, 2017) (Batch 14) (eDocket No. 201711-137475-01 (CN)).

⁷⁷³ Comment by Minn. Farm Bureau (Nov. 17, 2017) (Batch 14) (eDocket No. 201711-137475-01 (CN)).

⁷⁷⁴ Comment by Reif Center (Nov. 17, 2017) (Batch 14) (eDocket No. 201711-137475-01 (CN)).

⁷⁷⁵ Comment by East Polk Cnty. Farm Bureau (Nov. 27, 2017) (Batch 18A) (eDocket No. 201711-137680-01 (CN)).

⁷⁷⁶ Comment by Minn. Grain & Feed Ass'n (Nov. 27, 2017) (Batch 18A) (eDocket No. 201711-137680-01 (CN)).

⁷⁷⁷ Comment by Ass'n of Oil Pipelines (Nov. 21, 2017) (Batch 17) (eDocket No. 201711-137577-01 (CN)).

⁷⁷⁸ Comment by Consumer Energy Alliance (Nov. 22, 2017) (eDocket No. 201711-137636-02 (CN)).

⁷⁷⁹ Comment by Ill. Mfr. Ass'n. (Oct. 24, 2017) (Batch 7) (eDocket No. 201710-136772-01 (CN)).

⁷⁸⁰ Comment by Ill. Chamber of Comm. (Oct. 31, 2017) (Batch 9) (eDocket No. 201710-136994-01 (CN)).

⁷⁸¹ Comment by Twin West Chamber of Comm. (Nov. 21, 2017) (Batch 17) (eDocket No. 201711-137577-01 (CN)).

- Chemical Industry Council of Illinois⁷⁸²
- Illinois Petroleum Council⁷⁸³
- Minnesota Service Station & Convenience Store Association⁷⁸⁴
- Wisconsin Industrial Energy Group⁷⁸⁵
- Teamsters National Pipeline Training Fund⁷⁸⁶
- Area Partnership for Economic Expansion⁷⁸⁷
- Wisconsin Manufacturers & Commerce⁷⁸⁸
- Minnesota Chamber of Commerce⁷⁸⁹
- Jobs for Minnesotans⁷⁹⁰
- Canadian Association of Petroleum Producers⁷⁹¹
- Beltrami County Farm Bureau⁷⁹²
- Construction Laborers Education, Apprenticeship & Training Fund of Minnesota and North Dakota⁷⁹³

303. In addition to the intervenors, the following organizations submitted written comment generally in opposition to the Project:

- Fifty Lakes Property Owners⁷⁹⁴
- Long Lake Area Association⁷⁹⁵
- St. Croix River Association⁷⁹⁶
- MN 350⁷⁹⁷
- Whitefish Area Property Owners Association⁷⁹⁸

⁷⁸² Comment by Chem. Indus. Council of Ill. (Nov. 21, 2017) (Batch 17) (eDocket No. 201711-137577-01 (CN)).

⁷⁸³ Comment by Ill. Petroleum Council (Nov. 21, 2017) (Batch 17) (eDocket No. 201711-137577-01 (CN)).

⁷⁸⁴ Comment by Minn. Service Station & Convenience Store Ass'n (Nov. 27, 2017) (Batch 18A) (eDocket No. 201711-137680-01 (CN)).

⁷⁸⁵ Comment by Wis. Indus. Energy Grp. (Nov. 27, 2017) (Batch 18A) (eDocket No. 201711-137680-01 (CN)).

⁷⁸⁶ Comment by Teamsters Nat'l Pipeline Training Fund (Nov. 21, 2017) (Batch 17) (eDocket No. 201711-137577-01 (CN)).

⁷⁸⁷ Comment by Area P'ship for Econ. Expansion (Nov. 27, 2017) (Batch 18A) (eDocket No. 201711-137680-01 (CN)).

⁷⁸⁸ Comment by Wis. Manuf. & Comm. (Nov. 27, 2017) (Batch 18A) (eDocket No. 201711-137680-01 (CN)).

⁷⁸⁹ Comment by Minn. Chamber of Comm. (Nov. 27, 2017) (Batch 18A) (eDocket No. 201711-137680-01 (CN)).

⁷⁹⁰ Comment by Jobs for Minnesotans (Nov. 28, 2017) (Batch 25) (eDocket No. 201711-137704-02 (CN)).

⁷⁹¹ Comment by CAPP (Nov. 28, 2017) (Batch 26) (eDocket No. 201711-137705-02 (CN)).

⁷⁹² Comment by Beltrami Cnty. Farm Bureau (Nov. 27, 2017) (Batch 19) (eDocket No. 201711-137681-02 (CN)).

⁷⁹³ Comment by Constr. Laborers Edu., Apprenticeship & Training Fund of Minn. and N.D. (Nov. 27, 2017) (Batch 18A) (eDocket No. 201711-137680-01 (CN)).

⁷⁹⁴ Comment by Fifty Lakes Prop. Owners (Nov. 28, 2017) (Batch 25) (eDocket No. 201711-137704-02 (CN)).

⁷⁹⁵ Comment by Long Lake Area Ass'n (Nov. 17, 2017) (Batch 14) (eDocket No. 201711-137475-01 (CN)).

⁷⁹⁶ Comment by St. Croix River Ass'n (Nov. 17, 2017) (Batch 14) (eDocket No. 201711-137475-01 (CN)).

⁷⁹⁷ Ex. P-89 (Written Comment).

⁷⁹⁸ Comment by Whitefish Area Prop. Owners Ass'n (Nov. 27, 2017) (Batch 18A) (eDocket No. 201711-137680-01 (CN)).

- Columbia County Country Wise⁷⁹⁹
- Hubbard County Coalition of Lake Associations⁸⁰⁰
- Long Lake Area Association⁸⁰¹ (concerned about route alternatives)
- Public Accountability Initiative⁸⁰² (concerns with UMD Study)

304. Written comments were received from the following elected officials:

- Minnesota State Senator Paul Gazelka⁸⁰³ (Support)
- U.S. Representative for the 6th District of Minnesota, Tom Emmer⁸⁰⁴ (Support)
- U.S. Representatives for Minnesota's 7th & 8th Districts, Collin Peterson, Richard Nolan⁸⁰⁵ (Support)
- Mayor of Cohasset, Greg Hagy⁸⁰⁶ (Support)
- Saint Louis County Commissioners: Thomas Rukavina, Pete Stauber, Keith Nelson, Mike Jugovich⁸⁰⁷ (Support)
- Minnesota Iron Range Legislative Delegation: Minnesota State Senators: David Tomassoni, Thomas Bakk, Justin Eichorn. Minnesota State Representatives: Jason Metsa, Rob Ecklund, Julie Sandstede, Dale Lueck, Sandy Layman⁸⁰⁸ (Support).
- U.S. Representative for the 7th District of Wisconsin, Sean Duffy⁸⁰⁹ (Support).
- Minnesota State Senator John Marty⁸¹⁰ (Oppose)
- Minnesota State Representative Dale Lueck⁸¹¹ (Support)
- Carver County Commissioner Randy Maluchnik⁸¹² (Support)
- Minnesota State Senators: D. Scott Dibble, John Marty, Patricia Torres Ray, Sandra Pappas (Oppose) Minnesota State Representatives: Frank Hornstein, Mary Kunesh-Podein, Jamie Becker-Finn, Jean Wagenius, David Bly, Diane Loeffler, Karen Clark, Erin Maye Quade, Alice Hausman, Raymond Dehn, Fue Lee, Mike Freiberg, Peggy Flanagan.⁸¹³ (Oppose)

⁷⁹⁹ Comment by Columbia Cnty. Wise (Sept. 25, 2017) (Batch 2) (eDocket No. 20179-135778-01 (CN)).

⁸⁰⁰ Comment by Hubbard Cnty. Coalition of Lake Ass'ns (Nov. 17, 2017) (Batch 14) (eDocket No. 201711-137475-01 (CN)).

⁸⁰¹ Comment by Long Lake Area Ass'n (Nov. 17, 2017) (Batch 14) (eDocket No. 201711-137475-01 (CN)).

⁸⁰² Comment by Public Accountability Initiative (Nov. 17, 2017) (Batch 14) (eDocket No. 201711-137475-01 (CN)).

⁸⁰³ Comment by Paul Gazelka (Oct. 31, 2017) (Batch 9) (eDocket No. 201710-136994-01 (CN)).

⁸⁰⁴ Comment by Tom Emmer (Oct. 31, 2017) (Batch 9) (eDocket No. 201710-136994-01 (CN)).

⁸⁰⁵ Comment by Collin Peterson & Richard Nolan (Oct. 31, 2017) (Batch 9) (eDocket No. 201710-136994-01 (CN)).

⁸⁰⁶ Comment by Greg Hagy (Oct. 9, 2017) (Batch 5) (eDocket No. 201710-136290-02 (CN)).

⁸⁰⁷ Ex. P-124 (Written Comment).

⁸⁰⁸ Ex. P-115 (Written Comment).

⁸⁰⁹ Comment by Sean Duffy (Oct. 24, 2017) (Batch 7) (eDocket No. 201710-136772-01 (CN)).

⁸¹⁰ Comment by John Marty (Nov. 13, 2017) (Batch 12) (eDocket No. 201711-137314-01 (CN)).

⁸¹¹ Exs. P-138, P-267

⁸¹² Comment by Randy Maluchnik (Nov. 27, 2017) (Batch 18A) (eDocket No. 201711-137680-01 (CN)).

⁸¹³ Comment by Minn. State Legislators (Nov. 27, 2017) (Batch 18A) (eDocket No. 201711-137680-01 (CN)).

- Anoka County Commissioner Scott Schulte⁸¹⁴ (Support)
- Scott County Commissioner Michael Beard⁸¹⁵ (Support)
- U.S. Representative for the 5th District of Minnesota, Keith Ellison⁸¹⁶ (Oppose)
- Minnesota Representative Dan Fabian⁸¹⁷ (Support)
- Minnesota Representative Jamie Becker-Finn⁸¹⁸ (Oppose)
- U.S. Representative for the 1st District of Minnesota, Timothy Walz⁸¹⁹ (Oppose)
- Minnesota State Representative Mary Kunesch-Podein⁸²⁰ (Oppose)
- Minnesota State Representative Rep. Kurt Daudt⁸²¹ (Support)
- Minnesota State Senator Justin Eichorn⁸²² (Support)
- Minnesota State Representative Matt Bliss⁸²³ (Support)

305. Two state agencies also submitted written comments: the Minnesota Department of Natural Resources and the Minnesota Pollution Control Agency.

306. The DNR comments compared the natural resource considerations related to the Project, SA-04, route alternatives, and route segment alternatives.⁸²⁴ The DNR also proposed various mitigation measures and recommendations for the Project.⁸²⁵

307. Regarding need alternatives, the DNR letter concludes that “The potential degree/severity of impacts and quantity of sensitive resources potentially impacted indicate that the APR would have a greater impact on the natural environment than the SA-04 alternative.⁸²⁶ With respect to route alternatives, the DNR concluded that “RA-07 does the best job at minimizing potential impacts to state managed natural resources.”⁸²⁷ The DNR also evaluated RSAs and distinguished between those with the most adverse impact to natural resources.⁸²⁸

308. The MPCA’s comments were directed at the potential effects that the route and system alternatives would have on: (1) areas of concern for environmental justice; and (2) Minnesota’s water resources.⁸²⁹

⁸¹⁴ Comment by Scott Schulte (Nov. 27, 2017) (Batch 18A) (eDocket No. 201711-137680-01 (CN)).

⁸¹⁵ Comment by Michael Beard (Nov. 27, 2017) (Batch 19) (eDocket No. 201711-137681-02 (CN)).

⁸¹⁶ Comment by Keith Ellison (Nov. 28, 2017) (Batch 25) (eDocket No. 201711-137704-02 (CN)).

⁸¹⁷ Comment by Dan Fabian (Nov. 28, 2017) (Batch 26) (eDocket No. 201711-137705-02 (CN)).

⁸¹⁸ Comment by Jamie Becker-Finn (Nov. 27, 2017) (Batch 19) (eDocket No. 201711-137681-02 (CN));

Comment by Jamie Becker-Finn (Nov. 28, 2017) (Batch 26) (eDocket No. 201711-137705-02 (CN)).

⁸¹⁹ Comment by Timothy Walz (Nov. 28, 2017) (Batch 26) (eDocket No. 201711-137705-02 (CN)).

⁸²⁰ Ex. P-45

⁸²¹ Ex. P-102

⁸²² Ex. P-109

⁸²³ Ex. P-179.

⁸²⁴ Comment by MDNR (Nov. 27, 2017) (Batch 18A) (eDocket No. 201711-137680-01 (CN)).

⁸²⁵ *Id.* at 7-11.

⁸²⁶ *Id.* at 5.

⁸²⁷ *Id.* at 6.

⁸²⁸ *Id.* at 6-7.

⁸²⁹ Comment by MPCA (Nov. 22, 2017) (Batch 25) (eDocket No. 201711-137704-02 (CN)).

309. The MPCA made two general conclusions: (1) that the SA-04 would have the lowest impact on “environmental justice areas” than any of the other alternatives; and (2) that RA-07 would have the fewest impacts to Minnesota’s surface and groundwater resources.⁸³⁰

IV. GENERAL PROJECT BACKGROUND

A. History of Existing Line 3 Releases

310. Existing Line 3 was constructed in the 1960s and has been operating in Minnesota since that time.⁸³¹ Existing Line 3 was constructed before federal or state laws existed to fully regulate pipelines.⁸³² Because Existing Line 3 was installed before certificates of need and route permits were required in Minnesota, the line is not subject to the jurisdiction of the Commission.⁸³³ According to the DOC-DER, absent a condition in a permit for a new line, the Commission has no legal authority to require that Existing Line 3 be repaired or taken out of service.⁸³⁴

311. Applicant has only been tracking releases on Existing Line 3 since 1990.⁸³⁵ Since that time, Existing Line 3 has experienced 18 leaks or releases,⁸³⁶ 15 of which resulted in the release of more than 50 barrels of oil per incident.⁸³⁷ Seven of those large accidental release events occurred in Minnesota.⁸³⁸

312. The largest failure of Existing Line 3 in Minnesota occurred in 1991 near Grand Rapids, Minnesota, where approximately 1.7 million gallons (40,500 barrels)⁸³⁹ of oil were released into the environment.⁸⁴⁰ A decade later, in 2002, another major release occurred near Cohasset, Minnesota, which resulted in the release of approximately 6,000 barrels of oil.⁸⁴¹ Applicant attributes the 2002 release to “pressure-cycle-induced fatigue” and defective long-seam welds, which defects Applicant asserts still exist on Existing Line 3.⁸⁴²

313. Over the years, known integrity issues and safety risks, as well as a federal Consent Decree, have caused Applicant to reduce the amount and type of oil being transported through Existing Line 3 in an effort to relieve pressure on the aging line.⁸⁴³ While Applicant describes these pressure restrictions as “voluntary,” they are actually

⁸³⁰ *Id.*

⁸³¹ Ex. EN-12 at 11 (Kennett Direct).

⁸³² Evid. Hrg. Tr. Vol. 2A at 37.

⁸³³ Evid. Hrg. Tr. Vol. 7B at 65 (Eberth); Ex. DER-6 at 4 (O’Connell Surrebuttal).

⁸³⁴ Evid. Hrg. Tr. Vol. 12A at 128 (O’Connell).

⁸³⁵ Applicant asserts that spill records prior to 1990 do not exist. Ex. EN-12 at 20 (Kennett Direct).

⁸³⁶ Evid. Hrg. Tr. Vol. 8A at 40 (Simonson).

⁸³⁷ Ex. En-12 at 20 (Kennett).

⁸³⁸ Ex. En-12 at 20 (Kennett).

⁸³⁹ Ex. EN-1 at 3-16 (CN Application).

⁸⁴⁰ Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 134-135 (Oct. 25, 2017) (Bibeau).

⁸⁴¹ Evid. Hrg. Tr. Vol. 2A at 42 (Simonson); Ex. EN-12 at 19 (Kennett Direct).

⁸⁴² Ex. EN-12 at 19 (Kennett Direct).

⁸⁴³ Ex. EN-13 at 18 (Gerard Direct).

mandated by the federal government through a Consent Decree, described in more detail below.⁸⁴⁴

314. In recent years, Applicant has identified a combination of integrity conditions on Existing Line 3 that make safely and economically operating the Existing Line 3 challenging in coming years.⁸⁴⁵ Existing Line 3's pipe materials, coating, manufacturing process, installation method, and operating history have resulted in Line 3 having the largest external corrosion anomaly density of all pipelines in Enbridge's Mainline System.⁸⁴⁶

315. Eighty-four percent of the coating of Existing Line 3 is polyethylene tape, which has been found to dis-bond from the pipe, making the pipeline more susceptible to both external corrosion and stress corrosion cracking.⁸⁴⁷ When the tape was first installed in the 1960s, it was wrapped onto the pipe in the field during construction.⁸⁴⁸ Application in the field exposed the tape and pipe to environmental conditions, such as the presence of dust, which, over time, can interfere with the bond between the tape and the pipe.⁸⁴⁹ As a result, there are areas where this polyethylene coating has detached from the surface of the steel pipe.⁸⁵⁰ The dis-bonding has allowed water and oxygen to reach the surface of the steel, making it susceptible to corrosion.⁸⁵¹

316. Applicant has determined that Existing Line 3 has: (1) external corrosion on over 50 percent of its pipe sections between joints; (2) ten times as many corrosion anomalies per mile (with a depth of more than 20 percent of the pipe wall thickness) than any other Enbridge pipeline in the same corridor; (3) stress corrosion cracking affecting over 15 percent of its pipe joints; and (4) five times as many stress corrosion cracking anomalies per mile (with a depth of more than 10 percent of the pipe wall thickness) than any other Enbridge pipeline in the same corridor.⁸⁵²

317. In addition, Existing Line 3 pipe was constructed using a flash weld process no longer employed in the industry.⁸⁵³ Fifty-three percent of the longitudinal welds on Existing Line 3 are flash-welded.⁸⁵⁴ Impurities in the steel at the flash-welded seams create places where cracks can develop.⁸⁵⁵ This outdated manufacturing process has left Existing Line 3 more susceptible to cracking along the long seams of the pipe than pipe constructed using today's technology.⁸⁵⁶

⁸⁴⁴ Ex. EN-30 at Sched. 1 (Eberth Rebuttal).

⁸⁴⁵ Ex. EN-12 at 20-21 (Kennett Direct).

⁸⁴⁶ Ex. EN-12 at 29 (Kennett Direct).

⁸⁴⁷ Ex. EN-12 at 12 (Kennett Direct).

⁸⁴⁸ Ex. EN-12 at 13 (Kennett Direct).

⁸⁴⁹ Ex. EN-12 at 13 (Kennett Direct).

⁸⁵⁰ Ex. EN-12 at 13 (Kennett Direct).

⁸⁵¹ Ex. EN-12 at 12, 18 (Kennett Direct).

⁸⁵² Ex. EN-12 at 12 (Kennett Direct); Ex. EN-68 at 2 (Kennett Summary).

⁸⁵³ Ex. EN-12 at 12 (Kennett Direct).

⁸⁵⁴ Ex. EN-12 at 12 (Kennett Direct).

⁸⁵⁵ Ex. EN-68 at 2 (Kennett Summary).

⁸⁵⁶ Ex. EN-68 at 2 (Kennett Summary); Ex. EN-12 at 12-13 (Kennett Direct).

318. According to Applicant, no feasible technology or operational changes can arrest or reverse the external corrosion on Existing Line 3 or remove the risks inherent with flash-welded pipe.⁸⁵⁷ To mitigate the risks associated with Existing Line 3's integrity issues, Applicant has reduced the volume and type of oil that is transported through Existing Line 3.⁸⁵⁸

319. Historically, Existing Line 3 transported an annual average volume of crude oil "in the range of 760 kbpd."⁸⁵⁹ However, in 2008, as a result of ongoing line integrity issues, Applicant reduced Existing Line 3's capacity to 503 kbpd of "mixed service," meaning transportation of both heavy and light crude.⁸⁶⁰ In 2010, after two major releases on Enbridge's other Mainline pipelines, Applicant further reduced the capacity of Existing Line 3 to 390 kbpd for light crude oil.⁸⁶¹ By reducing the capacity, Applicant was able to lower the pressure on the pipeline and defer some of the maintenance work needed on the identified "anomalies."⁸⁶² However, due to the potential risks associated with these "anomalies" and a Consent Decree imposing pressure restrictions, Applicant has not returned Existing Line 3 to its original 760 kbpd capacity.⁸⁶³

320. Lessening pressure on the line does not prevent the external corrosion that Applicant has identified, which is expected to continue as time goes on. If Existing Line 3 continues to be utilized, the external corrosion on the line will need to be addressed through an extensive dig and repair program over the coming years.⁸⁶⁴

321. A 2014/2015 study revealed that over 70 percent of the pipeline's 140,000 joints currently exhibit external corrosion.⁸⁶⁵ This study showed that corrosion deeper than 50 percent of the pipe wall thickness would affect over 3,000 joints by 2016; and that over 25,500 pipe joints will have corrosion depth of 50 percent or more by 2030.⁸⁶⁶

322. Based upon this analysis, Applicant forecasts that it will need to undertake approximately 7,000 "integrity digs" in the U.S. (6,250 in Minnesota alone) in the next 15 years if Existing Line 3 continues to operate, even at a reduced capacity.⁸⁶⁷ By comparison, over the last 16 years Applicant has performed approximately 950 excavations on Existing Line 3.⁸⁶⁸

⁸⁵⁷ Ex. EN-12 at 20 (Kennett Direct).

⁸⁵⁸ Ex. EN-12 at 21 (Kennett Direct).

⁸⁵⁹ Ex. EN-19 at 7 (Glanzer Direct).

⁸⁶⁰ Ex. EN-12 at 21 (Kennett Direct).

⁸⁶¹ Ex. EN-12 at 21 (Kennett Direct).

⁸⁶² Ex. EN-12 at 21 (Kennett Direct).

⁸⁶³ Ex. EN-12 at 20 (Kennett Direct).

⁸⁶⁴ Ex. EN-12 at 20 (Kennett Direct).

⁸⁶⁵ Ex. EN-12 at 23 (Kennett Direct).

⁸⁶⁶ Ex. EN-12 at 23 (Kennett Direct).

⁸⁶⁷ Ex. EN-68 at 2 (Kennett Summary); Ex. EN-12 at 23-24 (Kennett Direct).

⁸⁶⁸ Ex. EN-12 at 11 (Kennett Direct). Note that Applicant has significantly increased the estimated number of integrity digs during the course of this litigation from approximately 4,000 in the CN Application to 7,000 in testimony. The 7,000-dig estimate does not seem to take into account the full replacement of the line currently underway in North Dakota and Wisconsin, which should negate any need for integrity digs on the old line in those states.

323. Despite the long list of integrity risks and 6,250 projected integrity digs in Minnesota that Applicant identifies, Applicant asserts that it can continue to operate Existing Line 3 safely so long as necessary maintenance is performed.⁸⁶⁹ Applicant estimates that, to return the line to its original operating capacity, it would cost as much as building a new line altogether.⁸⁷⁰

324. Applicant estimates that the cost to repair and restore Existing Line 3 to its original operating capacity in the U.S. over the next 15 years would be \$2 billion; whereas the estimated cost of installing an entirely new Line 3 in the U.S. is \$2.1 billion.⁸⁷¹ In addition, Applicant notes that an extensive dig-and-repair program would cause disruption to the environment and landowners along the route.⁸⁷² Given that the cost to repair Existing Line 3 in the U.S. roughly equals the cost to replace it in its entirety in the U.S., Applicant concluded that it would pursue replacement over repair.⁸⁷³ Notably, however, Applicant does not include the cost of removal of Existing Line 3 in its evaluation of costs. Instead, Applicant seeks to abandon Existing Line 3 in-place and open a new oil pipeline corridor for its new line.

325. According to Applicant, it will construct the new Line 3 using modern pipeline design, manufacturing, coating, and installation techniques, as well as wider, thicker pipe.⁸⁷⁴ Applicant proposes to use 36-inch diameter pipe with a wall thickness of 0.515-inch (as opposed to Existing Line 3's 34-inch diameter pipe with 0.281 inch wall thickness).⁸⁷⁵ According to Applicant, the wider, thicker pipe has a yield strength 35 percent greater than Existing Line 3.⁸⁷⁶

326. A new pipeline is expected to result in: (1) an increase in safety and reliability attributable to the use of new equipment and modern-day technologies, manufacturing, and coating processes; and (2) a reduction in the number of integrity digs required for ongoing maintenance.⁸⁷⁷

B. History of Pipeline Spills and Resulting Federal Consent Decree Enbridge's History of Spills and Failures

i. History of Spills and Failures

325. Applicant's decision to replace Existing Line 3 with a new pipeline was not based solely on the pipeline's age, the integrity threats it poses, its reduced operating pressure, or the high cost of repair expected in the near future. Rather, the decision also arises out of a settlement agreement (Consent Decree) between Enbridge and the United

⁸⁶⁹ Evid. Hrg. Tr. Vol. 1A at 51-52 (Kennett).

⁸⁷⁰ Evid. Hrg. Tr. Vol. 1A at 52 (Kennett).

⁸⁷¹ Ex. EN-12 at 24 (Kennett Direct).

⁸⁷² Ex. EN-12 at 22 (Kennett Direct).

⁸⁷³ Ex. EN-12 at 24 (Kennett Direct).

⁸⁷⁴ Ex. EN-24 at 6-7 (Eberth Direct).

⁸⁷⁵ Ex. EN-22 at 5 (Simonson Direct).

⁸⁷⁶ Ex. EN-22 at 5 (Simonson Direct).

⁸⁷⁷ Ex. EN-12 at 27 (Kennett Direct).

States government stemming from major oil spills from two other of Enbridge's Mainline System pipelines (Lines 6A and 6B).⁸⁷⁸

326. A review of Enbridge's spill history provides context for the settlement agreement, as well as an explanation of why the Consent Decree addresses Existing Line 3, even though Line 3 was not the subject of the federal litigation in which that settlement agreement arose.

327. In recent years, other pipelines in Enbridge's Mainline System have been the subject of major failures or notable defects. The most significant of these failures occurred in 2010 near Marshall, Michigan, when Enbridge's Line 6B ruptured and, over the course of two days, released over 20,000 barrels of heavy crude oil into the environment, including into the Kalamazoo River (Marshall Spill).⁸⁷⁹ The Marshall Spill is regarded as one of the largest in-land oil spills in U.S. history.

328. Just two months after the Marshall Spill, another of Enbridge's Mainline System pipelines (Line 6A) developed a large leak near Romeoville, Illinois, which discharged approximately 6,427 barrels of crude into navigable waters of the United States.⁸⁸⁰

329. Most recently, in the fall of 2017, Enbridge was criticized for not timely reporting safety risks related to its Line 5 through the Straits of Mackinac in Michigan.⁸⁸¹ Enbridge acknowledged that it knew of damage to the protective coating on its Line 5 since 2014, but failed to inform regulatory authorities of this issue until 2017, approximately three years after the discovery.⁸⁸²

ii. Federal Consent Decree

330. As a result of the Marshall Spill and the spill in Romeoville, Illinois (collectively referred to herein as the "2010 Spills"), the EPA and U.S. Coast Guard brought an action against Applicant, its partners, and related Enbridge entities (collectively referred to in the lawsuit as "Enbridge"), under the Clean Water Act and Oil Pollution Act, seeking to collect millions of dollars in cleanup-related costs and injunctive relief to prevent future spills from Enbridge pipelines.⁸⁸³

331. To settle the action, Applicant and its Enbridge partners entered into a Consent Decree with the United States Department of Justice.⁸⁸⁴ Although not part of the subject matter of the litigation giving rise to the Consent Decree, Applicant has included in the agreement a requirement to "replace" Existing Line 3.

⁸⁷⁸ See Ex. 30 (Eberth Rebuttal), Sched. 1 (Consent Decree).

⁸⁷⁹ Ex. EN-30 (Eberth Rebuttal), Sched. 1 at 2 (Consent Decree).

⁸⁸⁰ Ex. EN-30 (Eberth Rebuttal), Sched. 1 at 2, 4 (Consent Decree).

⁸⁸¹ Ex. DER-10 (News Article).

⁸⁸² Ex. DER-10 (News Article).

⁸⁸³ Ex. EN-30, Sched. 1 (Consent Decree).

⁸⁸⁴ Ex. EN-30, Sched. 1 (Consent Decree).

332. The Consent Decree imposes certain requirements on Applicant and its Enbridge partners. First, the Consent Decree requires that Enbridge pay a civil penalty in the amount of \$62 million for the unlawful discharges related to the 2010 Spills.⁸⁸⁵ Second, the agreement requires that Enbridge reimburse the federal Oil Spill Liability Trust Fund for past and future removal costs associated with the 2010 Spills.⁸⁸⁶ Third, the agreement imposes specific injunctive and safety measures applicable to Enbridge's Lakehead System pipelines, including Existing Line 3.⁸⁸⁷

333. The injunctive measures in the Consent Decree require Enbridge to permanently cease operations of Line 6B; seek approval and replace Existing Line 3; and evaluate replacement of Line 10.⁸⁸⁸ The Consent Decree also imposes safety and operating requirements on all of Enbridge's Lakehead System pipelines, including implementation of an in-line inspection-based spill prevention program; additional safety measures to prevent spills in the Straits of Mackinac (Michigan); required use of an integrated database; required leak detection and control room operations; improvement of spill response and preparedness measures; installation of remote controlled valves; implementation of mandatory reporting requirements; and hiring of third party/independent compliance verification.⁸⁸⁹

334. With respect to Existing Line 3, the Consent Decree expressly provides:

Enbridge *shall replace* the segment of the Lakehead System Line 3 oil transmission pipeline that spans approximately 292 miles from Neche, North Dakota, to Superior Wisconsin ("Original US Line 3"), *provided that Enbridge receives all necessary approvals to do so*. Enbridge *shall seek all approvals* necessary for the replacement of Original US Line 3, and provide approval authorities with complete and accurate information needed to support such approvals, as expeditiously as practicable, and Enbridge shall respond as expeditiously as practicable to any requests by approval authorities for supplemental information related to the requested approvals. *If Enbridge receives approvals necessary for replacement of Original US Line 3, Enbridge shall complete the replacement of Original US Line 3 and take Original US Line 3 out of service*, including depressurization of Original US Line 3, *as expeditiously as practicable*.⁸⁹⁰

335. With respect to removal of Existing Line 3 from service, the Consent Decree provides that within 90 days after Existing Line 3 is taken out of service, Applicant must purge all oil from the line by running a cleaning "pig" through the line, and complete final clean-out and "decommissioning" within one year "thereafter."⁸⁹¹ Once Line 3 is taken out of service, "Enbridge shall be permanently enjoined from operating, or allowing

⁸⁸⁵ Ex. EN-30, Sched. 1 at 20-21 (Consent Decree).

⁸⁸⁶ *Id.* at 22-23.

⁸⁸⁷ *Id.* at 25-126.

⁸⁸⁸ *Id.* at 25-28.

⁸⁸⁹ *Id.* at 28-126.

⁸⁹⁰ *Id.* at 25-26 (emphasis added).

⁸⁹¹ *Id.* at 26.

anyone else to operate, any portion of the pipeline for the purpose of transporting oil, gas, diluent or any hazardous substance.”⁸⁹² The Consent Decree does not require Applicant to remove Existing Line 3 from the ground.⁸⁹³ It only requires termination of operation.⁸⁹⁴

336. Until Existing Line 3 is removed from service, the Consent Decree provides that Applicant shall limit the operating pressure in each segment of the line to a prescribed maximum operating pressure until hydrostatic pressure testing (as specified in the Consent Decree) validates the use of an increased operating pressure.⁸⁹⁵

337. The Consent Decree further provides that if Applicant has not taken Existing Line 3 out of service by December 31, 2017, Applicant must: (1) complete yearly in-line inspections; (2) identify, excavate, and mitigate or repair all “Features Requiring Excavation” (a defined term); and (3) clean all portions of the line quarterly.⁸⁹⁶

338. The operating conditions placed on Existing Line 3 by the Consent Decree remain in effect until: (1) Existing Line 3 is taken out of service and decommissioned; or (2) the Consent Decree is terminated.⁸⁹⁷ Enbridge may request termination of the Consent Decree: (a) once it has completed all requirements of the Consent Decree; (b) once it has maintained “substantial compliance with the requirements of the Consent Decree for at least 12 continuous months; and (c) when at least four years have elapsed since May 23, 2017.”⁸⁹⁸ Thus, Enbridge can request termination of the Consent Decree (and thus the restrictions contained therein) in four years even if it has not replaced Existing Line 3 or taken it out of service because no approval for a new Line 3 has been granted.

339. In addition, according to Paragraph 206 of the Decree:

Notwithstanding termination of other provisions of the Consent Decree, the restrictions on any resumption of operation of Original US Line 3 or Original Line 6B to transport oil, gas, diluent, or any hazardous substance shall remain in effect and enforceable until 10 years after the Effective Date or until [Enbridge] has satisfied the requirements for termination specified above, whichever is later.

340. Although Paragraph 206 seems to indicate that Applicant can resume operation of Existing Line 3 in ten years after its removal from service, Applicant reports that this provisions is simply an error (a remnant clause from a prior draft) and has no

⁸⁹² *Id.* at 27.

⁸⁹³ *Id.*

⁸⁹⁴ *Id.*

⁸⁹⁵ *Id.* at 26.

⁸⁹⁶ *Id.* at 26-27.

⁸⁹⁷ *Id.* at 157-159.

⁸⁹⁸ *Id.* at 156, 157-159.

effect.⁸⁹⁹ Applicant confirms that if a new Line 3 is approved, it will permanently remove Existing Line 3 from service and will never resume its operation.⁹⁰⁰

341. According to the DOC-EERA, “if the proposed Line 3 project is not approved by the PUC, the continued operation of the existing Line 3 will be regulated by the Federal government, not the State of Minnesota.”⁹⁰¹

342. The Consent Decree was approved by the federal court on May 23, 2017, and currently remains in effect.⁹⁰²

343. Under the terms of the Consent Decree, *Applicant must seek approval for a new Line 3 and, if such approvals are granted, take Existing Line 3 out of service “as expeditiously as practicable.”*⁹⁰³ *As the DOC-DER notes, the Consent Decree does not require replacement or decommissioning of Existing Line unless and until a new Line 3 receives all necessary approvals.*⁹⁰⁴ The Consent Decree does not bind the Commission.⁹⁰⁵

344. The Consent Decree does not require Minnesota to grant approval for a new Line 3; nor does it expressly address what would happen if Applicant does not receive all necessary approvals for a new line.

345. More importantly, the Consent Decree does not address what occurs if Applicant receives all governmental approvals necessary for a new line but Applicant opposes the route or required conditions on those permits. Under the terms of the Consent Decree, if approvals are granted for necessary permits, Applicant “shall complete the replacement” and take Existing Line 3 “out of service.”⁹⁰⁶ The agreement makes no allocation for Applicant rejecting permit conditions or refusing to replace Existing Line 3 if the necessary approvals are granted. The Consent Decree also does not appear to anticipate that Applicant would seek approval for a new and larger Line 3, which has a greater design capacity (844 kbpd), and requires a partially new corridor/route through Minnesota, which is what Applicant has proposed in this case.

346. Applicant has confirmed its legal interpretation of the Consent Decree to require it to take Existing Line 3 out of service permanently once it receives “a lawful and final approval order by the Commission.”⁹⁰⁷ According to Applicant:

The Consent Decree does not include any language, either under Paragraph 22 or any other provision of the Consent Decree, that excuses Enbridge from its obligation to replace Line 3 in the event that conditions

⁸⁹⁹ Ex. EN-40 at 18 (Eberth Rebuttal).

⁹⁰⁰ *Id.* at 19.

⁹⁰¹ Ex. EERA-42. Vol. 1 at ES-6 (Revised EIS).

⁹⁰² Ex. EN-30 (Eberth Rebuttal), Sched. 1 at 15 (Consent Decree).

⁹⁰³ *Id.* at 25-27 (emphasis added).

⁹⁰⁴ Ex. DER-6 at 9 (O’Connell Surrebuttal); Ex. EN-30 (Eberth Rebuttal), Sched. 1 at 15 (Consent Decree)

⁹⁰⁵ Ex. DER-6 at 10 (O’Connell Surrebuttal).

⁹⁰⁶ *Id.* at 25-26 (Emphasis added).

⁹⁰⁷ Applicant’s Initial Post-Hearing Br. at 148 (Jan. 23, 2018) (eDocket No. 20181-139252-03 (CN)).

that Enbridge may find ‘disagreeable’ are imposed *in a lawful and final approval issued by the Commission or another regulatory agency*.⁹⁰⁸

347. The emphasized clause highlights the likelihood that Applicant could challenge conditions imposed by the Commission in this case, arguing that they are “unlawful,” “arbitrary and capricious,” “exceeding Commission authority,” or the like, as alluded to in Applicant’s Initial Post-Hearing Brief.⁹⁰⁹

C. Funding of Project by Canadian Oil Producers (a/k/a Shippers)

348. Before proceeding with this Project, Enbridge entered into an agreement with the Representative Shippers Group (RSG), a group of shippers/producers of Canadian crude oil that has expressed intent on using the Project.⁹¹⁰ The material terms of this agreement are summarized in the Issue Resolution Sheet (IRS) attached to Applicant’s CN Application.⁹¹¹

349. The RSG represents over 75 percent of the shippers (measured by volume throughput) on the Mainline System;⁹¹² and includes the three companies which comprise the intervening Shippers party herein: Cenovus Energy, Inc., Suncor Energy Marketing, Inc., BP Products North America Inc.⁹¹³ Intervening Shippers are all Canadian crude oil producers and members of the Canadian Association of Petroleum Producers (CAPP).⁹¹⁴

350. Pursuant to an agreement between the RSG and Applicant, expressed in the IRS, the RSG funds 75 percent of the capital costs of this Project through payment of a “Line 3 Surcharge” on the oil transported through the Mainline System over the course of 15 years.⁹¹⁵ In this way, the Canadian tar sands oil producers have agreed to fund the majority of the Project through payment of a per-barrel toll surcharge.⁹¹⁶ Under the agreement, Applicant “fronts” the costs of the Project, builds the infrastructure, and reimburses itself, over the course of 15 years, through the a surcharge paid by shippers on the oil they ship on the Mainline System.⁹¹⁷ After 15 years, Applicant “will be entitled to recovery of any undepreciated Line 3 Replacement rate base, the terms of which will be negotiated with the appropriate counterparty at that time.”⁹¹⁸

351. Under the IRS, the “Project Scope” anticipates an “*initial*” annual capacity of 760 kbpd, with 65 percent heavy crude and 35 percent light crude; a 36-inch pipe

⁹⁰⁸ *Id.* (Emphasis added).

⁹⁰⁹ See Applicant’s Initial Post-Hearing Br. at 118-149 (Jan. 23, 2018) (eDocket No. 20181-139252-03 (CN)).

⁹¹⁰ Ex. EN-1 at Appendix D (Issue Resolution Sheet).

⁹¹¹ Ex. EN-1 at Appendix D (Issue Resolution Sheet).

⁹¹² Ex. Sh-1 at 8 (Kahler Direct).

⁹¹³ See EX. SH-1 at 3 (Shipper Direct), SH-2 (Shipper Rebuttal), SH-3 (Shipper Surrebuttal).

⁹¹⁴ Ex. SH-1 at 3 (Kahler Direct);

⁹¹⁵ Ex. EN-1 at App. D (Issue Resolution Sheet).

⁹¹⁶ Ex. EN-1 at App. D (Issue Resolution Sheet).

⁹¹⁷ The surcharge would be charged on all oil shipped on the Mainline System (not just Line 3) based upon a Hardisty, Canada, to Flanagan, Illinois, movement. See Ex. EN-1 at App. D (Issue Resolution Sheet).

⁹¹⁸ Ex. EN-1 at App. D (Issue Resolution Sheet).

between the U.S./Canadian border and Superior; connectivity in Clearbrook and Superior; and Unclassified Total Capital Costs (including decommissioning of Existing Line 3) of \$2.6 billion.⁹¹⁹

352. If the total capital costs of the Project (including decommission of Existing Line 3) exceed 15 percent of the agreed upon capital costs (\$2.6 billion), then the RSG can, with a 2/3 majority vote, elect not to proceed with the Project.⁹²⁰ If the RSG does not terminate the contract, then Applicant is responsible for the all costs in excess of the agreed-up capital costs (\$2.6 billion).⁹²¹ Accordingly, there is an incentive for Applicant to keep the capital costs of the Project to \$2.6 billion, thereby rendering Applicant only responsible for 25 percent of the total capital costs.

353. Similarly, if Applicant does not receive approvals for the Project or receives an approval that is not satisfactory to Applicant, RSG can vote, by 2/3 majority, not to proceed with the Project.⁹²² If the RSG votes to terminate the Project, RSG is responsible for all costs incurred by Applicant in pursuing the Project, including legal fees in this proceeding.⁹²³

354. While the RSG Agreement gives Applicant the option of not proceeding with the Project if the governmental approvals contain conditions unsatisfactory to Applicant, the Consent Decree is not as flexible, as addressed above.⁹²⁴

355. The DOC-DER's witness Kate O'Connell asserts that Applicant has not shown a need for this Project because it "does not commit to ceasing operations of [E]xisting Line 3" and that Applicant "has not decided that it will cease operating [E]xisting Line 3."⁹²⁵ Ms. O'Connell cites to the IRS as the basis for her conclusion.⁹²⁶

356. However, the IRS and the Consent Decree are two different documents with two different purposes and very different parties. The IRS allows the RSG to terminate the Project funding agreement if Applicant receives approval for the Project with conditions unsatisfactory to Applicant.⁹²⁷ But the RSG's termination of the Project funding by the RSG does not excuse Applicant from complying with the terms of the federal Consent Decree.

⁹¹⁹ Ex. EN-1 at App. D (Issue Resolution Sheet) (emphasis added).

⁹²⁰ Ex. EN-1 at App. D (Issue Resolution Sheet); Evid. Hrg. Tr. Vol. 9A at 38-39 (Kahler).

⁹²¹ *Id.*

⁹²² Ex. EN-1 at App. D (Issue Resolution Sheet); Evid. Hrg. Tr. Vol. 9A at 38-39 (Kahler).

⁹²³ Ex. EN-1 at App. D (Issue Resolution Sheet); Evid. Hrg. Tr. Vol. 9A at 38-39 (Kahler). On August 24, 2016, the RSG voted to approve proceeding with the Project despite the fact that Applicant did not have regulatory approvals for the Project by August 2016, as originally anticipated. Ex. EN-39 at 9 (Fleeton Rebuttal).

⁹²⁴ Compare Ex. EN-1 at Appendix D (RSG Issue Resolution Sheet) and Ex. EN-30 (Eberth Rebuttal) at Sched. 1 (Consent Decree).

⁹²⁵ See e.g., EX. DER-19 (O'Connell Summary)

⁹²⁶ Evid. Hrg. Tr. Vol. 12B at 7-14 (O'Connell).

⁹²⁷ Ex. EN-1 (CN) at App. D at 2 (IRS).

357. Contrary to Ms. O’Connell’s testimony, Applicant has testified that it will remove Existing Line 3 from service permanently if approvals are granted for the proposed Project and once the Project is placed into service.⁹²⁸ Moreover, the Consent Decree unambiguously requires that Applicant decommission and take out of service Existing Line 3 if approvals are granted for a new Line 3.⁹²⁹

358. With respect to the federal government, the Consent Decree is controlling, not the IRS. The IRS simply addresses the cost sharing for the Project between Applicant and its customers if the Project is approved but Applicant chooses not to build it. It does not supersede the Consent Decree. Therefore, Ms. O’Connell’s understanding of these two separate agreements is misguided.

359. Viewed in totality, Applicant has strategically included Existing Line 3 into a Consent Decree (arising out of a litigation wholly unrelated to Line 3), which requires Applicant to “replace” Existing Line 3 with a new pipeline. But rather than seek approval for a true replacement line (which Applicant is doing in North Dakota and Wisconsin), Applicant is seeking a new and different pipeline in Minnesota – one that is wider and longer, opens a new and different pipeline corridor through the state, and has an ultimate design capability to transport more oil of a different type than Existing Line 3 does currently.

360. By positioning this Project as a “replacement,” Applicant has given the impression that it is compelled by the federal government to build the Project it is proposing. In reality, however, the pipeline for which Applicant is seeking approval is a materially different creature than the pipeline Applicant is seeking to replace. Most importantly, the federal government is not compelling Minnesota to approve the CN and RP applications.

361. At the same time, Applicant has positioned itself in a place of risk – where it could be granted an approval by Minnesota, but with conditions or a route that Applicant it does not wish to accept. Under the Consent Decree, an approval is an approval.⁹³⁰ Once all approvals are granted, Applicant must replace the line, and decommission/take out of service Existing Line 3.⁹³¹ If Minnesota’s approval is for a different route or contains conditions that Applicant does not want to accept, Applicant can reject the approval (and risk being in violation of the Consent Decree), or it can accept the approval and build a new line subject to the permit conditions.

362. In its Initial Post-Hearing Brief, Applicant acknowledged that its disagreement with conditions placed on permits issued by the Commission will not excuse it from its obligations to replace the line under the Consent Decree.⁹³² However, Applicant has carefully worded its acknowledgement as follows:

⁹²⁸ Ex. EN-22 at 23 (Simonson Direct).

⁹²⁹ Ex. EN-30 (Eberth Rebuttal), Sched. 1 at 25-26 (Consent Decree).

⁹³⁰ Ex. EN-30 (Eberth Rebuttal), Sched. 1 (Consent Decree).

⁹³¹ *Id.*

⁹³² Applicant’s Initial Post-Hearing Br. at 149 (Jan. 23, 2018) (eDocket No. 20181-139252-03 (CN)).

Accordingly, if the Commission grants a CN and Route Permit containing conditions *that may lawfully be imposed by the Commission*, Enbridge is required to replace the existing Line 3 under the terms of the Consent Decree, and it must discontinue service on the existing Line 3 once the replacement is complete.⁹³³

363. Based upon Applicant's careful wording, it can be anticipated that Applicant could challenge conditions placed on the permits by arguing that such conditions exceed Minnesota's permitting authority or are otherwise "unlawful."

D. Project Design

364. The Project design calls for X-70 steel, manufactured using a submerged arc welded welding process⁹³⁴ The wall thickness for the majority of the pipeline is proposed to be .515 inches, and .600 to .750 inches where the pipeline crosses public roads, railroads, specific waterbodies, as well as directly downstream of certain identified pump stations.⁹³⁵

365. Applicant proposes to install eight new pump stations, spaced at an average of approximately 42 miles apart.⁹³⁶ Four new pump stations would be constructed adjacent to the existing Enbridge Donaldson, Viking, Plummer, and Clearbrook sites. These new pump stations are replacements for the Existing Line 3 pump stations at those locations.⁹³⁷ Four additional new pump stations at Two Inlets, Backus, Palisade, and Cromwell are proposed to be constructed east of Clearbrook. The Clearbrook and Backus pump stations would include a new inline inspection tool launcher and receiver traps, in addition to the valves, metering, monitoring equipment, and associated electrical facilities required at all sites.⁹³⁸ The existing Clearbrook terminal would include modifications to, or replacement of, an inline inspection tool receiver trap, valves, metering, monitoring equipment and associated electrical facilities.⁹³⁹

366. Applicant proposes to install 27 mainline valves outside of pump stations and terminals in Minnesota.⁹⁴⁰ The proposed pump stations and terminals provide more ability to isolate the line, yielding a total of 35 mainline valves within the state of Minnesota, as designed.⁹⁴¹ The approximate distance between valves ranges from less than one mile to 27.3 miles; and the approximate average distance between valves is 9.5 miles.⁹⁴²

⁹³³ *Id.* (Emphasis added).

⁹³⁴ Ex. EN-22 at 4-5 (Simonson Direct).

⁹³⁵ Ex. EN-22 at 5 (Simonson Direct).

⁹³⁶ Ex. EN-22 at 7 (Simonson Direct).

⁹³⁷ Ex. EN-22 at 7 (Simonson Direct).

⁹³⁸ Ex. EN-22 at 7 (Simonson Direct).

⁹³⁹ Ex. EN-22 at 8 (Simonson Direct).

⁹⁴⁰ Evid. Hrg. Tr. Vol. 2A at 34 (Simonson).

⁹⁴¹ Ex. EN-22 at 10 (Simonson Direct).

⁹⁴² Ex. EN-22 at 10 (Simonson Direct).

367. Mainline valves are designed to isolate sections of the pipeline for operational and maintenance purposes or in the event of a release.⁹⁴³ Applicant utilized several criteria in determining the locations of mainline valves, including compliance with the valve location requirements specified by the United States Department of Transportation and the PHMSA.⁹⁴⁴ Additional criteria included the elevation profile of the proposed route, the location of High Consequence Areas (HCAs)⁹⁴⁵ on and near the centerline of the pipeline route, and whether installing a valve in a specific location would reduce the possible impact in the event of a release.⁹⁴⁶

368. The power source for Emergency Flow Restricting Devices (EFRD) is supplied by the local utility from a transformer service drop dedicated to Applicant.⁹⁴⁷ The communication and control power supply is backed up by a local Uninterruptible Power Supply at the EFRD site to maintain valve and process instrumentation status over Supervisory Control and Data Acquisition (SCADA) for the line operator to determine if an on-call first responder is needed at the site. In the event of a power outage of the electrical grid, the local Programmable Logic Controller will sense the loss of control power for the site and alarm the line operator over SCADA, who would then be responsible to initiate communications to the on-call personnel with first responder responsibilities.⁹⁴⁸

369. The full design capacity of the Project is 844 kbpd.⁹⁴⁹ Full design capacity is calculated assuming ideal operating conditions without factoring in typical operating issues like scheduled and unscheduled maintenance, which are reflected in the annual average capacity calculations.⁹⁵⁰

370. Applicant asserts that the Project will have an “annual average capacity” of 760 kbpd, which computes to 256,120 million barrels per day-miles.⁹⁵¹ The “annual average capacity” refers to the average sustainable pipeline throughput that the pipeline will achieve over the course of the year, assuming historic average annual operating conditions.⁹⁵² Annual capacity is typically 90 percent of the design capacity.⁹⁵³ Here, Applicant is asserting that the expected annual capacity of the line will be 760 kbpd, approximately 85 percent of the design capacity.⁹⁵⁴ Assuming that annual capacity is “typically” 90 percent of the design capacity (as Applicant asserts in its CN Application),

⁹⁴³ Ex. EN-22 at 9 (Simonson Direct).

⁹⁴⁴ Ex. EN-22 at 9 (Simonson Direct).

⁹⁴⁵ HCAs are defined in 49 C.F.R. Part 195.450 as high population or other populated areas, commercially navigable waterways, as well as unusually sensitive areas as defined in 49 C.F.R. Part 195.6. See, Ex. EN-22 at 9 (Simonson Direct).

⁹⁴⁶ Ex. EN-22 at 9 (Simonson Direct).

⁹⁴⁷ Ex. EN-45 at 16 (Simonson Rebuttal).

⁹⁴⁸ Ex. EN-45 at 16 (Simonson Rebuttal).

⁹⁴⁹ Ex. EN-1 at 8-3 (CN Application).

⁹⁵⁰ Ex. EN-1 at 8-3 (CN Application).

⁹⁵¹ Ex. EN-24 at 5 (Eberth Direct); Ex. EN-1 at 2-6 (CN Application).

⁹⁵² Ex. EN-1 at 8-3 (CN Application).

⁹⁵³ Ex. 1 at 8-3 (CN Application).

⁹⁵⁴ Ex. EN-19 at 7 (Glanzer Direct).

it is possible that the line could be operated closer to an annual average capacity of 795 kbpd (90 percent of the 884 kbpd design capacity).

371. Notably, the Project has an “ultimate design capacity”, considering its diameter, wall thickness, steel grade and crude slate, of 1,016 kbpd.⁹⁵⁵ This ultimate design capacity is significantly higher than that which Applicant asserts it will actually operate the facilities. The ultimate design capacity would result in an ultimate annual average capacity of 915 kbpd.⁹⁵⁶

372. Applicant states that it cannot operate the Project at the ultimate design capacity without adding additional pumping horsepower (i.e., infrastructure), which is not part of the current proposal.⁹⁵⁷ The Commission should consider the fact that the Project is being built to allow Applicant to increase capacity in the future, should it desire to transport more crude through the line.

373. The current total annual average capacity of the Mainline System in Minnesota is 2,621 kbpd and the current effective system capacity is 2,333 kbpd.⁹⁵⁸ If the Project is approved as proposed, the anticipated annual average capacity of the Mainline System in Minnesota will be 3,221 kbpd, and the effective system capacity will be 2,867 kbpd.⁹⁵⁹ This indicates that Applicant anticipates that the new Line 3 will add between 534 and 600 kbpd to the Mainline System’s annual capacity, beyond the 390 kbpd that Existing Line 3 is currently transporting.

374. The design factor for mainline pipe design is found in federal regulation 49 C.F.R. Part 195.106. This regulation mandates that, except for certain, specified cases, the maximum design factor is 0.72 for mainline pipe design. Put simply, this means that the actual throughput can be no more than 72 percent of the rated yield strength of the pipe installed.⁹⁶⁰ The wall thickness and yield strength for all Project pipe must comply with this regulation.

375. Applicant has designed the Project, including the pipe wall thickness, to meet PHMSA requirements for wall thickness, as well as the pipe thickness ratio requirements of 49 C.F.R. 195.207.⁹⁶¹ To mitigate potential cracking concerns during transit, Applicant is required by the Consent Decree to pressure test the pipe to 125 percent of maximum operating pressure prior to placing the pipeline into service.⁹⁶²

⁹⁵⁵ Ex. EN-1 at 8-3 (CN Application).

⁹⁵⁶ Ex. EN-1 at 8-3 (CN Application).

⁹⁵⁷ Evid. Hrg. Tr. Vol. 1B at 63-64 (Glanzer); Ex. DER-1, Attach. 3 at 1 (O’Connell Direct).

⁹⁵⁸ Ex. EN-1 at 2-6 (CN Application).

⁹⁵⁹ *Id.*

⁹⁶⁰ Ex. EN-22 at 7 (Simonson Direct); Evid. Hrg. Tr. Vol. 2A at 49 (Simonson).

⁹⁶¹ Ex. EN-45 at 13 (Simonson Rebuttal).

⁹⁶² Ex. EN-45 at 13 (Simonson Rebuttal).

376. The Project will allow Applicant to operate Line 3 in heavy, light, and mixed service.⁹⁶³ Applicant intends to use the line predominantly to transport Canadian heavy crude.⁹⁶⁴ Currently, Existing Line 3 is transporting predominantly light crude.⁹⁶⁵

377. The requirements of a federal Consent Decree require Applicant to implement an in-line inspection-based spill prevention program; use the OneSource database to integrate information about crack, corrosion, and geometric features identified by investigations and field measurement devices; implement specific leak detection and control room operations; improve its spill response and preparedness measures; install remote controlled valves on the line; comply with mandatory reporting requirements; and ensure third party/independent verification of compliance.⁹⁶⁶

378. In addition, the Project must meet federal cathodic protection timeline requirements. Federal regulation, 49 C.F.R. 195.563, requires that operating cathodic protection be in use no later than one year after a pipeline is constructed. Applicant asserts that cathodic protection will begin within one year after all construction is complete.⁹⁶⁷

379. Enbridge's own design standard (D04-101 Cathodic Protection, Mainline) requires operating cathodic protection no later than 90 days after construction.⁹⁶⁸ Applicant asserts that the Project will have an operating cathodic protection system prior to being in service.⁹⁶⁹ Applicant claims that there will not be a gap between the in-service date of the Project and operational cathodic protection.⁹⁷⁰

380. Between North Dakota and Clearbrook, the line will have cathodic protection available by tying into existing Enbridge rectifiers. The Project will tie into these operating cathodic protection systems during construction.⁹⁷¹ From Clearbrook to Wisconsin, the line will have cathodic protection available through galvanic anodes installed at test stations, spaced approximately every mile. These galvanic anodes will also be connected to the pipeline during construction.⁹⁷² Appellant asserts that it will transition from the temporary galvanic anodes to the impressed current cathodic protection system within one year of operation.⁹⁷³

⁹⁶³ Ex. EN-19 at 5 (Glanzer Direct).

⁹⁶⁴ Ex. 1 (CN) at App. D (Issue Resolution Sheet). Applicant's assertion of need is based, in large part, on the need to reduce apportionment of heavy crude. Therefore, it is clear that Appellant intends to transport mostly heavy crude on the Proposed Line 3.

⁹⁶⁵ Ex. EN-12 at 21 (Kennett Direct); Evid. Hrg. Tr. Vol. 9A at 21 (Kahler).

⁹⁶⁶ Ex. EN-30 (Eberth Rebuttal) at Schedule 1 (Consent Decree) at 30-126.

⁹⁶⁷ Ex. EN-45 at 5-6 (Simonson Rebuttal).

⁹⁶⁸ Ex. EN-45 at 6 (Simonson Rebuttal).

⁹⁶⁹ Ex. EN-45 at 6 (Simonson Rebuttal).

⁹⁷⁰ Ex. EN-45 at 6 (Simonson Rebuttal).

⁹⁷¹ Ex. EN-45 at 6 (Simonson Rebuttal).

⁹⁷² Ex. EN-45 at 6 (Simonson Rebuttal).

⁹⁷³ Ex. EN-45 at 6 (Simonson Rebuttal).

E. Decommissioning and Abandonment

381. Once the Project is in service, Applicant has committed to both Minnesota and the federal government that it will “permanently remove [E]xisting Line 3 from service.”⁹⁷⁴ To do so, Applicant asserts that it will purge, clean, and decommission the line (as required by the Consent Decree), and then permanently disconnect it from the rest of the pipeline system.⁹⁷⁵ In addition, Applicant proposes to segment the line, cap the segments, permanently close valves, and remove the “associated facilities.”⁹⁷⁶ As a result, Applicant asserts that Existing Line 3 will not be able to be used for crude oil transportation in the future.⁹⁷⁷

382. Applicant is not proposing to remove Existing Line 3, but rather to simply abandon it in-place.⁹⁷⁸

383. While Applicant generally avoids the term “abandon” in its filings, under federal pipeline laws and regulations,⁹⁷⁹ and for all intents and purposes, the line will be abandoned.⁹⁸⁰ Although the pipe will be drained of oil, cleaned, and capped, Applicant intends to simply discard its steel infrastructure in-ground, leaving landowners, Indian tribes, and the state with nearly 300 miles of unusable, underground pipe for hundreds, if not thousands, of years to come.⁹⁸¹

384. Federal regulations do not define or use the terms “decommission” or “deactivate.”⁹⁸² Canada, however, recognizes three categories of pipe disposition: (1) abandonment, which means “to permanently cease operation such that the cessation results in the discontinuance of service”; (2) decommission, which means to “permanently cease operation such that the cessation does not result in the discontinuance of service”; and (3) deactivate, which means “to temporarily remove from service.”⁹⁸³ In this case, Applicant proposes to “permanently decommission” Existing Line 3⁹⁸⁴ and permanently discontinue service.”

385. To be clear, for purposes of United States pipeline laws and regulations Applicant is proposing to abandon Existing Line 3.⁹⁸⁵

⁹⁷⁴ Ex. EN-30 at 15 (Eberth Rebuttal) (emphasis added).

⁹⁷⁵ Ex. EN-30 at 19 (Eberth Rebuttal); Ex. EN-22 at 22 and Sched. 6 at 6-7 (Simonson Direct).

⁹⁷⁶ Ex. EN-30 at 19 (Eberth Rebuttal); Ex. EN-22 at 22 and Sched. 6 at 6-7 (Simonson Direct).

⁹⁷⁷ Evid. Hrg. Tr. Vol. 2B at 21 (Simonson).

⁹⁷⁸ Ex. EN-22 at 21 (Simonson) (“To be clear, Enbridge intends to ‘abandon’ Line 3 as the term is used in federal regulations.”)

⁹⁷⁹ See 49 C.F.R. § 195.2 (“Abandoned means permanently removed from service.”).

⁹⁸⁰ Evid. Hrg. Tr. Vol. 2A at 94-95 (Simonson). Applicant apparently chooses to use the terms “permanently deactivate” or “permanently decommission” because it will continue monitoring activities in the Mainline corridor. Ex. EN-22 at 21 (Simonson); Ex. EN-39 at 2 (Fleeton).

⁹⁸¹ Evid. Hrg. Tr. Vol. 2B at 23-24 (Simonson).

⁹⁸² Ex. EN-39 at 1 (Fleeton Rebuttal).

⁹⁸³ Ex. EN-39 at 1 (Fleeton Rebuttal).

⁹⁸⁴ *Id.* at 2.

⁹⁸⁵ Ex. EN-22 at 21 (Simonson) (“To be clear, Enbridge intends to ‘abandon’ Line 3 as the term is used in federal regulations.”)

386. Federal regulations in the United States do not require than an abandoned pipe be monitored or maintained.⁹⁸⁶ Applicant states that it will continue visual (aerial) monitoring and external cathodic protection of abandoned Line 3 only because it is already conducting that type of external monitoring on its other pipelines in the same Mainline System corridor.⁹⁸⁷ Thus, it is only because Applicant has other pipelines in the corridor that the external monitoring will continue.⁹⁸⁸ Presumably, once monitoring of those other Mainline pipelines end so too will the monitoring of the abandoned Line 3, leaving it to landowners and state regulators to monitor.

387. Another purpose of continued monitoring of the line is to prevent a claim of abandonment of the easements. Under Minnesota law, abandonment of an easement occurs when nonuse of the easement is accompanied by affirmative and unequivocal acts indicative of an intent to abandon and are inconsistent with the continued use of the easement.⁹⁸⁹ In submitted testimony, Applicant has made the affirmative declaration that that the line will be abandoned⁹⁹⁰ and will no longer be used to transport oil.

388. Because federal regulations do not require maintenance and monitoring of abandoned pipelines, continued monitoring of abandoned Line 3 will be at Applicant's sole discretion for as long as Applicant sees fit.⁹⁹¹ There would be no regulatory oversight to ensure that exposed, collapsed, or problematic pipe be removed.⁹⁹²

389. At the evidentiary hearing, Applicant verbally agreed to remove all exposed pipe, in compliance with a recommendation made by the DOC-DER.⁹⁹³ At a minimum, the Commission should require Applicant to comply with this representation.

F. Permanent and Temporary Easements Required for Project

390. As part of its RP Application, Applicant seeks both permanent and temporary easements within which to construct, operate, and maintain the pipeline and associated facilities.⁹⁹⁴ Although Applicant asserts that it needs only a 50-foot easement for the line, Applicant seeks approval for a 750-foot route width for the Project.⁹⁹⁵ According to Applicant, a 750-foot route width would provide flexibility for making minor

⁹⁸⁶ Evid. Hrg. Tr. Vol. 2A at 94-95; Vol. 2B at 21-22 (Simonson).

⁹⁸⁷ Evid. Hrg. Tr. Vol. 2A at 94-95, 128; Vol. 2B at 21-22 (Simonson).

⁹⁸⁸ Evid. Hrg. Tr. Vol. 2A at 94-95, 128 (Simonson). Because the cathodic protection system is an "integrated system," providing monitoring to Line 3, as long as other lines in the corridor are being similarly monitored, is not an additional burden for Applicant. Evid. Hrg. Tr. Vol. 2B at 46 (Simonson).

⁹⁸⁹ *Richards Asphalt Co. v. Bunge Corp.*, 399 N.W.2d 188, 192 (Minn. Ct. App. 1987). See also, *United Parking Stations, Inc. v. Calvary Temple*, 101 N.W.2d 208, 212 (Minn. 1960) (holding that abandonment may occur when the owner of the dominant estate has made no use of an easement and his conduct is such as to evidence intention to abandon).

⁹⁹⁰ Ex. EN-22 at 21 (Simonson) ("To be clear, Enbridge intends to 'abandon' Line 3 as the term is used in federal regulations.")

⁹⁹¹ Evid. Hrg. Tr. Vol. 2A at 103; Vol. 2B at 21-22 (Simonson).

⁹⁹² Evid. Hrg. Tr. Vol. 2B at 21-22 (Simonson).

⁹⁹³ Evid. Hrg. Tr. Vol. 8A at 45-46 (Eberth).

⁹⁹⁴ Ex. EN-6 at 5 (McKay Direct).

⁹⁹⁵ Ex. EN-30, Sched. 4 at 11 (Eberth Rebuttal).

adjustments to alignments and right-of-way to accommodate landowner requests or address unforeseen conditions.⁹⁹⁶

i. Permanent Easements

391. With respect to permanent easements, Applicant states that it will need 50 feet of right-of-way within which to construct, operate, maintain, and, potentially idle the new pipeline.⁹⁹⁷ According to Applicant, the amount of permanent right-of-way “typically” needed is 25 feet on both sides of the pipeline, measured from its centerline (i.e., a total of 50 feet).⁹⁹⁸

392. Along the North Dakota border-to-Clearbrook segment of the APR, Applicant asserts that it can utilize 25 feet of existing Enbridge-owned right-of-way.⁹⁹⁹ Applicant will need to acquire an additional 25 feet to complete the requested 50-foot-wide right-of-way.¹⁰⁰⁰ In this segment of the APR, Applicant has already acquired options for 99 percent of the private land easements because those landowners have previously executed easements for the numerous pipelines currently located on their properties.¹⁰⁰¹

393. As for the Clearbrook-to-Wisconsin border segment of the Proposed Route, Applicant will need to acquire an entirely new 50-foot-wide permanent easement from landowners.¹⁰⁰² Enbridge’s Mainline System does not travel through this portion of the Project, so permanent easements for the entire width of the right-of-way must be acquired from landowners in this segment of the APR.¹⁰⁰³

394. According to Applicant’s witness, Applicant has already obtained easements from approximately 94 percent of all private landowners along the Clearbrook-to-Wisconsin border segment.¹⁰⁰⁴ These easements are in addition to the easement rights purchased from landowners for the Sandpiper Project, which was proposed to be located in the same new corridor as the Proposed Line 3 from Clearbrook to Superior.¹⁰⁰⁵ Notably, Applicant confirmed that it is retaining the easements it purchased for the Sandpiper Project and does not intend to release them.¹⁰⁰⁶

ii. Combination of Sandpiper and Proposed Line 3 Easements

395. In an effort to combine the Sandpiper and proposed Line 3 easements, Applicant has obtained new easement agreements from landowners in the Clearbrook-

⁹⁹⁶ Ex. EN-30, Sched. 4 at 11 (Eberth Rebuttal).

⁹⁹⁷ Ex. EN-6 at 5 (McKay Direct).

⁹⁹⁸ Ex. EN-6 at 5 (McKay Direct).

⁹⁹⁹ Ex. EN-6 at 5 (McKay Direct).

¹⁰⁰⁰ Ex. EN-6 at 5 (McKay Direct).

¹⁰⁰¹ Evid. Hrg. Tr. Vol. 3A at 133, Vol. 3B at 67 (McKay).

¹⁰⁰² Ex. EN-6 at 5 (McKay Direct).

¹⁰⁰³ Ex. EN-6 at 5 (McKay Direct).

¹⁰⁰⁴ Evid. Hrg. Tr. Vol. 3A at 106, 133, Vol. 3B at 66 (McKay).

¹⁰⁰⁵ Evid. Hrg. Tr. Vol. 3A at 112-113, 127-128, 129, 132; Vol. 3B at 34-37 (McKay).

¹⁰⁰⁶ Evid. Hrg. Tr. Vol. 3B at 33-34, 36; Vol. 3B at 134 (“...it’s something that we’ve paid for and we’ve recorded previously. So from a land rights only perspective, it make sense for us to hold onto it.”) (McKay).

to-Superior segment of the APR for a 75-foot easement that allows for the placement of two pipelines.¹⁰⁰⁷ Thus, while Applicant asserts that it is only seeking 50-foot easements from landowners for this Project, it bears noting that Applicant has purchased a total of 75-feet of easements from the landowners in the Clearbrook-to-Superior segment of the APR; and has indicated in those easement agreements its intent to install two pipelines in the easement area (see below).

396. Applicant offered into evidence a form easement agreement (“Template Easement Agreement”) which was presented as the standard type of easement agreement that Applicant would be using to acquire easements for this Project.¹⁰⁰⁸ The Template Easement Agreement conveys to Applicant:

[a] right-of-way and perpetual easement to survey, locate, construct, operate, maintain..., clear, inspect..., reclaim, remove, protect, idle in place, repair, replace, relocate, change the size of and reconstruct a single pipeline...and conduct other activities as may be necessary...for the transportation of crude petroleum and any product, by-product and derivative thereof...together with the right to clear and to keep cleared the Right of Way....¹⁰⁰⁹

397. Applicant’s Template Easement Agreement indicates that a “single pipeline” would be constructed in the easement area.¹⁰¹⁰ In reality, however, for landowners in the Clearbrook-to-Wisconsin border segment of the APR who signed easement agreements for the Sandpiper line, Applicant has obtained agreements for 75-foot easements, which allow Applicant the right to place two pipelines on their properties.¹⁰¹¹ Thus, the actual easement agreement used with landowners is different from the Template Easement Agreement Applicant submitted with its application. Nowhere in the record does it appear

¹⁰⁰⁷ Evid. Hrg. Tr. Vol. 3A at 112-113, 127-128, 129, 131-132; Vol. 3B at 34-37 (McKay); Exs. HTE-5, HTE-6. Complicating this issue is the fact that Applicant currently has three separate easement agreements from landowners in the Clearbrook-to-Superior segment of the APR. Evid. Hrg. Tr. Vol. 3B at 34-37; Exs. HTE-5, HTE-6. First, Applicant retains a 50-foot easement that was obtained in the name of North Dakota Pipeline Company for the Sandpiper line. Evid. Hrg. Tr. Vol. 3B at 34-37. Next, Applicant obtained easement agreements from the same property owners for a 50-foot easement in Applicant’s name for the Line 3 Project. Evid. Hrg. Tr. Vol. 3A at 131-132; Vol. 3B at 34-37, Ex. HTE-5. After the Sandpiper Project was withdrawn, Applicant had landowners execute a third easement agreement which grants Applicant a 75-foot easement and allows for *two pipelines* to be placed on the property. Evid. Hrg. Tr. Vol. 3B at 34-37, Ex. HTE-6. Applicant asserts that the third easement agreement combines the Sandpiper and Line 3 easement into one, 75-foot easement allowing for *two pipelines* to be located on the property. Evid. Hrg. Tr. Vol. 3A at 131-132; Vol. 3B at 34-37. Applicant claims that if the Line 3 Project is approved, Applicant will release the first two easements, leaving just one, 75-foot easement on these properties, allowing for two pipelines. Evid. Hrg. Tr. Vol. 3B at 36-37. Currently, however, neither North Dakota Pipeline Company nor Applicant has released any of the easements agreements. Evid. Hrg. Tr. Vol. 3B at 34-37. This allows for the possibility that Enbridge could have rights to up to **four** outstanding easements on the properties.

¹⁰⁰⁸ Ex. EN-6 at Schedule 3 (McKay Direct).

¹⁰⁰⁹ Ex. EN-6 at Schedule 3 (McKay Direct).

¹⁰¹⁰ Ex. EN-6 at Schedule 3 (McKay Direct).

¹⁰¹¹ Evid. Hrg. Tr. Vol. 3A at 112-114, 127-128, 129; Vol. 3B at 34-37 (McKay); Exs. HTE-5, HTE-6.

that Applicant has disclosed to the Commission that it has obtained 75-foot easements for two pipelines in the easement agreements it has obtained.

398. An example of the actual easement agreement recorded by Applicant was entered into the hearing record as Exhibit HTE-6. This document conveys to Applicant:

[a] right-of-way and perpetual easement to survey, locate, construct, install, operate, maintain..., clear, inspect..., reclaim, remove, protect, idle in place, repair, replace, relocate, change the size of and reconstruct two pipelines...and conduct other activities as may be necessary...for the transportation of crude petroleum and any product, by-product and derivative thereof...together with the right to clear and to keep cleared the Right of Way....¹⁰¹²

399. Thus, by not releasing the Sandpiper easements and by using an easement agreement that allows for the construction of two pipelines in the easement area, Applicant would not have to purchase new easements from landowners if it (or its successors) want to construct a second pipeline in the same corridor in the future.¹⁰¹³ Commission approval would be required for another pipeline, but the land rights would have already been acquired. These 75-foot easements also make it more likely that the APR could be used, in the future, as a new, multi-pipeline corridor, if Applicant seeks to decommission and abandon its other aging pipelines in the existing Mainline System corridor. It is clear that Applicant has prepared for the possibility that the APR could someday be used for the relocation of other aging Mainline System pipelines that it seeks to abandon in place.

400. Even more troubling is the possibility that Applicant could be envisioning up to four pipelines in this new proposed corridor (the Clearbrook-to-Wisconsin border segment). Applicant's land services manager, John McKay, testified that Applicant¹⁰¹⁴ purchased 50-foot easements from landowners for the Sandpiper line in that corridor.¹⁰¹⁵ Thereafter, Applicant purchased additional 50-foot easements for the Proposed Line 3, rather than assigning the easement rights it had purchased for the Sandpiper line so they could be used for the Proposed Line 3.¹⁰¹⁶ Then, despite these two separate easements agreements, each allowing for one pipeline in the easement area, Applicant approached the same landowners with a new easement agreement, this time for a 75-foot easement that allows for the installation of two pipelines.¹⁰¹⁷ Although these landowners signed a third easement agreement for a 75-foot easement (and two pipelines), Applicant did not release the two 50-foot easements it had previously obtained, which allowed for one pipeline for each easement.¹⁰¹⁸ In sum, many landowners have signed three separate

¹⁰¹² Ex. HTE-6 (emphasis added). Ex. HTE-E is an actual easement agreement recorded on private property in Aitkin County on October 5, 2017.

¹⁰¹³ Evid. Hrg. Tr. Vol. 3A at 112-114, 127-128, 129.

¹⁰¹⁴ In the name of North Dakota Pipeline Company.

¹⁰¹⁵ Evid. Hrg. Tr. Vol. 3A at 128, 131; Vol. 3B at 33-34 (McKay).

¹⁰¹⁶ Evid. Hrg. Tr. Vol. 3A at 128, 131; Vol. 3B at 33-34, 68 (McKay); See also, Ex. HTE-5 (Recorded Easement).

¹⁰¹⁷ Evid. Hrg. Tr. Vol. 3A at 131; Vol. 3B at 33-37 (McKay); See also, Ex. HTE-6 (Recorded Easement)

¹⁰¹⁸ Evid. Hrg. Tr. Vol. 3B at 33-37 (McKay).

easement agreements, apparently allowing for a total of four pipelines to be placed on their properties.¹⁰¹⁹

401. Mr. McKay confirmed that Applicant has not released the earlier easements¹⁰²⁰ and conceded that the new corridor could be used for additional pipeline projects (with Commission approval).¹⁰²¹ Consequently, the record indicates that Applicant could have already purchased a majority of the easements needed to place at least two, but potentially up to four, pipelines in this new corridor.¹⁰²² Mr. McKay asserts that Applicant will likely release the two earlier easements, leaving the 75-foot easements, which allow for two pipelines, to encumber the affected landowners' properties,¹⁰²³ but has not done so yet.¹⁰²⁴ Even if Applicant does eventually release the two earlier easements, Mr. McKay confirms that Applicant will retain the easement rights for at least two pipelines in this corridor.¹⁰²⁵

iii. Provisions for Future Abandonment

402. In addition to providing for the possibility of between two and four new pipelines in the new proposed corridor, Applicant's easement agreements (both actual and template) give Applicant the right to simply abandon ("idle in place") Proposed Line 3 (and future lines) once the pipelines have exhausted their economic use.¹⁰²⁶ Applicant's witness confirmed that the "idle in place" language in the easement agreements is specifically intended to allow Applicant to desert its pipelines in-ground into perpetuity once the pipelines no longer transport oil, thereby granting Applicant the property right to simply abandon their pipelines on the affected private properties in the future.¹⁰²⁷

403. In contrast, the original easements obtained for the Existing Line 3 do not specifically address "idling in place," decommissioning, or abandonment of the line.¹⁰²⁸ These easements, which originated in the 1950s and 1960s, paid landowners between \$100 and \$250 for easement rights.¹⁰²⁹ Based on a small sampling of these agreements, Applicant, through its predecessor (Lakehead Pipeline Company, Inc.), was granted:

A right of way and easement for the purpose of laying, maintaining, operating, patrolling..., altering, repairing, *renewing* and *removing* in whole

¹⁰¹⁹ Evid. Hrg. Tr. Vol. 3B at 33-37 (McKay).

¹⁰²⁰ Evid. Hrg. Tr. Vol. 3B at 36 (McKay).

¹⁰²¹ Evid. Hrg. Tr. Vol. 3A at 129; Vol. 3A at 114 (McKay).

¹⁰²² Evid. Hrg. Tr. Vol. 3B at 33-37 (McKay).

¹⁰²³ Evid. Hrg. Tr. Vol. 3B at 36-37 (McKay).

¹⁰²⁴ Evid. Hrg. Tr. Vol. 3B at 36 (McKay).

¹⁰²⁵ Evid. Hrg. Tr. Vol. 3B at 37 (McKay).

¹⁰²⁶ Ex. HTE-6; Ex. EN-6 (McKay Direct) at Sched. 3 (Easement Template); Evid. Hrg. Tr. Vol. 3A at 117-118 (McKay).

¹⁰²⁷ Evid. Hrg. Tr. Vol. 3A at 117-118 (McKay) (stating that the easements give Applicant the right to leave the pipeline in the ground in perpetuity); Evid. Hrg. Tr. Vol. 3B at 25-26 (McKay) ("Where our pipeline is within easements on private land, we are generally choosing not to remove the pipe; that's correct.") (McKay).

¹⁰²⁸ See e.g., Exs. DY-16, DY-17, P-13 (Peterson real estate documents).

¹⁰²⁹ Exs. DY-16, DY-17, P-13.

or in part a pipe line for the transportation of crude petroleum, its products and derivatives....¹⁰³⁰

404. Applicant agrees that the Existing Line 3 easements give Applicant the right to remove and replace the Existing Line 3,¹⁰³¹ but the documents are silent as to the effect of the easements should the pipeline be “idled” or taken out of service permanently.¹⁰³² The record indicates that Applicant has been replacing the Existing Line 3 easements upstream from Clearbrook with new easement agreements using the “idle in place” language contained in Applicant’s Template Easement Agreement.¹⁰³³

405. Minnesota Statutes section 216G.09 (2017) provides that “all easement interests acquired after May 26, 1979 for the purpose of constructing and operating a pipeline shall revert to the then fee owner if the pipeline ceases operation for a period of five years.” This provision would not apply to many of the original Line 3 easement agreements, but it would apply to new easements. However, these new easements expressly allow for “idling in place,” which Applicant interprets to mean that the landowner is consenting to the company’s future abandonment of the pipeline in-ground.¹⁰³⁴

iv. Land Adjacent to Right-of-Way

406. There are other differences between the easement agreements that Applicant is using in this Project compared to those used for Existing Line 3. In addition to granting a 50-foot permanent easement for the line itself, the easements that Applicant has obtained (or seeks to obtain) for this Project also grant to Applicant the permanent right to use and occupy the land *adjacent to* the right-of-way as is “reasonably necessary” “for the inspection and patrol..., operation, maintenance, repair, replacement, relocation, reconstruction, reclamation, removal, protection and idling of the pipeline.”¹⁰³⁵

407. Finally, the easements that Applicant has obtained or seeks to obtain for the Project provide for a waiver of the requirements of Minn. Stat. § 216G.07, subd. 1 (2017). Section 216G.07, subdivision 1 mandates that pipelines be buried with a minimum cover of not less than 4-1/2 feet where a pipeline crosses a public drainage facility, street, highway, or cultivated agricultural land. By initialing the waiver, a landowner expressly agrees that Applicant can install the pipeline on agricultural land using less than 4-1/2 feet of cover, but not less than three feet of cover.¹⁰³⁶

¹⁰³⁰ Exs. DY-16, DY-17, P-13 (emphasis added). These easements also expressly allow for additional pipeline to be placed within the easement for “like consideration per rod” of each additional pipeline. *Id.*

¹⁰³¹ Evid. Hrg. Tr. Vol. 3B at 23, 68 (McKay).

¹⁰³² Exs. DY-16, DY-17, P-13; Evid. Hrg. Tr. Vol. 3B at 68 (McKay).

¹⁰³³ Ex. EN-6 (McKay Direct) at Sched. 3 (Easement Template).

¹⁰³⁴ Evid. Hrg. Tr. Vol. 3A at 117-118 (McKay) (stating that the easements give Applicant the right to leave the pipeline in the ground in perpetuity); Evid. Hrg. Tr. Vol. 3B at 25-26 (McKay) (“Where our pipeline is within easements on private land, we are generally choosing not to remove the pipe; that’s correct.”) (McKay).

¹⁰³⁵ Ex. EN-6 at Sched. 3 (McKay Direct) (emphasis added).

¹⁰³⁶ Ex. EN-6 at Sched. 3 (McKay Direct).

v. Temporary Easements

408. In addition to permanent easements, Applicant will seeks to acquire temporary easements for construction workspace. Applicant asserts that it will require approximately 120 feet of construction workspace in upland areas and a 95-foot-wide construction workspace in wetland areas.¹⁰³⁷

409. Applicant asserts that it also needs additional temporary workspace (beyond the standard construction workspace) to facilitate specific aspects of construction.¹⁰³⁸ This additional temporary workspace would be required in areas where the APR crosses open-cut road crossing, bored roads, foreign pipelines, utility crossings, railroad crossings, pipeline cross-unders, water body crossings, horizontal directionally drilled waterbody crossings, and wetlands.¹⁰³⁹ The additional temporary workspace easements requested are between 100 and 200 feet in addition to the temporary construction easement.¹⁰⁴⁰ Full ownership of the temporary workspace and additional temporary workspace would revert to the landowner after construction and restoration tasks are completed.¹⁰⁴¹

410. The specific right-of-way requested for the Project are described in the Draft Route Permit attached as Schedule 4 to Exhibit EN-30 (Eberth Rebuttal).

G. Indian Reservations and Treaty-Ceded Territories

411. In addition to the private easements that the Project will require, there are additional property issues related to the traversing of land over which American Indian tribes retain certain property rights.

412. In the 1880s, the United States government undertook actions to obtain right and title to the land comprising, what is now, Minnesota.¹⁰⁴² These actions included the execution of treaties with Indian tribes which established legal rights to the property and created Indian reservations.¹⁰⁴³ This section discusses the unique legal implications of the Project crossing territory ceded to the United States by the Indians, as well as land designated and held in trust by the federal government as Indian Reservation property.

413. Federally-recognized tribes are sovereign nations that retain the power of self-governance over their lands and members.¹⁰⁴⁴ The U.S. Supreme Court has characterized tribal governments as “domestic dependent nations” to whom the federal

¹⁰³⁷ Ex. EN-22 at 19 (Simonson Direct); Ex. EN-30, Sched. 4 at 12 (Eberth Rebuttal).

¹⁰³⁸ Ex. EN-30, Sched. 4 at 13 (Eberth Rebuttal).

¹⁰³⁹ Ex. EN-30, Sched. 4 at 13 (Eberth Rebuttal).

¹⁰⁴⁰ Ex. EN-30, Sched. 4 at 13 (Eberth Rebuttal).

¹⁰⁴¹ Ex. EN-6 at 5 (McKay Direct).

¹⁰⁴² See Ex. EERA-42 at 9-7 to 9-9 (Revised EIS).

¹⁰⁴³ *Id.*

¹⁰⁴⁴ Ex. EERA-42 at 9-1 (Revised EIS).

government has essentially a fiduciary relationship.¹⁰⁴⁵ Tribal sovereignty and the right to self-govern is the central tenet of federal American Indian policy.¹⁰⁴⁶

414. In the 1800s, Indian tribes residing on land now known as Minnesota entered into treaties with the United States government.¹⁰⁴⁷ Under these treaties, the Indian tribes relinquished millions of acres of their homeland to the United States in exchange for the protection of (and from) the government.¹⁰⁴⁸ These treaties recognized and established rights, benefits, and conditions for tribes, including rights to occupy certain land as reservations and, in some cases, the right to use off-reservation land for hunting, fishing, and gathering.¹⁰⁴⁹

i. Property Designated as an Indian Reservation

415. A federal Indian Reservation is an area of land reserved for a tribe or tribes as permanent tribal homelands under a treaty or other agreement with the United States, executive order, federal statute, or administrative action.¹⁰⁵⁰ The U.S. government holds title to the reservation land in trust for the benefit of the tribes.¹⁰⁵¹ The Secretary of the Interior is vested with the authority to administer the trusts.¹⁰⁵² Land held in trust cannot be sold or conveyed by its tribal or individual landowners without federal consent through the Secretary of the Interior.¹⁰⁵³

416. There are 11 federally-recognized American Indian tribes and reservations or communities in Minnesota: seven Anishinaabe (Chippewa and Ojibwe) tribes and reservations, and four Dakota (Sioux) tribes and communities.¹⁰⁵⁴ This Project primarily impacts the reservation lands and treaty-ceded territory rights of the Anishinaabe tribes in northern Minnesota.¹⁰⁵⁵

417. The seven Anishinaabe tribes in Minnesota include: the Bois Forte Band of Chippewa, Fond du Lac Band of Lake Superior Chippewa, Grand Portage Band of Chippewa Indians, Leech Lake Band of Ojibwe, Mille Lacs Band of Ojibwe, Red Lake Band of Chippewa Indians, and White Earth Band of Ojibwe.¹⁰⁵⁶ Five of these tribes are parties to this action: Fond du Lac, Leech Lake, Mille Lacs, Red Lake, and White Earth.

418. Below is map illustrating the location of Existing Line 3, the APR, and the route alternatives (RA-03AM, RA-06, RA-07, and RA-08) in relation to the Indian Reservations located in Minnesota:

¹⁰⁴⁵ *Id.*

¹⁰⁴⁶ *Id.* at 9-2.

¹⁰⁴⁷ *Id.*

¹⁰⁴⁸ Ex. EERA-29 at 9-7 to 9-10.

¹⁰⁴⁹ Ex. EERA-29 at 9-7 to 9-10.

¹⁰⁵⁰ *Id.* at 9-6.

¹⁰⁵¹ *Id.* at 9-5 to 9-6.

¹⁰⁵² *Id.* at 9-6.

¹⁰⁵³ *Id.*

¹⁰⁵⁴ *Id.* at 9-2.

¹⁰⁵⁵ See generally, Ex. EERA-29 at Ch. 9

¹⁰⁵⁶ Ex. EERA-29 at 9-2.

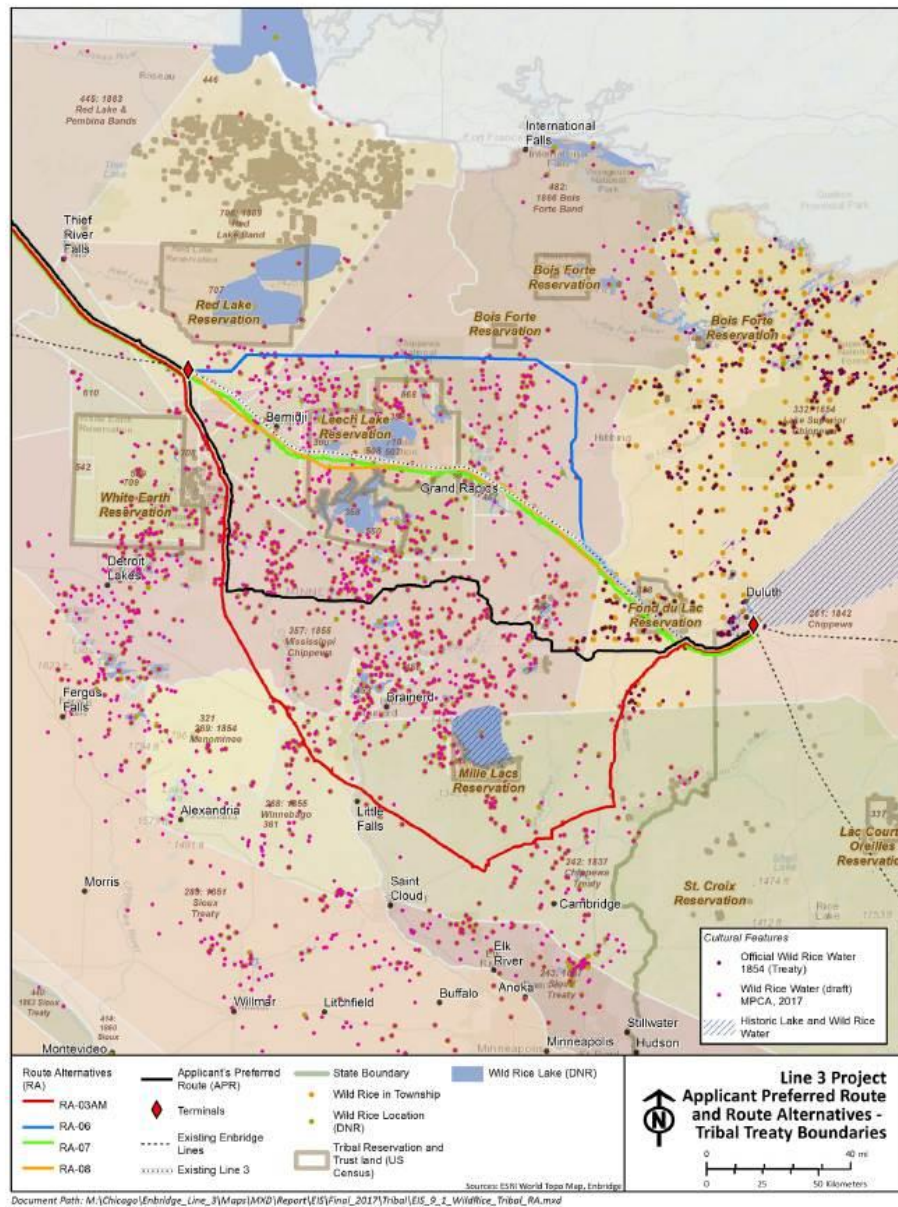


Figure 9-1. Applicant Preferred Route and Route Alternatives - Tribal Treaty Boundaries

419. Enbridge's Mainline and six of Enbridge's pipelines,¹⁰⁵⁷ including Existing Line 3, traverse the Leech Lake and Fond du Lac Reservations.¹⁰⁵⁸

¹⁰⁵⁷ Line 13, the "Southern Lights" diluent line, is not technically part of the Mainline System, although it is an Enbridge pipeline.

¹⁰⁵⁸ Exs. FDL-7, FDL-8A, FDL-9, LL-1, LL-2, LL-3, LL-5, LL-6, LL-7, LL-8, LL-9, LL-10. The six lines include: Lines 1, 2, 3, and 4, Line 67, and the Southern Lights Diluent Line.

420. RA-07 and RA-08 traverse the same two Reservations (Leech Lake and Fond du Lac).¹⁰⁵⁹ RA-06 avoids the Leech Lake Reservation but does cross the Fond du Lac Reservation.¹⁰⁶⁰ The APR and RA-03AM do not cross any Indian Reservations.¹⁰⁶¹

ii. Treaty-Ceded Territories and Usufractory Rights

421. In addition to establishing Indian Reservations, certain treaties entered into between Indian tribes and the federal government in the 1800s reserved for the tribes certain “usufractory” rights to fish, hunt, and gather on the lands ceded by the tribes to the U.S. government.¹⁰⁶² “Usufractory rights” are rights to use or enjoy property that is owned by another person or entity.¹⁰⁶³ The treaty-reserved usufractory rights on off-reservation lands are akin to permanent easements running with the land.¹⁰⁶⁴ These reserved usufractory rights do not give tribes the right to own the property, but rather a right to use the ceded property for certain purposes (fishing, hunting, and gathering).

422. “Treaty-ceded lands” are those lands that Indian tribes relinquished to the U.S. government as part of a treaty.¹⁰⁶⁵ The fact that land is “treaty-ceded” does not, by itself, convey any usufractory rights to the land to any particularly Indian tribe. It merely means that the land was relinquished by the Indians to the United States government under a treaty.

423. Notably, Indians and U.S. government officials entering into these treaties were not on equal footing, as the treaties were written in English and most often conducted under threat of harm to the Indians.¹⁰⁶⁶ Nonetheless, by entering into these treaties, the Indian tribes relinquished their rights to the real property and retained only those rights specifically identified in the treaties.¹⁰⁶⁷ In most treaties, the Indian tribes did not retain any usufractory rights to the ceded lands.

424. The Project crosses property that was originally ceded to the United States under numerous treaties, six of which have been identified by the intervening parties as most applicable to this proceeding:¹⁰⁶⁸ the Treaty with the Chippewa of 1837 (1837 Treaty); the Treaty with the Chippewa of the Mississippi and Lake Superior of 1847, dated August 2, 1847 (Aug. 2, 1847 Treaty); Treaty with the Pillager Band of Chippewa Indians

¹⁰⁵⁹ Ex. EERA-42 at 9-3. Presumably, RA-07 and RA-08 would traverse the property claimed by the Red Lake Band.

¹⁰⁶⁰ Ex. EERA-42 at 9-3.

¹⁰⁶¹ *Id.*

¹⁰⁶² Ex. EERA-42 at 9-7 to 9-9.

¹⁰⁶³ See *Black’s Law Dictionary*, Abridged 6th Ed. (West 1991) at 1073.

¹⁰⁶⁴ Ex. EERA-42 at 9-7, 9-8.

¹⁰⁶⁵ *Id.* at 9-8.

¹⁰⁶⁶ *Id.* at 9-8 to 9-9.

¹⁰⁶⁷ *Id.* at 9-9.

¹⁰⁶⁸ See Ex. HTE-9 (Map of Treaty-Ceded Property). As explained in detail in Ex. EN-99, the Project Area crosses land ceded by the Indians under numerous treaties. However, the ALJ will address only those treaties identified in Ex. HTE-9, as the tribal intervenors have focused on those treaties; and all usufractory rights issues can be adequately addressed, for purposes of this proceeding, by that representative sample.

of 1847, dated August 21, 1847 (Aug. 21 1847 Treaty);¹⁰⁶⁹ 1854 Treaty of LaPointe with the Chippewa of Indians of Lake Superior and the Mississippi (1854 Treaty); Treaty with the Mississippi Chippewa of 1855 (1855 Treaty); and the Treaty with the Chippewa – Red Lake and Pembina Bands of 1863 (1863 Treaty); the Treaty with the Bois Fort Band of 1866 (1866 Treaty); the Treaty with the Chippewa of the Mississippi of 1867 (1867 Treaty); and the Treaty with the Chippewa Indians of 1889 (commonly known as the Nelson Act).¹⁰⁷⁰

425. A map of the treaty-ceded territories in the Project area is set forth below:¹⁰⁷¹

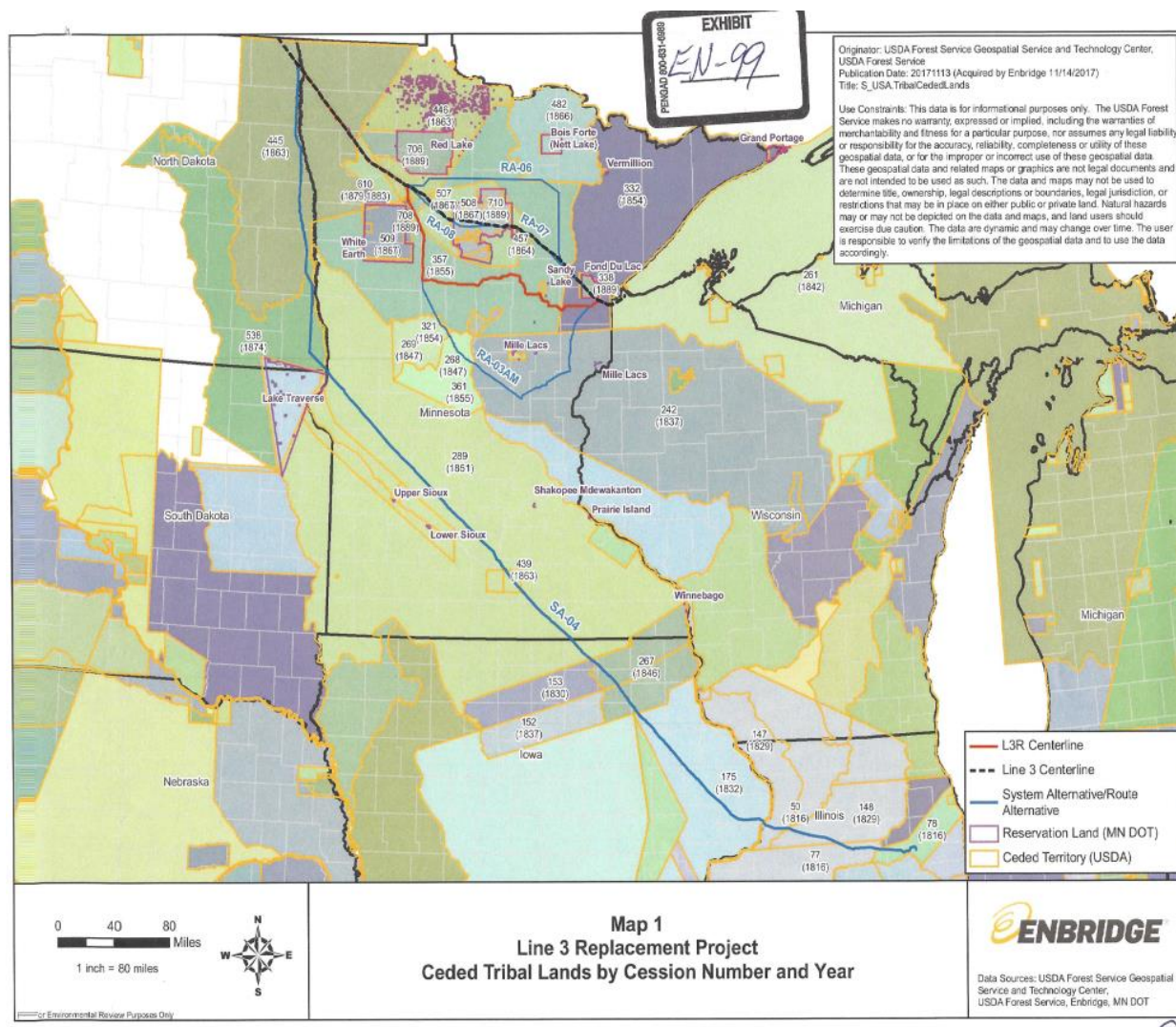


¹⁰⁶⁹ The Treaty with the Chippewa of the Mississippi and Lake Superior of 1847, dated August 2, 1847 (Aug. 2, 1847 Treaty), and the Treaty with the Pillager Band of Chippewa Indians of 1847, dated August 21, 1847 (Aug. 21 1847 Treaty), shall be collectively referred to herein as the “1847 Treaties”.

¹⁰⁷⁰ Pursuant to the Second Am. Notice of Taking Admin. Notice & Opportunity to Object (Mar. 29, 2018) (eDocket No. 20183-141510-01 (CN)), the ALJ takes judicial notice of the fact and content of the identified treaties. Copies of the various treaties are attached to the Notice, as filed in eDockets as Attachment A. Applicant notes that these treaties have the status of law and need not be subject to judicial notice. See Applicant Objections to Proposed Taking of Admin. Notice (Apr. 5, 2018) (eDocket No. 20184-141717-01 (CN)). The ALJ took “judicial notice” of them for the purpose of including paper copies of the documents in the record for the convenience of the public and Commission.

¹⁰⁷¹ Ex. HTE-9 (Treaty Map).

426. A map showing the Project Area, the APR, SA-04, and the Route Alternatives in relation to the treaty-ceded territories is set forth below (see Ex. EN-99 for a key to the cession and treaty numbers):¹⁰⁷²



427. As this map depicts, the Project area crosses land ceded to the U.S. government under a number of treaties, but the ones identified specifically by the tribal intervenors include: the 1837 Treaty; the Aug. 2, 1847 Treaty; the Aug. 21, 1847 Treaty; the 1854 Treaty; the 1855 Treaty; the 1863 Treaty; the 1866 Treaty; the 1867 Treaty, and the 1889 Treaty (the Nelson Act).¹⁰⁷³

¹⁰⁷² Ex. EN-99 (Map 1 – Map of Ceded Tribal Lands).

¹⁰⁷³ See Ex. HTE-9 (Map of Treaty-Ceded Property).

iii. Discussion of Identified Treaties ¹⁰⁷⁴

428. The 1837 Treaty with the Chippewa Nation was the first of the treaties impacting lands in the Project area.¹⁰⁷⁵ The 1837 Treaty took from the Chippewa Indians land located in (what is now) Crow Wing, Morrison, Benton, Mille Lacs, Aitkin, Kanabec, Isanti, Chisago, and Pine Counties.¹⁰⁷⁶ Under the 1837 Treaty, the Indians retained “[t]he privilege of hunting, fishing, and gathering the wild rice, upon the lands, the rivers and the lakes *included in the territory ceded*” “during the pleasure of the President of the United States.”¹⁰⁷⁷ Accordingly, the usufractory rights included in the 1837 Treaty encumber only the territory ceded in the 1837 Treaty and do not extend to other treaty-ceded territories.

429. The APR, SA-04, RA-06, RA-07, and RA-8 do not cross territory ceded under the 1837 Treaty.¹⁰⁷⁸ RA-03AM is the only route alternative that crosses 1837 Treaty-ceded territory.¹⁰⁷⁹

430. In the two 1847 Treaties, the Chippewa of the Mississippi and Lake Superior, and the Pillager Band of Chippewa Indians, ceded to the United States additional territory identified in the maps above.¹⁰⁸⁰ These treaties did not reserve any usufractory rights for the Indian tribes.¹⁰⁸¹

431. The 1854 Treaty ceded additional land to the United States, as depicted in the maps above.¹⁰⁸² It also established reservations for the Fond du Lac, Grand Portage, and Bois Forte Bands.¹⁰⁸³ The 1854 Treaty provided that the Indians who “reside in the territory hereby ceded” “shall have the right to hunt and fish therein until otherwise ordered by the President.”¹⁰⁸⁴ In 1988, the three bands party to the 1854 Treaty (i.e., the Fond du Lac, Grand Portage, and Bois Forte Bands) agreed to restrict hunting, fishing, and wild rice gathering off-reservation property in exchange for annual payments from the state.¹⁰⁸⁵ Fond du Lac later withdrew from that agreement and, in 2017, the Fond du Lac Band and Minnesota executed a Memorandum of Understanding that formalized their practices regarding the Band’s usufractory rights under the 1854 Treaty.¹⁰⁸⁶

¹⁰⁷⁴ This section does not include a discussion of all of the treaty-ceded property crossed by SA-04, as that system alternative involves significantly more distance and other treaties, both inside and outside Minnesota. The intervening tribes have not identified SA-04 as implicating any treaty-ceded usufractory rights.

¹⁰⁷⁵ Treaty with the Chippewa, 1837, 7 Stat. 536; Ex. EERA-42 at 9-9 (Revised EIS).

¹⁰⁷⁶ See EN-99 at Map 1 (Maps of Treaty-Ceded Territories).

¹⁰⁷⁷ Treaty with the Chippewa, 1837, 7 Stat. 536 (Emphasis added).

¹⁰⁷⁸ Ex. EN-99 (Map 1 – Map of Ceded Tribal Lands).

¹⁰⁷⁹ *Id.*

¹⁰⁸⁰ Treaty with the Chippewa of the Mississippi and Lake Superior, 1847, 9 Stat. 904; Treaty with the Pillager Band of Chippewa Indians, 1847, 9 Stat. 908.

¹⁰⁸¹ *Id.*

¹⁰⁸² Treaty with the Chippewa, 1854, 10 Stat. 1109.

¹⁰⁸³ *Id.*

¹⁰⁸⁴ *Id.*

¹⁰⁸⁵ Ex. EERA-42 at 9-9 (Revised EIS).

¹⁰⁸⁶ See https://www.dnr.state.mn.us/aboutdnr/laws_treaties/1854/litigation.html.

432. The APR, Existing Line 3, RA-06, RA-07, and RA-08 all cross a small portion of the 1854 Treaty-ceded territory.¹⁰⁸⁷

433. The 1855 Treaty ceded additional land to the United States, as depicted in the maps above.¹⁰⁸⁸ It also established the Mille Lacs and Leech Lake Reservations.¹⁰⁸⁹ The 1855 Treaty did not reserve any usufractory rights for the Indian tribes.¹⁰⁹⁰ In addition, the 1855 Treaty provided that the tribes “fully and entirely relinquish and convey to the United States, any and all right, title, and interest, of whatsoever nature the same may be, which they may now have in, and to any other lands in the Territory of Minnesota or elsewhere.”¹⁰⁹¹

434. In 1999, in the U.S. Supreme Court ruled that the 1855 Treaty did not abrogate the tribes’ usufractory rights to hunt, fish, and gather in the 1837 Treaty-ceded territory.¹⁰⁹² This decision did not, however, give the tribes usufractory rights to the 1855 Treaty-ceded territory – a separate territory from that ceded under the 1837 Treaty – or any other treaty-ceded territories.¹⁰⁹³

435. The 1863 Treaty ceded additional land to the United States, as depicted in the map above.¹⁰⁹⁴ It also established reservations for the Red Lake and Pembina Bands.¹⁰⁹⁵ The 1863 Treaty did not reserve any usufractory rights for the Indian tribes with respect to the land ceded under that treaty.¹⁰⁹⁶

436. The 1866 Treaty ceded additional land to the United States, as depicted in the maps above.¹⁰⁹⁷ It also established a reservation for the Bois Fort Band.¹⁰⁹⁸ The 1866 Treaty did not reserve any usufractory rights for the Bois Fort Band with respect to the land ceded under the treaty.¹⁰⁹⁹

437. The 1867 Treaty ceded additional land to the United States as depicted in the maps above.¹¹⁰⁰ It also established the White Earth Reservation and added land to the Leech Lake Reservation.¹¹⁰¹ The 1867 Treaty did not reserve any usufractory rights for the Chippewa with respect to the land ceded under the treaty.¹¹⁰²

¹⁰⁸⁷ Ex. EN-99 (Treaty-ceded Territory Map).

¹⁰⁸⁸ Treaty with the Chippewa, 1855, 10 Stat. 1165.

¹⁰⁸⁹ *Id.*

¹⁰⁹⁰ *Id.*

¹⁰⁹¹ *Id.*

¹⁰⁹² See *Minnesota v. Mille Lacs Band of Chippewa Indians, et al.*, 526 U.S. 172 (1999).

¹⁰⁹³ *Id.*

¹⁰⁹⁴ Treaty with the Chippewa -- Red Lake and Pembina Bands, 1863, 13 Stat. 667.

¹⁰⁹⁵ *Id.*

¹⁰⁹⁶ *Id.*

¹⁰⁹⁷ Treaty with the Chippewa – Bois Fort Band, 1866, 14 Stat. 765.

¹⁰⁹⁸ *Id.*

¹⁰⁹⁹ *Id.*

¹¹⁰⁰ Treaty with the Chippewa of the Mississippi, 1867, 16 Stat. 719.

¹¹⁰¹ *Id.*

¹¹⁰² *Id.*

438. In 1871, Congress discontinued the practice of treaty-making with Indian tribes, but expressly provided that all previously-enacted treaties would remain in force.¹¹⁰³ The United States Constitution expressly recognizes treaties as “the supreme law of the land.”¹¹⁰⁴

439. In 1889, Minnesota passed the “Act for the Relief and Civilization of the Chippewa Indians in the State of Minnesota,” commonly known as the “Nelson Act.”¹¹⁰⁵ It allowed the President to create a Commission to “negotiate” with the Chippewa tribes in Minnesota for the relinquishment of their title to reservation lands, with the exception of the White Earth and Red Lake Reservations.¹¹⁰⁶ The Act was intended to relocate all the Anishinaabe people in Minnesota to the White Earth Indian Reservation, and to expropriate the vacated reservation land for sale to non-Indians. This Act did not reserve any usufractory rights to the Indian tribes.¹¹⁰⁷

iv. The APR and Route Alternatives and Usufractory Rights

440. As set forth above, the only treaties in which Indian tribes retained usufractory rights to property are the 1837 and 1854 Treaties. Accordingly, only the land ceded under those two treaties are subject to usufractory rights claims by the tribes who were signatories to those two treaties. Indian tribes did not retain usufractory rights in or to any of the other treaty-ceded territories.

441. RA-03AM is the only route or route alternative that crosses 1837 Treaty-ceded territory.

442. Existing Line 3, the APR, RA-06, RA-07, RA-08, and SA-04 do not cross 1837 Treaty-ceded territory. Therefore, any usufractory rights retained by the tribes under the 1837 Treaty do not apply to these routes.

443. Existing Line 3, RA-06, RA-07, and RA-08 do cross territory ceded under the 1854 Treaty located in Carlton County. The only tribes that can arguably claim usufractory rights under the 1854 Treaty are the Fond du Lac, Grand Portage, and Bois Forte Bands.

v. Tribal Easements and Rights of Way

444. The background about Indian Reservations, treaty-ceded territory, and usufractory rights is important to understand when reviewing the circumstances surrounding Applicant’s request to open a new pipeline corridor through Minnesota that

¹¹⁰³ Ex. EERA-42 at 9-5 (Revised EIS).

¹¹⁰⁴ U.S. Const. art. VI, cl. 2. “The Constitution and the laws of the United States which shall be made in pursuance thereof; and all treaties made, or which shall be made, under the authority of the United States shall be the supreme law of the land...”

¹¹⁰⁵ An Act for the Relief and Civilization of the Chippewa Indians in Minnesota, 50 Cong. Ch. 24, 1889, 25 Stat. 642.

¹¹⁰⁶ *Id.*

¹¹⁰⁷ *Id.*

avoids Indian Reservations and certain treaty-ceded territories. It is also important to understand when reviewing the various routes and the system alternatives in this case.

445. Existing Line 3 and five other of Enbridge's pipelines (Lines 1, 2, 4, 13, and 67) traverse both the Leech Lake and Fond du Lac Reservations.¹¹⁰⁸ Existing Line 3 traverses approximately 46 miles through the Leech Lake Reservation and approximately 11 miles through the Fond du Lac Reservation.¹¹⁰⁹

446. Under federal law, the U.S. Secretary of the Interior is empowered to grant rights-of-way over and across lands held in trust by the United States for Indian tribes, communities, bands, or nations.¹¹¹⁰ The Secretary of the Interior, by and through the Bureau of Indian Affairs (BIA), limits rights-of-way for oil and gas purposes through Indian reservation lands to a term of 20 years.¹¹¹¹ Indian tribes and the BIA can only grant pipeline easements for a period of 20 years at a time. At the expiration of the 20-year term, the easement must be renegotiated, preventing a perpetual easement over tribal property. In addition, a utility cannot use eminent domain to acquire pipeline rights-of-way across federal Indian reservation lands.¹¹¹²

447. To give Applicant the right to place and, thereafter, maintain Existing Line 3 (and five other pipelines) on the Leech Lake and Fond du Lac Reservations, both Tribes had to voluntarily execute a grant of easement for right-of-way to Applicant. An evaluation of those easement agreements – and the current sentiment among tribes about pipelines running through tribal property – shed light on why Applicant has chosen to pursue a new route for Existing Line 3 outside of the Mainline corridor. It also brings into question whether Applicant will be required to remove Existing Line 3 from the Reservations if the Commission allows the line to be abandoned in-place, as proposed. Moreover, it begs the question of what will happen in 2029 when the existing easements for these six pipelines in the Mainline corridor expire.

448. Between 1950 and 1973, Applicant's predecessor, Lakehead Pipeline Company (Lakehead), constructed Line 1, Line 2, Existing Line 3, and Line 4 across the Fond du Lac and Leech Lake Reservations.¹¹¹³

449. Documentation of these easement agreements has been difficult to obtain from the parties and only scant documents have been produced. From these documents, it appears that, in 1954, Lakehead obtained its first easements from the Department of the Interior for the construction of Lakehead's first two pipelines (Lines 1 and 2) across

¹¹⁰⁸ Exs. FDL-9; LL-9.

¹¹⁰⁹ Evid. Hrg. Tr. Vol. 10A at 73 (Brown).

¹¹¹⁰ 25 U.S.C. § 323.

¹¹¹¹ See 25 C.F.R. § 169.201(c).

¹¹¹² Ex. EERA-42 at ES-8 (Revised EIS).

¹¹¹³ Ex. FDL-9 at 2 (FDL Settlement Agreement); Ex. LL-2 (LL Resolution 2009-170), LL-3 (LL Resolution 2009-122).

the Fond du Lac and Leech Lake Reservations.¹¹¹⁴ The term of these easements was 20 years.¹¹¹⁵

450. In approximately 1962, Lakehead requested additional right-of-way to install another pipeline (Existing Line 3) on the two Reservations and an extension of the previously existing easements.¹¹¹⁶ In furtherance of this agreement, the Tribal Executive Committee executed a Resolution No. 6, agreeing to an additional right-of-way for Existing Line 3 for a term of 50 years.¹¹¹⁷ Lakehead agreed to pay \$6,400 for a 50-year right-of-way across the two Reservations for the construction of Existing Line 3 and the extension of the existing easements for the previous two pipelines (Lines 1 and 2).¹¹¹⁸ The Department of Interior granted approval of the easements in approximately 1962 and 1963.¹¹¹⁹ The 50-year term of these easements would expire in approximately 2013.

451. Sometime after 1962, Lakehead constructed Line 4 across the two Reservations. No information is in the record regarding the original easements obtained for Line 4.

452. In 2009, Applicant sought to construct two additional pipelines across the two Reservations: Line 13, the Southern Lights diluent line (Line 13); and Line 67, the Alberta Clipper Line (Line 67).¹¹²⁰ To install these two new lines in the Mainline corridor near existing Lines 1, 2, 3, and 4, Applicant needed to obtain new easements from the two tribes.¹¹²¹ At this time, the existing easements for Lines 1, 2, 3, and 4 were close to expiration.¹¹²² Therefore, Applicant engaged in negotiations with the tribes to purchase new easements for Lines 13 and 67, and “renew” the existing easements for Lines 1, 2, 3, and 4, thereby allowing all six lines to be included in one easement agreement, having the same 20-year term.¹¹²³

453. To accomplish these goals, Applicant entered into settlement agreements with both tribes.¹¹²⁴ These settlement agreements are similar, but different; and both resulted in easement agreements approved by the BIA.¹¹²⁵

a. Fond du Lac Easement Agreement

454. In its settlement agreement with Applicant (FDL Settlement Agreement), Fond du Lac agreed to grant to Applicant a right-of-way easement for the “construction,

¹¹¹⁴ Ex. LL-7 (LL Pre-2009 Easement Documents).

¹¹¹⁵ *Id.*

¹¹¹⁶ Ex. LL-6 at 3, 26 (LL Pre-2009 Easement Documents).

¹¹¹⁷ Ex. LL-7 at 5 (LL Pre-2009 Easement Documents).

¹¹¹⁸ Ex. LL-6 at 8 (LL Pre-2009 Easement Documents).

¹¹¹⁹ Ex. LL-6 at 1, 27 (LL Pre-2009 Easement Documents).

¹¹²⁰ Ex. FDL-9 (FDL Settlement Agreement); LL-3 (LL Settlement Agreement).

¹¹²¹ Exs. FDL 9 (FDL Settlement Agreement); LL-3 (LL Settlement Agreement).

¹¹²² Exs. FDL 9 (FDL Settlement Agreement); LL-3 (LL Settlement Agreement).

¹¹²³ Exs. FDL-7 (FDL Easement); LL-1 (LL Easement).

¹¹²⁴ Exs. FDL-9 (FDL Settlement Agreement); LL-3 (LL Settlement Agreement).

¹¹²⁵ Exs. FDL-9 (FDL Settlement Agreement); FDL-7 (FDL Easement); LL-3 (LL Settlement Agreement); LL-1 (LL Easement Agreement).

operation, maintenance, inspection, and repair activities (including pipe replacement if required for safe and reliable operations) associated with the Existing Pipelines” (Lines 1, 2, 3, 4) and the two new pipelines (Lines 13 and 67).¹¹²⁶ Thus, under the express terms of the FDL Settlement Agreement, Applicant is granted the right to replace Existing Line 3 within the right-of-way, which would include in-trench replacement, until 2029.¹¹²⁷

455. In compliance with the FDL Settlement Agreement, the Fond du Lac Reservation Business Committee passed a resolution approving a 20-year right-of-way, with no renewal, for the “Existing Pipelines” (Lines 1, 2, 3, 4) and for the new pipelines (Lines 13, and 67).¹¹²⁸

456. Under the FDL Settlement Agreement, Fond du Lac is required to cooperate and assist in obtaining all required consents, approvals, and permits for the right-of-way from the BIA.¹¹²⁹ To that end, the Band requested a Grant of Easement for Right-of-Way from the BIA consistent with the FDL Settlement Agreement.¹¹³⁰ The BIA approved and issued the Grant of Easement for Right-of-Way on December 11, 2009 (FDL Easement).¹¹³¹ The FDL Easement conveyed to Applicant an easement for right-of-away for the following purposes:

- Construction, operation and maintenance of new 36-inch diameter and 20-inch diameter liquid petroleum pipelines on certain restricted and allotted lands identified as “NEW” in EXHIBITS A-R, *as well as the renewal of existing rights-of-way grants to provide for the continued operation and maintenance* of 18-inch, 26-inch, 34-inch [Existing Line 3], and 48-inch liquid petroleum pipelines identified as ‘RENEWAL’; and
- All existing, previously granted rights-of-way made to the Grantee [Applicant] or its predecessor (Lakehead Pipelines) will expire with the grant of easement, regardless of term remaining for previously granted rights-of-way.¹¹³²

457. The FDL Easement thus gave Applicant a new 20-year easement for Line 1, Line 2, Existing Line 3, and Line 4 across the Fond du Lac Reservation.

458. While the FDL Easement does not specifically mention replacement of the pipelines like the FDL Settlement Agreement does, it is apparent that the purpose and intent of the FDL Easement is to implement the terms of the FDL Settlement Agreement and to convey to Applicant all of the property rights the tribe agreed to (and was paid for)

¹¹²⁶ Ex. FDL-9 (FDL Settlement Agreement).

¹¹²⁷ *Id.*

¹¹²⁸ Ex. FDL-8A (Resolution).

¹¹²⁹ *Id.*

¹¹³⁰ Ex. FDL-7 (FDL Easement).

¹¹³¹ *Id.*

¹¹³² *Id.* at 1 (Emphasis added). Presumably, the last paragraph of this provision means that any existing easement rights for the oil pipelines (Lines 1, 2, 3, and 4) are replaced by a new 20-year new easement, consistent with the FDL Settlement Agreement and FDL Resolution.

under the FDL Settlement Agreement. Thus, when read together, the FDL Settlement Agreement, FDL Resolution, and FDL Easement allow Applicant to replace Existing Line 3 in the easement area during the term of the easement (i.e., until 2029).

459. In exchange for the FDL Easement, Applicant agreed:

- “to restore the land to its original condition, as far as is reasonably possible, upon termination or revocation of this easement for any reason”;
- “upon revocation or termination of the right-of-way, the applicant shall, so far as is reasonably possible, restore the land to its original condition. The determination of “reasonably possible” is subject to [the Secretary of Interior’s] approval.”¹¹³³

460. The FDL Easement further provides that:

This easement is subject to any prior valid existing right or adverse claim and is granted for 20 years, and *is granted in replacement of all existing rights-of-way currently held by the GRANTEE [Applicant]* so long as said easement shall actually be used for the purposes specified; PROVIDED, that this right-of-way may be terminated in whole or in part by the GRANTOR [BIA] for any of the following causes upon 30 days written notice...:

1. Failure to comply with any term or condition of the Grant, or the applicable regulations.
2. A non-use of the right-of-way for any consecutive two-year period (for the purposes of which it was granted).
3. An abandonment of the right-of-way, as determined by the BIA.¹¹³⁴

461. When read together, the FDL Settlement Agreement, FDL Resolution, and FDL Easement give to Applicant an easement for Lines 1, 2, Existing Line 3, Line 4, Line 13, and Line 67 for 20 years from December 11, 2009.¹¹³⁵ The easements will, thus, expire in December 2029, unless earlier terminated by the BIA.¹¹³⁶

462. As set forth above, the FDL Easement gives the BIA a right to terminate the FDL Easement before 2029 for breach of the parties’ agreement, non-use of the right-of-way, or abandonment of the right-of-way.¹¹³⁷ Thus, if Existing Line 3 is abandoned in-

¹¹³³ Ex. FDL-7 at 2 (FDL Easement).

¹¹³⁴ *Id.* at 3 (Original emphasis removed and replaced with new emphasis).

¹¹³⁵ Exs. FDL-7 (FDL Easement); FDL-8A (FDL Resolution); FDL-9 (FDL Settlement Agreement).

¹¹³⁶ *Id.*

¹¹³⁷ Ex. FDL-7 at 2 (FDL Easement).

place or is no longer in use, it is possible that the BIA could declare the easement terminated as it pertains to Existing Line 3.¹¹³⁸

463. Upon termination of the FDL Easement, Applicant is obligated to restore the land to its “original condition,” if “reasonably possible.”¹¹³⁹ Whether full restoration is “reasonably possible” will be left to the sole discretion of the BIA, not Enbridge.¹¹⁴⁰ Accordingly, upon the termination of the FDL Easement (either by BIA early termination or by natural expiration), the BIA has the right to require Applicant to remove the pipe from the Fond du Lac Reservation to restore the land to its original condition.¹¹⁴¹

464. There are approximately 13.25 miles of Existing Line 3 on the Fond du Lac Reservation.¹¹⁴²

b. Leech Lake Easement Agreements

465. Applicant reached similar agreements with the Leech Lake Band in 2009.

466. In May 2009, Leech Lake entered into a settlement agreement with Applicant (LL Settlement Agreement) granting Applicant a “renewal” of its existing “right-of-way license” for Lines 1, 2, 3, and 4, and issuance of a new “right-of-way license” for Lines 13 and 67.¹¹⁴³ The term of the licenses was for 10 years with “the right to extend” the leases for another 10 years.¹¹⁴⁴ The LL Settlement Agreement expressly combined the existing license for Lines 1, 2, 3, and 4; and the new license for Lines 13 and 67 into the same 10-year term, automatically renewable for 10 additional years.¹¹⁴⁵

467. Unlike the FDL Settlement Agreement, the LL Settlement Agreement does not specifically address replacement of the existing pipelines as part of the permitted uses of the easement.¹¹⁴⁶ Rather, the LL Settlement Agreement simply renews the existing leases for Lines 1, 2, 3, and 4.¹¹⁴⁷

468. To effectuate the LL Settlement Agreement, the Leech Lake Reservation Business Council passed Resolution 2009-122 declaring that it would “grant all necessary permits and leases for a term of 10 years + 10 years” for the existing pipelines and the new pipelines.¹¹⁴⁸ Shortly thereafter, the Council passed Resolution 2009-170, which adopted and incorporated all of the terms of the LL Settlement Agreement; and authorized

¹¹³⁸ Early termination would be complicated by the fact that the FDL Easement is not just for Existing Line 3. It is an easement for Lines 1, 2, 3, 4, 13, and 67. Because the FDL Easement is for both the “old” pipelines (Lines 1, 2, 3, and 4) and the “new” pipelines (Lines 13 and 67), it is unknown if the BIA can terminate only a portion of the easement (i.e., the portion of the easement related just to Existing Line 3).

¹¹³⁹ Ex. FDL-7 at 2 (FDL Easement).

¹¹⁴⁰ *Id.*

¹¹⁴¹ Ex. FDL-7 at 2 (FDL Easement).

¹¹⁴² Ex. FDL-9 at 1 (FDL Settlement Agreement).

¹¹⁴³ Ex. LL-3 (LL Settlement Agreement).

¹¹⁴⁴ *Id.*

¹¹⁴⁵ *Id.*

¹¹⁴⁶ *Id.*

¹¹⁴⁷ *Id.*

¹¹⁴⁸ Ex. LL-9 (LL Resolution 2009-122).

the Council to take such actions to assist Applicant in obtaining approvals from the BIA to grant the property rights described in the LL Settlement Agreement.¹¹⁴⁹

469. On November 9, 2009, the BIA issued a Grant of Easement for Right-of-Way (LL Easement) for the construction, operation, and maintenance of Lines 13 and 67, as well as a renewal of existing rights-of-way for the continued operation and maintenance of Lines 1, 2, 3, and 4.¹¹⁵⁰ By the terms of the LL Easement, the renewal superseded the previous grant of easement for Lines 1, 2, 3, and 4.¹¹⁵¹

470. The term of the LL Easement is 20 years from November 13, 2009 (not separate, automatically renewable 10-year terms, as indicated in the LL Settlement Agreement).¹¹⁵² Thus, as with Fond du Lac Reservation, Applicant holds a 20-year easement across the Leech Lake Reservation for Lines 1, 2, 3, 4, 13, and 67.¹¹⁵³ Both the LL Easement and the FDL Easement expire in 2029.¹¹⁵⁴

471. The terms of the FDL Easement and LL Easement are nearly identical except for the name of the tribe and the description of affected lands.¹¹⁵⁵ In both easements, Applicant agrees to restore the land to its original condition, as far as is reasonably possible, upon termination or revocation of the easement.¹¹⁵⁶ In addition, both easements authorize the BIA to terminate the easements prior to expiration on the bases of breach, non-use, and abandonment, as described more fully above.¹¹⁵⁷

472. Based upon the settlement agreements, resolutions, and easement agreements between the two tribes and Applicant, it is clear that Applicant will need to renegotiate a new easement for Lines 1, 2, 3,¹¹⁵⁸ and 4, as well as Lines 13 and 67, before 2029 unless Applicant intends to simply abandon all of those lines and install new ones in a new corridor outside the Reservations, like Applicant is proposing for Existing Line 3. In other words, regardless of what happens with Line 3 in these proceedings, by 2029, Applicant will need to renew its pipeline easements with the Leech Lake and Fond du Lac Bands to continue operating (and locating) five of its pipelines on the two Reservations.

473. Leech Lake has publicly expressed that it “will not allow any replacement of Line 3 whether in trench or alongside the current Line 3.”¹¹⁵⁹ In addition, on November 27, 2017 (after the close of the evidentiary hearing), the Leech Lake Tribal Council passed Resolution No. LD2018-073, which declares:

¹¹⁴⁹ Ex. LL-8 (LL Resolution 2009-170).

¹¹⁵⁰ Ex. LL-1 (LL Easement).

¹¹⁵¹ *Id.*

¹¹⁵² *Id.*

¹¹⁵³ *Id.*

¹¹⁵⁴ Exs. FDL-7 (FDL Easement); LL-1 (LL Easement).

¹¹⁵⁵ Exs. FDL-7 (FDL Easement); LL-1 (LL Easement).

¹¹⁵⁶ Exs. FDL-7 (FDL Easement); LL-1 (LL Easement).

¹¹⁵⁷ Ex. LL-1 (LL Easement).

¹¹⁵⁸ If Existing Line 3 remains in service.

¹¹⁵⁹ Ex. LL-4 (LL Official Statement); see *a/so*, Evid. Hrg. Tr. Vol. 10A at 70-167 (Brown).

- That the Leech Lake Tribal Council does hereby with today's resolution proclaim any attempt by any entity of the State of Minnesota to approve a route across the Leech Lake Indian Reservation as an attack on tribal sovereignty; and
- That the Leech Lake Tribal Council does hereby warn that any attempt to cross the Leech Lake Indian Reservation will lead to conflict; and
- That the Leech Lake Tribal Council will not approve a route across the Leech Lake Indian Reservation.¹¹⁶⁰

474. While Leech Lake has expressed that it will not allow the placement of a new Line 3 through its Reservation, the Tribe does not have legal authority to prevent Applicant from continuing to operate and maintain Existing Line 3 within the Leech Lake Reservation. The LL Easement gives Applicant full legal right to continue operating and maintaining Existing Line 3 on the Reservation, along with Lines 1, 2, 4, 13, and 67, until 2029.¹¹⁶¹

c. Summary of Tribal Easements Findings

475. Given Leech Lake's current position on Line 3, it is reasonable to assume that Applicant may have difficulty renewing its current easement for the existing Lines 1, 2, 3, 4, 13, and 67 in the years leading up to 2029. Therefore, it is understandable why Applicant would want to create a new corridor where it can obtain perpetual easements from private landowners and avoid tribal lands altogether. It is also reasonably foreseeable that Applicant will seek to re-route its existing lines outside of the Leech Lake and Fond du Lac Reservations in the near future.

476. Because Applicant will need to seek renewal before 2029 of the existing easements for five other lines currently traversing the Fond du Lac and Leech Lake Reservations, Applicant could include the new Line 3 in that negotiation process. Given this fact, and the fact that Applicant is arguably entitled to replace Line 3 under the terms of the FDL Settlement Agreement, in-trench replacement of Line 3 is not an impossibility.

477. If the Tribes will not agree to new easements by 2029, then Applicant will no longer be able to operate its six lines through the Reservations after 2029. This is a risk that Applicant assumed in 2009 when it installed two more pipelines through the Reservations. Applicant's ability or inability to obtain tribal approval for its pipelines is a matter outside of the scope of this proceeding. Also, if Applicant is unable to procure a renewal of its easements through the Leech Lake and Fond du Lac Reservations by 2029, six pipelines of the Mainline System located in Minnesota will no longer be able to operate in their current locations. Therefore, Applicant has a much larger issue to address with the tribes than just Existing Line 3.

¹¹⁶⁰ Ex. LL-10 (LL Resolution LD2018-073).

¹¹⁶¹ Ex. LL-1 (LL Easement).

H. Shipping Agreement, Nominations, and Apportionment

478. To understand Applicant's allegations of need, it is important to understand how the transportation of oil on the Mainline System is conducted.

479. The Enbridge Mainline is operated as a common-carrier system, which subjects it to certain non-discrimination regulations under the United States Interstate Commerce Act.¹¹⁶² As a common carrier, Enbridge is required to provide service to all shippers without undue discrimination or preference.¹¹⁶³ All shippers are treated alike and have the same opportunities to ship on the Mainline System.¹¹⁶⁴ No shipper is given preference over others.¹¹⁶⁵

i. "Pay-as-you-go" vs. "Take-or-Pay" Shipping Systems

480. Unlike other types of pipelines, the Mainline System operates on a pay-as-you-go system, without long-term contracts with shippers.¹¹⁶⁶ Shippers pay only for the amount of crude they ship on the line.¹¹⁶⁷ This is in contrast to other pipelines, like the Keystone XL pipeline, that operate on long-term "take or pay" contracts, which require shippers to transport a designated minimum amount of crude each month or pay for that minimum amount, whether or not the minimum amount was actually shipped.¹¹⁶⁸

481. Under the long-term "take-or-pay" contracts, shippers commit in advance to pay for the capital cost of a pipeline project by agreeing to ship a certain amount of oil through the line each month, or pay for that amount even if they do not ship it.¹¹⁶⁹ These commitments are generally made before a pipeline is built. Thus, pipelines built under "take-or-pay" shipping contracts are assured that most or all of the capital costs of the project will be covered by its customers, whether or not the demand for the oil exists.¹¹⁷⁰ This is because it commits shippers to long-term payments (through payment for shipments or payments-in-lieu-of-shipments), even if demand for oil or supply of oil changes in the future.¹¹⁷¹

482. In contrast, with the "pay-as-you-go," month-to-month system, like Enbridge's Mainline System and the Proposed Line 3, shippers are not required to ship any specific amounts of oil on the line in any given month.¹¹⁷² A shipper can ship as little oil as it wants or as much oil as the pipeline has capacity to ship on any particular

¹¹⁶² Ex. EN-19 at 11 (Glanzer Direct).

¹¹⁶³ Ex. EN-19 at 11 (Glanzer Direct).

¹¹⁶⁴ Ex. EN-19 at 11 (Glanzer Direct).

¹¹⁶⁵ Ex. EN-19 at 11 (Glanzer Direct).

¹¹⁶⁶ Evid. Hrg. Tr. Vol. 9A 72-73 (Van Heyst); Ex. EN-14 at 6 (Fleeton Direct).

¹¹⁶⁷ Evid. Hrg. Tr. Vol. 9A 72-73, 92 (Van Heyst).

¹¹⁶⁸ Evid. Hrg. Tr. Vol. 9A at 67-72, 92 (Van Heyst).

¹¹⁶⁹ Evid. Hrg. Tr. Vol. 9A at 23 (Kahler); 67-72 (Van Heyst).

¹¹⁷⁰ Evid. Hrg. Tr. Vol. 9A at 84-85 (Van Heyst).

¹¹⁷¹ Evid. Hrg. Tr. Vol. 9A at 84-85 (Van Heyst).

¹¹⁷² Evid. Hrg. Tr. Vol. 9A at 72-73, 86 (Van Heyst); Evid. Hrg. Tr. Vol. 1B at 110-11 (Fleeton).

month.¹¹⁷³ Each month is a new contract, with new nominations by a variable group of shippers, none of whom are in long-term contracts with the pipeline company.¹¹⁷⁴

483. With respect to Enbridge's Mainline System, the rate that Applicant charges to transport oil on the pipelines is called a tariff.¹¹⁷⁵ Tariff amounts are negotiated between the Representative Shippers Group (RSG) and Applicant generally every five years, and are confirmed in an agreement called a Competitive Toll Settlement (CTS).¹¹⁷⁶ The tariff is then approved by the Federal Energy Regulatory Commission (FERC), and Applicant is paid when the shippers transport oil on the Mainline System.¹¹⁷⁷

484. As set forth above, when Applicant was considering replacing Existing Line 3, it entered into negotiations with its RSG for a surcharge (a toll charged to shippers in addition to the tariff) that shippers would pay for each barrel of oil it ships on the new Line 3.¹¹⁷⁸ This "Line 3 Surcharge," which is between \$0.75 and \$0.80 per barrel of oil (depending on the year of shipment), would then be used, over time, to pay the capital costs of the new Line 3.¹¹⁷⁹

485. Because there are no long-term contracts with shippers, there is nothing that compels shippers to use the line.¹¹⁸⁰ A shipper's only obligation to Applicant is to pay the agreed-upon tariff and surcharge should that shipper actually use the line. Thus, if demand for crude oil is reduced, shippers are not committed to ship on the line and the pipeline may not recover the capital or operating costs of the Project, resulting in the possibility of a penalty or increased tolls to the shippers in future years.¹¹⁸¹

486. This type of financing arrangement was originally described as a "build-and-they-will-come" pipeline; meaning, build the pipeline and shippers will come to use it because it is an available, efficient form of transportation.¹¹⁸² This type of system works as long as there continues to be sufficient supply and demand for the oil such that producers (i.e., shippers) continue to nominate shipments on the line each month in sufficient amounts to cover the capital and operating costs of the line – and so long as other forms of transportation or other pipelines are more expensive or otherwise less desirable than Line 3.¹¹⁸³ Put simply, because the proposed Project will operate on a "pay-as-you-go" basis, and because shippers only pay for the costs of the new line if they use it, there is no real "downside" for shippers to support this Project and seek a new line.

¹¹⁷³ Evid. Hrg. Tr. Vol. 1B at 110-111 (Fleeton)

¹¹⁷⁴ Evid. Hrg. Tr. Vol. 9A at 72-73, 86 (Van Heyst).

¹¹⁷⁵ Evid. Hrg. Tr. Vol. 1B at 108-109 (Fleeton).

¹¹⁷⁶ Evid. Hrg. Tr. Vol. 1B at 108-109; 121 (Fleeton).

¹¹⁷⁷ Evid. Hrg. Tr. Vol. 1B at 108 (Fleeton).

¹¹⁷⁸ Ex. EN-1 at Appendix D (Issue Resolution Sheet).

¹¹⁷⁹ Ex. EN-1 at Appendix D (Issue Resolution Sheet).

¹¹⁸⁰ Evid. Hrg. Tr. Vol. 1B at 110-111 (Fleeton).

¹¹⁸¹ Evid. Hrg. Tr. Vol. 9A at 40 (Kahler); 73-74 (Van Heyst). While Applicant can apply to recover any undepreciated capital costs, it must do so through a toll, which, again, is not paid unless shippers actually use the line. Ex. EN-1 at Appendix D (RSG Issue Resolution Sheet).

¹¹⁸² Evid. Hrg. Tr. Vol. 9A at 73, 93-94 (Van Heyst).

¹¹⁸³ Evid. Hrg. Tr. Vol. 9A at 94-95 (Van Heyst).

487. It stands to reason that producers of Canadian tar sands oil want to have as many shipping options as possible to move their product to and through the United States for sale (within or outside of the U.S.).¹¹⁸⁴ To do that, they need pipelines.¹¹⁸⁵ The more pipelines there are, the easier and more economical it is for shippers to ship and refiners to receive oil.¹¹⁸⁶ The more options refiners have to receive crude oil and the more type of oil there is available to them in the market, the more competitive the supply market and the most profitable their business becomes.¹¹⁸⁷ Accordingly, there are incentives for shippers and refiners to support this Project.

488. At the same time, shippers are not obligated to use the new Line 3 if other pipelines become available that are more economically desirable.¹¹⁸⁸ While shippers, as a whole, are responsible for a majority (75 percent) of the capital costs of the Proposed Line 3,¹¹⁸⁹ this cost is only recouped by Applicant through the Line 3 Surcharge when shippers actually use the line.¹¹⁹⁰ If shippers do not use the line to pay the tariff and surcharge, these costs will not get fully recouped by Applicant. (This is true even if the toll increases over the years due to unexpectedly low use.)

489. Ultimately, the Line 3 Surcharge will be passed on to refiners, who then pass on the costs to consumers of refined petroleum products.¹¹⁹¹ In this way, the financial risk of the Project to Canadian oil producers and shippers who are supporting the new line (i.e., Applicant's "customers") is minimal. The shippers will only be responsible for the costs if they actually use the line.¹¹⁹² If they do not use the line, the shippers will not be charged.¹¹⁹³ If they do use the line, these costs can be passed on to customers and consumers.¹¹⁹⁴

ii. Nominations and Apportionment

490. To begin the shipping process on the Mainline System, shippers make requests or "nominations" for transportation of specific types of crude from receipt point(s) in Western Canada and North Dakota to downstream delivery points throughout the United States.¹¹⁹⁵ These nominations are allocated by Applicant between the crude oil

¹¹⁸⁴ Ex. EN-14 at 4 (Fleeton Direct) ("Similarly, producers seek access to as many markets as possible in order to attract the best price for each barrel and be in a position to sell all of their production in a month.")

¹¹⁸⁵ *Id.*

¹¹⁸⁶ Ex. EN-14 at 3-4 (Fleeton Direct). ("...refiners seek access to a multitude of crude oil sources so that they are in a competitive position and receive the most economic crude oil...."[R]efiners are acutely interested in ensuring that this is sufficient pipeline capacity to get their crude oil to their refinery....")

¹¹⁸⁷ Ex. EN-14 at 3-4 (Fleeton Direct).

¹¹⁸⁸ Evid. Hrg. Tr. Vol. 9A at 66 (Van Heyst) ("There is no obligation to make nominations..."); Evid. Hrg. Tr. Vol. 9A at 86 (Van Heyst), Evid. Hrg. Tr. Vol. 9A at 88 (Van Heyst); Evid. Hrg. Tr. Vol. 1B at 110-111 (Fleeton).

¹¹⁸⁹ Ex. EN-1 at App. D (RSG Issue Resolution Sheet).

¹¹⁹⁰ Ex. EN-1 at App. D (RSG Issue Resolution Sheet); Evid. Hrg. Tr. Vol. 1B at 110-111 (Fleeton).

¹¹⁹¹ Ex. FOH-6 at ii (Joseph Direct).

¹¹⁹² Evid. Hrg. Tr. Vol. 1B at 110-111 (Fleeton).

¹¹⁹³ *Id.*

¹¹⁹⁴ Ex. FOH-6 at ii (Joseph Direct).

¹¹⁹⁵ Ex. SH-1 at 4 (Shippers Direct).

type and the designated use of the particular line (i.e., light, heavy, or mixed service).¹¹⁹⁶ There is no discrimination between shippers.¹¹⁹⁷ Thus, every shipper that wants to ship on Line 3 will have equal access to the operating capacity of the line.¹¹⁹⁸

491. Apportionment occurs when shippers request the transportation of more crude oil than the pipeline system can accommodate.¹¹⁹⁹ When barrels nominated for a specific type of crude oil exceed available capacity for that type of crude on the Mainline, the capacity is “apportioned” on a pro rata basis among all shippers who verified nominations of that type of crude oil.¹²⁰⁰ The apportionment procedure occurs in accordance with Enbridge’s Rules and Regulations Tariff and is regulated by FERC.¹²⁰¹

492. Shipper nominations are due the month before a shipment is to occur.¹²⁰² A shipper is defined as any producer, marketer, refiner, or an integrated company, who owns the commodity while it is being transported on the Enbridge Mainline System.¹²⁰³

493. Nominations are submitted to Applicant on a prescribed date each month, generally the 20th day of the preceding month.¹²⁰⁴ Upon receipt of all nominations, Applicant verifies the nomination amount with upstream suppliers and downstream delivery points designated by the shipper.¹²⁰⁵ Once verified and accepted, the nominations are allocated between the various pipelines in a manner that optimizes the entire system.¹²⁰⁶

494. Applicant’s process of verifying nominations is designed to prevent shippers from over-nominating volumes and thus inflating the space needed on the system.¹²⁰⁷ As set forth above, Applicant does not enter into long-term contracts with shippers.¹²⁰⁸ Rather, all shipping is conducted on a pay-as-you-go (month-to-month) basis, as described above.¹²⁰⁹

495. In recent years, Enbridge has implemented various projects to provide its shippers with additional transportation capacity. The Mainline Enhancement Projects, including expansion of Line 61 in Wisconsin and Illinois, and the expansion of Line 67 in Minnesota, were designed to allow increased Western Canadian heavy production to

¹¹⁹⁶ Ex. SH-1 at 4 (Shippers Direct).

¹¹⁹⁷ Ex. EN-19 at 11 (Glanzer Direct).

¹¹⁹⁸ Ex. EN-19 at 11 (Glanzer Direct).

¹¹⁹⁹ Ex. SH-1 at 4 (Kahler Direct).

¹²⁰⁰ Ex. SH-1 at 4-5 (Kahler Direct).

¹²⁰¹ Ex. SH-1 at 5 (Kahler Direct).

¹²⁰² Ex. EN-19 at 4 (Glanzer Direct).

¹²⁰³ Ex. EN-19 at 4 (Glanzer Direct).

¹²⁰⁴ Ex. EN-19 at 4 (Glanzer Direct).

¹²⁰⁵ Ex. EN-19 at 4 (Glanzer Direct).

¹²⁰⁶ Ex. EN-19 at 4 (Glanzer Direct).

¹²⁰⁷ Evid. Hrg. Tr. Vol. 1B at 79-80 (Glanzer).

¹²⁰⁸ Ex. EN-14 at 6 (Fleeton Direct).

¹²⁰⁹ Ex. EN-14 at 6 (Fleeton Direct).

access new markets (mainly the U.S. Gulf Coast) by expanding sections of the Lakehead System and associated tankage and terminal upgrades.¹²¹⁰

496. The Light Oil Market Access Program, which includes expanding Line 61, construction of Line 78 in Illinois and Indiana, and the Line 6B Expansion, were designed to allow light production growth from Western Canada and the U.S. Bakken regions to access new and existing markets in PADD II and Eastern Canada through expansions on the Lakehead System and associated tankage and terminal upgrades.¹²¹¹

497. The Eastern Access Projects, which include the Line 62 Expansion, the Line 5 Expansion, and the Line 6B Replacement, were designed to allow heavy and light production growth from Western Canada to new and existing markets in PADD II, and Eastern Canada through expansions on the Lakehead System and associated tankage and terminal upgrades.¹²¹²

I. Alternatives Evaluated

498. For the CN decision, the Commission has three options: (1) issue the CN for the Project as proposed; (2) deny the CN; or (3) issue a CN subject to conditions or modifications.¹²¹³

499. The Environmental Impact Statement (EIS) evaluated the potential environmental impacts of approving the CN for proposed Project; the potential consequences of denying the CN (i.e., the “No Action” alternative); system alternatives to the proposed Project (i.e., different pipeline systems); and route and route segment alternatives to the APR.

i. No Action Alternatives

500. A “No Action” alternative is an alternative that supposes that the Project will not be approved. Under all No Action alternatives, the Project would not be constructed, and the Existing Line 3 would continue to operate at its reduced capacity and with the attendant integrity digs.¹²¹⁴ The EIS did not study, and the DOC-DER did not consider, a “No Action” alternative whereby Existing Line 3, through repair, is brought back to its original 760 kbpd operating capacity, as Applicant has asserted that no repairs can return the line to the original operating capacity.¹²¹⁵

501. The No Action alternatives studied in the FEIS include transportation by rail, transportation by truck, transportation by combined truck and rail, and continued use of

¹²¹⁰ Ex. EN-19 at 8 (Glanzer Direct).

¹²¹¹ Ex. EN-19 at 8 (Glanzer Direct).

¹²¹² Ex. EN-19 at 8-9 (Glanzer Direct).

¹²¹³ Minn. R. 7853.0800.

¹²¹⁴ Ex. EERA-29 at 4-6 – 4-7 (FEIS).

¹²¹⁵ Ex. EN-26 at 21 (Kennett Direct).

Existing Line 3 (plus combinations of transportation by rail or truck, along with Existing Line 3).¹²¹⁶

502. Absent the Project, some volume of crude oil would be transported by rail.¹²¹⁷ The EIS assumes that a rail alternative would deliver crude oil from the Canadian border to the Wisconsin border. These are feasible end points for a rail alternative through Minnesota because Enbridge has begun construction of the Line 3 replacement pipeline in Canada and Wisconsin, and would not remove those pipelines should Minnesota deny their application for a certificate of need for Line 3.¹²¹⁸

503. Absent the Project, some volume of crude would also be transported by tanker truck. This No Action alternative involves the transportation of crude oil by oil tanker truck on Minnesota roads and highways.¹²¹⁹

ii. System Alternative

504. The EIS also studied one system alternative (SA). A “system alternative” is a conceptual project alternative that provides comparative analysis for a proposed project.¹²²⁰ The DOC-EERA defines a system alternative as, “a route for a new pipeline with different origin, destination, or intermediate points of delivery than those proposed by the applicant.”¹²²¹

505. Unlike a route alternative, which can be selected by the Commission in a RP proceeding, a system alternative cannot actually be permitted as part of this proceeding.¹²²² The purpose of a system alternative to provide a comparative analysis for the proposed Project.

506. In this proceeding, FOH has proposed a system alternative that runs from Neche, North Dakota, south through western Minnesota, and ends in Joliet, Illinois.¹²²³ This alternative has been referred to as “System Alternative 04” or “SA-04”.

507. The concept behind SA-04 was to demonstrate the possibility of a pipeline that could avoid northern and central Minnesota (an area dense in natural water-rich resources), and yet transport Western Canada oil to the Central United States, serving the regional petroleum needs of PADD II.¹²²⁴ By avoiding Minnesota’s north-central lake country, SA-04 does not connect to Enbridge’s terminals in either Clearbrook or

¹²¹⁶ Ex EERA-29 at 4-5 (FEIS).

¹²¹⁷ Ex. EERA-29 at 4-9 – 4-13 (FEIS).

¹²¹⁸ Evid. Hrg. Tr. Vol 2A at 117 (Simonson).

¹²¹⁹ Ex. EERA-29 at 4-13 – 4-16 (FEIS).

¹²²⁰ Ex. EERA-29 at 4-8 (FEIS).

¹²²¹ EX. EERA-15 at Table 1 (Alternatives Screening Report).

¹²²² Ex. EERA-29 at 4-8 (FEIS).

¹²²³ Ex. EERA-29 at 4-8 (FEIS). SA-04 was originally proposed in the Sandpiper Project and has been modified for the Line 3 Project. Ex. EERA-15 at 3.2.1 (Alternatives Screening Report).

¹²²⁴ Ex. EERA-29 at 4-8 (FEIS).

Superior.¹²²⁵ Instead, SA-04 interconnects with the regional pipeline system closer to major refineries in Central Illinois.¹²²⁶

508. Approximately 68 percent of SA-04 is located outside of Minnesota (that is, in in North Dakota, Iowa, and Illinois), making it considerably longer than the APR.¹²²⁷ Another concern about SA-04 in the environmental analysis, was the karst topography and conditions in Minnesota, Iowa, and Illinois, along SA-04's route.¹²²⁸ A map of SA-04 is set forth below:¹²²⁹



509. When the Commission declared the Final EIS (FEIS) inadequate in December 2017, the Commission ordered the DOC-EERA to re-route SA-04 to avoid, as much as possible, karst geography.¹²³⁰ The DOC-EERA attempted to reroute SA-04, as

¹²²⁵ Ex. EERA-29 at 4-8 (FEIS).

¹²²⁶ Ex. EERA-29 at 4-8 (FEIS).

¹²²⁷ Ex. EERA-29 at 4-8, 4-9 (FEIS).

¹²²⁸ Ex. EERA-29 at 5-18 - 5-19 (FEIS).

¹²²⁹ Ex. EERA-42 at 4-4 (FEIS).

¹²³⁰ Order Finding EIS Inadequate at 2 (Dec. 14, 2017) (eDocket No. 201712-138168-02 (CN)).

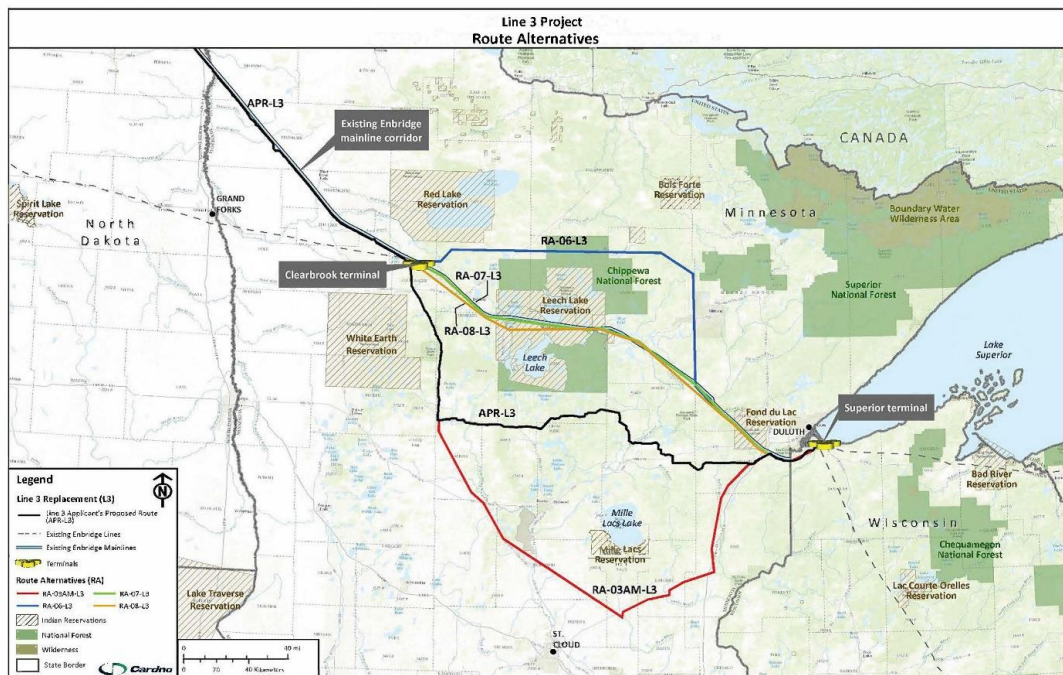
a hypothetical pipeline paralleling Spectra infrastructure.¹²³⁴ None of these alternatives were studied in the EIS, but are discussed below.

iii. Route Alternatives.

513. If a need for the Project is found, the Commission must evaluate APR in comparison to route alternatives under the criteria set forth in rule and law.¹²³⁵ A “route alternative” is a relative long section of new pipeline with the same origin, destination, and intermediate points of delivery as those proposed by Applicant, and can be evaluated as an entire route.¹²³⁶

514. The FEIS evaluated four route alternatives in this case: Route Alternative 03, as modified (RA-03AM); Route Alternative 06 (RA-06); Route Alternative 07 (RA-07); and Route Alternative 08 (RA-08).¹²³⁷

515. All of the route alternatives share the existing Mainline System corridor as the APR between Neche, North Dakota, and Clearbrook, Minnesota. However, from Clearbrook to the Wisconsin border, the route alternatives diverge from APR.¹²³⁸ The APR and the four route alternatives are illustrated in the map below:¹²³⁹



¹²³⁴ Ex. DER-1 at 57, 54-55, 59-60 (O'Connell Direct); Ex. DER-4, Sched. MF-1 at 19 (Fagan Direct).

¹²³⁵ Minn. Stat. § 216G.02, subd. 3(b)(2); Minn. R. 7853.1900.

¹²³⁶ Ex. EERA-15 at Table 1 (Alternatives Screening Report).

¹²³⁷ Ex. EERA-29 at 4-20 (FEIS).

¹²³⁸ Ex. EERA-29 at ES-9 (FEIS Figure ES-3).

¹²³⁹ EX. EERA-29 at ES-9 (FEIS Figure ES-3).

516. RA-03AM follows the APR from Necho, North Dakota, to the Clearbrook terminal.¹²⁴⁰ From Clearbrook, the route follows the APR through Park Rapids, and then deviates from the APR in the southwest corner of Hubbard County.¹²⁴¹ At the southwest corner of Hubbard County, RA-03AM travels south for 112 miles, following the existing Viking Natural Gas Pipeline to Chisago County.¹²⁴² It then turns northeast for 39 miles, paralleling Highway 23.¹²⁴³ Near Hinckley, it turns north and follows an existing utility corridor for 48 miles until it reconnects with the APR west of Interstate 35 in Carlton County.¹²⁴⁴ With a length of 395 miles, RA-03AM is significantly longer than APR.¹²⁴⁵

517. RA-06 follows the APR from Necho, North Dakota, to the Clearbrook terminal.¹²⁴⁶ From there, the route travels east across Beltrami and Itasca Counties.¹²⁴⁷ At the eastern border of Itasca County, the route turns south, running along the eastern border of Itasca County, where it rejoins the Existing Line 3/Mainline corridor until it exits Minnesota in Carlton County, at the same location as the APR.¹²⁴⁸ RA-06 is 317 miles long, making it shorter than the APR.¹²⁴⁹

518. RA-07 follows the same path as the Existing Line 3 from Necho, North Dakota, to the Clearbrook terminal.¹²⁵⁰ From there, the route would follow the route of Existing Line 3 in the Mainline corridor and end in Superior, Wisconsin.¹²⁵¹ RA-07 is the “in trench” replacement alternative in which Existing Line 3 would be removed and the new pipeline installed in the same trench, for most of the route. The length of RA-07 is the same as the Existing Line 3 (approximately 282 miles), making it significantly shorter than the APR, and would require no new pipeline corridor in Minnesota.¹²⁵² In addition, RA-07 would leave the new Line 3 in an existing Enbridge Mainline corridor, along with five to six other active Enbridge pipelines.

519. RA-08 follows the same path as the APR from Necho, North Dakota, to the Clearbrook terminal.¹²⁵³ At Clearbrook, the route deviates such that it is located south and parallel to Highway 2 along the Great Lakes Gas Transmission Company pipeline corridor.¹²⁵⁴ While RA-08 runs along and close to RA-7, it was repositioned to avoid certain impacts in the area of the Chippewa National Forest and the Leech Lake

¹²⁴⁰ Ex. EN-22, Sched. 7 at 18 (Simonson Direct); Ex. EERA-15 at 14 (Final Scoping Decision Document).

¹²⁴¹ Ex. EN-22, Sched. 7 at 18 (Simonson Direct).

¹²⁴² Ex. EN-22, Sched. 7 at 18 (Simonson Direct).

¹²⁴³ Ex. EN-22, Sched. 7 at 18 (Simonson Direct).

¹²⁴⁴ Ex. EERA-42 at 6-2 (Revised EIS).

¹²⁴⁵ Ex. EERA-15 at 14 (Final Scoping Decision Document).

¹²⁴⁶ Ex. EN-22, Sched. 7 at 24 (Simonson Direct); Ex. EERA-15 at A-5 (Alternatives Screening Report).

¹²⁴⁷ Ex. EN-22, Sched. 7 at 24 (Simonson Direct); Ex. EERA-15 at A-5 (Alternatives Screening Report).

¹²⁴⁸ Ex. EERA-42 at 6-2 (Revised EIS).

¹²⁴⁹ Ex. EERA-15 at 14 (Final Scoping Decision Document).

¹²⁵⁰ Ex. EN-22, Sched. 7 at 30 (Simonson Direct); Ex. EERA-15 at A-5 (Alternatives Screening Report).

¹²⁵¹ Ex. EN-22, Sched. 7 at 30 (Simonson Direct).

¹²⁵² Ex. EN-22, Sched. 7 at 30 (Simonson Direct).

¹²⁵³ Ex. EN-22, Sched. 7 at 38 (Simonson Direct); Ex. EERA-15 at A-5 (Alternatives Screening Report).

¹²⁵⁴ Ex. EN-22, Sched. 7 at 38 (Simonson Direct).

Reservation.¹²⁵⁵ RA-08 exits Minnesota in Carlton County at the same location as APR.¹²⁵⁶ RA-08 is 284 miles long.¹²⁵⁷

iv. Route Segment Alternatives

520. A “route segment alternative” is a short deviation (from a fraction of a mile to a few miles in length) along the APR or a proposed route alternative.¹²⁵⁸ These segments begin and end at intermediate points along a route or route alternative, and are proposed to resolve or mitigate a perceived localized resource conflict.¹²⁵⁹

521. The FEIS evaluated 24 route segment alternatives (RSAs).¹²⁶⁰

522. Overall, there is little evidence in the record with respect to the RSAs proposed in this action, apart from the information provided in the FEIS, the MDNR comment letter, and the testimony of Eric Best from Kennecott.¹²⁶¹

523. In its comment letter, the MDNR asserts that the following RSAs would reduce natural resource impacts relative to the APR: RSA-05, RSA-10, RSA-15, RSA-White Lake, and RSA-33 if APR is selected.¹²⁶² The MDNR also advises against a number of other RSAs (see MDNR Comment Letter dated November 22, 2017).¹²⁶³

524. Kennecott was the only party to directly address RSAs. Kennecott asserts that the APR will bisect Kennecott’s property in Aitkin County.¹²⁶⁴ According to Kennecott, this property is “environmentally sensitive property” that was acquired for preservation and mitigation of the Tamarack Project impacts.¹²⁶⁵ The property was purchased by Kennecott for potential wetland mitigation and to unify two state wildlife management areas.¹²⁶⁶ Consequently, Kennecott advocates against the APR, as well as RSA-31, RSA-34, and RSA-35.¹²⁶⁷

525. No other party presented a witness to sponsor or oppose RSAs. Due to the number of complex issues presented in these proceedings, these RSAs can be addressed by the Commission once it decides the issue of need and, if still necessary, when it is selecting a route. Based upon the ALJ’s recommendation in this case, the ALJ makes no recommendation on any RSAs.

¹²⁵⁵ Ex. EERA-15 at A-5 (Alternatives Screening Report).

¹²⁵⁶ Ex. EN-22, Sched. 7 at 38 (Simonson Direct).

¹²⁵⁷ Ex. EERA-15 at 14 (Final Scoping Decision Document).

¹²⁵⁸ Ex. EERA-15 at Table 1 (Alternatives Screening Report).

¹²⁵⁹ *Id.*

¹²⁶⁰ Ex. EERA-29 at 4-29 (FEIS).

¹²⁶¹ Comment by MDNR at 6 (Nov. 27, 2017) (Batch 18A) (eDocket No. 201711-137680-01 (CN)); Ex. KN-1 (Best Direct); Ex. KN-2 (Best Summary).

¹²⁶² Comment by MDNR at 6 (Nov. 27, 2017) (Batch 18A) (eDocket No. 201711-137680-01 (CN)).

¹²⁶³ *Id.*

¹²⁶⁴ Ex. KN-1 at 3 (Best Direct).

¹²⁶⁵ *Id.*

¹²⁶⁶ *Id.*

¹²⁶⁷ *Id.*

V. APPLICATION OF CERTIFICATE OF NEED CRITERIA.

526. A Certificate of Need is required prior to the construction of a new “large petroleum pipeline.”¹²⁶⁸ A “large petroleum pipeline” is defined as “a pipeline greater than six inches in diameter and having more than 50 miles of its length in Minnesota used for the transportation of crude petroleum or petroleum fuels or oil or their derivatives”¹²⁶⁹

527. Both statute (Minn. Stat. § 216B.243, subd. 3) and rule (Minn. R. 7853.0130) set forth the criteria for the Commission to apply in determining whether a CN should be granted for a large petroleum pipeline. Both the statute and rule generally articulate the same criteria, but in a different order. For purposes of organization, the Administrative Law Judge will follow the criteria, as set forth in Rule 7853.0130.

528. Applicant bears the burden to demonstrate, by a preponderance of the evidence, that its Project meets the criteria established in rule and law for the issuance of a CN.¹²⁷⁰

529. A “preponderance of the evidence” means that the ultimate facts must be established by a greater weight of the evidence.¹²⁷¹ “It must be of a greater or more convincing effect and ... lead you to believe that it is more likely that the claim ... is true than ... not true.”¹²⁷² In other words, if it is more likely than not that the facts support the Applicant’s version of the facts, then the Applicant has met its burden. In contrast, if the evidence casting doubt on the Applicant’s facts is stronger and more persuasive, then the Applicant has failed to meet its burden. Under this standard, the Applicant the ultimate burden of persuasion to prove that a CN should be granted in this case.

530. With respect to whether a more reasonable and prudent alternative to the Project exist (i.e., whether a more reasonable and prudent system alternative exists), Parties other than the Applicant have the burden to establish whether a more reasonable and prudent alternative to the Project exists.¹²⁷³

531. A CN shall be granted if the Applicant establishes, by a preponderance of the evidence, that:

- A. the probable result of denial would adversely affect the future adequacy, reliability, or efficiency of energy supply to the applicant, to the

¹²⁶⁸ Minn. R. 7853.0030 (2017).

¹²⁶⁹ Minn. R. 7853.0010, subp. 14 (2017).

¹²⁷⁰ Minn. Stat. § 216B.243, subd. 3 (2016); Minn. R. 1400, 7300, subp. 5 (2017).

¹²⁷¹ 4 Minnesota Practice, CIV JIG 14.15 (2014).

¹²⁷² *State v. Wahlberg*, 296 N.W.2d 408, 418 (Minn. 1980).

¹²⁷³ Minn. R. 7853.0130(B) (“A certificate of need shall be granted to the applicant if it is determined that...a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record *by the parties or persons other than the applicant...*”) (Emphasis added).

applicant's customers, or to the people of Minnesota and neighboring states, considering:

- (1) the accuracy of the applicant's forecast for demand for the type of energy that would be supplied by the proposed facility;
- (2) the effects of the applicant's existing or expected conservation programs and state and federal conservation programs;
- (3) the effects of the applicant's promotional practices that may have given rise to the increase in the energy demand, particularly promotional practices that have occurred since 1974;
- (4) the ability of current facilities and planned facilities not requiring certificates of need, and to which the applicant has access, to meet the future demand; and
- (5) the effect of the proposed facility, or a suitable modification of it, in making efficient use of resources;

B. a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record by parties or persons other than the applicant, considering:

- (1) the appropriateness of the size, the type, and the timing of the proposed facility compared to those of reasonable alternatives;
- (2) the cost of the proposed facility and the cost of energy to be supplied by the proposed facility compared to the costs of reasonable alternatives and the cost of energy that would be supplied by reasonable alternatives;
- (3) the effect of the proposed facility upon the natural and socioeconomic environments compared to the effects of reasonable alternatives; and
- (4) the expected reliability of the proposed facility compared to the expected reliability of reasonable alternatives;

C. the consequences to society of granting the certificate of need are more favorable than the consequences of denying the certificate, considering:

- (1) the relationship of the proposed facility, or a suitable modification of it, to overall state energy needs;

(2) the effect of the proposed facility, or a suitable modification of it, upon the natural and socioeconomic environments compared to the effect of not building the facility;

(3) the effects of the proposed facility or a suitable modification of it, in inducing future development; and

(4) socially beneficial uses of the output of the proposed facility, or a suitable modification of it, including its uses to protect or enhance environmental quality; and

D. it has not been demonstrated on the record that the design, construction, or operation of the proposed facility will fail to comply with those relevant policies, rules, and regulations of other state and federal agencies and local governments.¹²⁷⁴

532. Each of these criteria will be addressed individually below.

A. Result of Denial Would Adversely Affect Future Adequacy, Reliability, or Efficiency of Energy Supply to Applicant, Applicant's Customers, or the People of Minnesota and Neighboring States [Minn. R. 7853.0130(A)]

533. The first of the four criteria established by the Commission for the granting of a CN calls for an examination of whether:

the probable result of denial would adversely affect the future adequacy, reliability, or efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states.¹²⁷⁵

534. Under this criterion, the Commission shall consider: (1) the accuracy of Applicant's forecast of demand for the type of energy (crude oil) that would be supplied by the proposed facility; (2) Applicant's conservation programs and state and federal conservation programs; (3) Applicant's promotional practices that may have given rise to the increase in energy demand; (4) the ability of current or planned facilities, not requiring a CN, to meet the future demand for energy; and (5) the Project's ability to make an efficient use of resources.¹²⁷⁶

535. Rule 7853.0130(A) does not distinguish between the relative importance of adequacy, reliability, or efficiency of energy supply.¹²⁷⁷ Nor does the rule distinguish between the relative importance of the effect on the Applicant, the Applicant's customers,

¹²⁷⁴ Minn. R. 7853.0130.

¹²⁷⁵ Minn. R. 7853.0130(A).

¹²⁷⁶ Minn. R. 7853.0130(A).

¹²⁷⁷ See Minn. R. 7853.0130(A).

or the people of Minnesota and neighboring states (i.e., the region).¹²⁷⁸ Instead, all three groups are placed on equal footing under the rule.

536. Applicant, Shippers, and the DOC-DER define adequacy, reliability, and efficiency a little differently, each depending on their needs and interests.

537. With respect to “adequacy” of energy supply, Applicant views the term to mean providing its customers (that is, its shippers) with sufficient pipeline capacity to transport a variety of crude grades to fulfill the customers’ needs.¹²⁷⁹ According to Applicant, an “adequate” pipeline system provides its customers with sufficient pipeline capacity and operational flexibility to balance fluctuations between heavy and light crude oil nominations or other market fluctuations.¹²⁸⁰

538. Similarly, Shippers view “adequacy” to mean that a pipeline system’s capacity can satisfy current and foreseeable shipper demand to transport their oil to their customers (i.e., the refineries).¹²⁸¹

539. The DOC-DER relies upon a narrower definition of “adequate,” as set forth in the Oxford Dictionary, to mean “satisfactory or acceptable in quality or quantity.”¹²⁸² The DOC-DER’s definition is more generic and is not directed at the interests of the Applicant or its customers.

540. With respect to “reliability,” Applicant looks to the ability of a pipeline system to deliver product (oil) at consistent, predictable, and timely intervals to allow its customers to better plan for their operations.¹²⁸³ In other words, Applicant views reliability as a function of dependability.¹²⁸⁴

541. Likewise, Shippers define “reliability” to mean the ability of a transportation source to meet its needs consistently and without interference due to maintenance or other disruptions.¹²⁸⁵

542. The DOC-DER takes a broader view of the term, again relying upon the Oxford Dictionary definition of “consistently good in quality or performance,” to frame its review of reliability of energy supply.¹²⁸⁶

543. “Efficiency” of energy supply, from the standpoint of a pipeline, means a system that “balances all of its operating parameters” to provide “the service level

¹²⁷⁸ *Id.*

¹²⁷⁹ Ex. EN-38 at 2 (Glanzer Rebuttal).

¹²⁸⁰ Ex. EN-38 at 2 (Glanzer Rebuttal).

¹²⁸¹ Ex. SH-2 at 3 (Shippers Rebuttal), citing *In re Application of Enbridge for a Certificate of Need for the Line 67 Phase 2*, MPUC Docket No. PL-9/CN-13-153, Order Granting Certificate of Need at 27 (Nov. 7, 2014).

¹²⁸² Ex. DER-1 at 22 (O’Connell Direct).

¹²⁸³ Ex. EN-38 at 2 (Glanzer Rebuttal).

¹²⁸⁴ Ex. EN-38 at 2 (Glanzer Rebuttal).

¹²⁸⁵ Ex. SH-2 at 5-6 (Shippers Rebuttal).

¹²⁸⁶ Ex. DER-1 at 22 (O’Connell Direct).

commitment” to its customers “at the most economic cost.”¹²⁸⁷ According to Applicant, a pipeline system can provide more efficient service by “optimizing power utilization across the system.”¹²⁸⁸

544. For shippers, “efficiency” simply means the ability to ship the most amount of crude oil, the longest distance, at the lowest monetary and non-monetary cost.¹²⁸⁹

545. The DOC-DER takes a more generic approach, again relying on the Oxford Dictionary to define “efficient” as, “achieving maximum productivity with minimum wasted resources.”¹²⁹⁰

546. Keeping these definitions in mind, the ALJ evaluated the factors of the first criterion.

i. Accuracy of Applicant’s Forecast of Demand [Minn. R. 7853.0130(A)(1)]¹²⁹¹

547. It is Applicant’s burden to establish, by a preponderance of the evidence, that its long-range forecast for demand for Canadian crude oil is accurate.¹²⁹²

548. Applicant called two witnesses to explain its forecast for demand for crude oil: (1) Neil Earnest, President of Muse, Stancil & Co., a consultancy specializing in the refining industry; and (2) John Glanzer, the Director of Infrastructure Planning and Lifecycle Effectiveness for Enbridge.

549. Applicant’s case for need relies upon projections contained in Mr. Earnest’s report entitled, “Enbridge Line 3 Replacement Project Market Analysis” (Muse Stancil Report).¹²⁹³

a. Muse Stancil Report

550. The stated intent of the Must Stancil Report was to analyze both “the historical and projected refined product demand in Minnesota” and “the historic and projected refined product demand in states that neighbor Minnesota.”¹²⁹⁴ After preparation of the report, however, Mr. Earnest changed the stated scope of his report to

¹²⁸⁷ Ex. EN-38 at 2 (Glanzer Rebuttal).

¹²⁸⁸ Ex. EN-38 at 2 (Glanzer Rebuttal).

¹²⁸⁹ Ex. SH-2 at 7 (Shippers Rebuttal).

¹²⁹⁰ Ex. DER-1 at 23 (O’Connell Direct).

¹²⁹¹ See also, Minn. Stat. § 216B.243, subd. 3(1).

¹²⁹² Minn. Stat. § 216B.243, subd. 3(1); Minn. R. 1400.7300, subp. 5.

¹²⁹³ Ex. EN-15, Sched. 2. (Mr. Earnest’s original report is attached to Ex. 1 (CN Application) as Appendix C. Mr. Earnest updated his report in January 2017 and included it in his Direct Testimony (Ex. EN-15 at Sched. 2). The report analyzed here is the January 2017 “Muse Stancil Report.”

¹²⁹⁴ Ex. EN-15, Sched. 2 at 5 (Earnest Direct). Mr. Earnest’s original report is attached to Ex. 1 (CN Application) as Appendix C. Mr. Earnest updated his report in January 2017 and included it in his Direct Testimony (Ex. EN-15, Sched. 2). (Ex. EN-15, Sched. 2)

evaluate the historic and projected demand for crude oil (not refined product) in Minnesota and the larger region.¹²⁹⁵

551. Using what he calls the “Muse Crude Oil Market Optimization Model” (Muse Model or Model), a model he developed, Mr. Earnest evaluated the market impact of two scenarios: (1) not replacing Line 3 (i.e., continuing to use Line 3 at its current reduce capacity of 390 kbpd for light crude); and (2) replacing Line 3 with a new line having a capacity of up to 760 kbpd mixed service, as has been proposed in this case.¹²⁹⁶ Mr. Earnest’s analysis looked to the Mainline System as a whole, and did not evaluate the utilization of just Existing Line 3 due to the integrated nature of the Mainline System.¹²⁹⁷

552. The Muse Model is “a mathematical representation of the North American crude oil distribution system, including rail and water transportation modes, that predicts the flow of crude oil to various markets and crude oil prices that result from such flows.¹²⁹⁸ “The model attempts to mirror the crude oil distribution pattern that would arise from an efficiently operating crude marketplace.”¹²⁹⁹

553. The inputs in the model include: (1) the supply of Canadian and U.S. crude oil by grade; (2) the capacity of each available pipeline and barge; (3) available rail capacity; (4) pipeline volume commitments; (5) transportation costs; (6) refinery capacity and constraints; and (7) the refining value of the crude oil grades at each refinery.¹³⁰⁰ The Model does not take into account demand for refined product.¹³⁰¹ Rather, it only looks to the supply forecast of crude oil, and not to demand for the end product (i.e., refined product).¹³⁰²

554. As an input in his original analysis, Mr. Earnest used exclusively the Canadian Association of Petroleum Producers (CAPP) June 2016 crude oil supply forecast for Canadian crude (2016 CAPP forecast).¹³⁰³ According to its website, CAPP is “the voice of Canada’s upstream oil and natural gas industry.”¹³⁰⁴ It “enable[s] the responsible growth of [the] industry and advocate[s] for economic competitiveness and safe, environmentally and socially responsible performance.”¹³⁰⁵ In other words, CAPP is an organization dedicated to growing the Canadian oil production industry.

¹²⁹⁵ Ex. EN-37, Sched. 1 at 41-43 (Earnest Rebuttal).

¹²⁹⁶ Ex. EN-15, Sched. 2 at 5 (Earnest Direct).

¹²⁹⁷ Ex. EN-15, Sched. 2 at 20 (Earnest Direct).

¹²⁹⁸ Ex. EN-15, Sched. 2 at 59 (Earnest Direct).

¹²⁹⁹ Ex. EN-15, Sched. 2 at 60 (Earnest Direct).

¹³⁰⁰ *Id.*

¹³⁰¹ Ex. EN-37, Sched. 1 at 46 (Earnest Rebuttal).

¹³⁰² Ex. EN-37, Sched. 1 at 46 (Earnest Rebuttal).

¹³⁰³ *Id.* at 61.

¹³⁰⁴ See <https://www.capp.ca>. See, Second Am. Notice of Taking Admin. Notice & Opportunity to Object (Mar. 29, 2018) (eDocket No. 20183-141510-01 (CN)) and Applicant Objections to Proposed Taking of Admin. Notice (Apr. 5, 2018) (eDocket No. 20184-141717-01 (CN)). Based upon the publicly available nature of this website and the very basic fact which the ALJ notices, the ALJ notes but overrules Applicant’s objection to this judicially-noticed fact.

¹³⁰⁵ *Id.*

555. With respect to inputs as to pipelines available in the future to export crude from Canada, Mr. Earnest included all of the Enbridge Mainline and affiliated pipelines, as well as currently available non-Enbridge pipelines, including the Kinder Morgan Trans Mountain Line and its expected 2021 expansion (despite the fact that construction on the expansion has not yet begun).¹³⁰⁶ Mr. Earnest, however, does not include in his original analysis the following pipeline projects: the Northern Gateway, East Energy, and the Keystone XL.¹³⁰⁷ Mr. Earnest considered these proposed projects too speculative and unlikely to proceed.¹³⁰⁸

556. Other inputs into the Model (refinery capacity and crude oil refining values) were not significantly disputed by any party.

557. Mr. Earnest's Model forecasts utilization of a new Line 3 from 2016 to 2035.¹³⁰⁹ Under the financing agreement with the RSG, the new Line 3 is anticipated to be paid for within 15 years of operation or by approximately 2035.¹³¹⁰ Therefore, utilization of the Project, from Applicant's standpoint, is most important until 2035, because it is utilization (i.e., surcharges on use) that pays for the Project for Applicant. What is not paid off during the 15-year period, becomes the responsibility of Applicant, not necessarily the shippers.¹³¹¹

558. Using certain key assumptions about crude oil supply and transportation capacities to export the oil from Canada, Mr. Earnest concluded that:¹³¹²

- the increase of 370 kbpd of capacity for mixed service¹³¹³ created by the Project will be fully utilized by shippers until 2035.
- the mixed service capability of Line 3 will enable the full utilization of currently unused light crude oil capacity on the Mainline of about 180 kbpd.
- The Project will have only a minor impact on other pipelines that exit Western Canada.
- The Project will reduce the volume of Canadian crude shipped by rail by between 110 and 510 kbpd.

¹³⁰⁶ *Id.* at 61-69.

¹³⁰⁷ *Id.* at 68-69.

¹³⁰⁸ *Id.*

¹³⁰⁹ Ex. EN-15 at Sched. 2 (Earnest Direct).

¹³¹⁰ Ex. EN-1 at App. D (Issue Resolution Sheet).

¹³¹¹ *Id.*

¹³¹² Ex. EN-15, Sched. 2 at 87-88 (Earnest Direct).

¹³¹³ The current operating capacity of Existing Line 3 is 390 kbpd. The expected annual operating capacity of the new Line 3 is 760 kbpd, resulting in an increase of 370 kbpd.

- The Project will not impact the supply of Western Canadian or Bakken crude oil being produced. It will only impact the mode of transportation and distribution pattern for the oil.¹³¹⁴

559. The DOC-DER retained Marie Fagan, PhD, a Lead Economist at London Economics International, LLC, to analyze Mr. Earnest's modeling methods, his report, and his conclusions.¹³¹⁵ Dr. Fagan was not retained "to create an independent empirical analysis or a stand-alone report" analyzing the issue of need in this case.¹³¹⁶ Rather, Dr. Fagan was solely "taxed with providing a critical review" of the Muse Stancil Report and the Oliver Wyman Report (a report discussed later related to the use of rail as an alternative to the Project).¹³¹⁷ Accordingly, Dr. Fagan's analysis is limited to critique, not independent analysis. As a result, Dr. Fagan does not provide forecasts for future crude oil supply or demand; and she does not provide any projections on expected demand for refined products in Minnesota or elsewhere for the ALJ or Commission to consider and contrast with Applicant's data.¹³¹⁸

560. In her analysis, Dr. Fagan identifies four deficiencies in Mr. Earnest's modeling methods. First, Dr. Fagan notes that Mr. Earnest's Muse Model incorporates only one forecast for crude oil supply -- the 2016 CAPP crude oil supply outlook.¹³¹⁹ Second, Dr. Fagan explains that Mr. Earnest's analysis does not include a specific outlook for refined product demand and assumes that consumer demand for petroleum products will remain unchanged for the entire forecast period (until 2035).¹³²⁰ Third, Dr. Fagan observes that Mr. Earnest's analysis implicitly assumes that any crude oil supply that exceeds U.S. refined product demand will necessarily be exported by refiners outside of the U.S.¹³²¹ And finally, Dr. Fagan notes that Mr. Earnest's original analysis relies on an assumption that there will be no pipeline expansion from 2021 to 2035 (after the Kinder Morgan Pipeline expansion, expected to be completed in 2021).¹³²² Each of these criticisms are addressed below.

b. Single Supply Forecast

561. With respect to the first criticism (a single supply forecast), Mr. Earnest explained that he selected the 2016 CAPP forecast as it was "his experience" that "the

¹³¹⁴ As Dr. Fagan noted, this statement is an assumption, not a proper conclusion. Ex. DER-4, Sched. MF-1 at 22-23 (Fagan Direct). By utilizing the CAPP forecasts of supply, Dr. Earnest adopts, in whole, the Canadian oil producers' expectations of future supply. If transportation is less convenient and more expensive (i.e., if the Project is not permitted), it will likely impact the profitability of oil, thereby impacting the amount of supply to be transported. Mr. Earnest did not evaluate the impact of transportation costs on available supply. Therefore, Mr. Earnest cannot assert that oil supply will remain constant irrespective of available modes of transportation. The ALJ, therefore, does not accept this conclusion.

¹³¹⁵ Ex. DER-4 at 1-2 (Fagan Direct).

¹³¹⁶ *Id.*

¹³¹⁷ *Id.*

¹³¹⁸ *Id.*

¹³¹⁹ Ex. DER-4, Sched. MF-1 at 5 (Fagan Direct).

¹³²⁰ *Id.* at 5, 26.

¹³²¹ *Id.* at 26.

¹³²² *Id.*

CAPP crude oil supply forecasts are commonly used for regulatory purposes in Canada and the U.S.”¹³²³ Mr. Earnest asserts that the 2016 CAPP supply forecast he used is generally consistent with (if not conservative compared to) the Canada’s National Energy Board (NEB) 2016 high price, low price, and reference case scenarios through 2030.¹³²⁴

562. Three experts in this case, however, have warned against relying solely upon CAPP supply forecasts for determining need: Dr. Fagan; Lorne Stockman, a Senior Research Analysis at Oil Change International; and Chris Joseph, Ph.D., a principal at Swift Creek Consulting in Canada.

563. According to Mr. Stockman, the CAPP supply forecast is based upon the production expectations provided by individual CAPP members (i.e., Canadian crude oil producers).¹³²⁵ These members do not publicly disclose their oil price assumptions or their forecasting methodology.¹³²⁶ Instead, CAPP forecasts are determined through surveys of member expected production.¹³²⁷ CAPP forecasts “supply” by estimating the gross volume of product likely to be produced by Canadian mines and wells (as reported by CAPP member surveys), minus the Western Canadian refinery demand for the oil.¹³²⁸ The amount remaining is the potential “supply” or amount available for transport outside of the region.¹³²⁹ The potential “supply” is generally greater than the volume of crude oil that is actually exported to the U.S. or refined into other products.¹³³⁰

564. According to Mr. Stockman, the problem with such a supply forecast is that it “is based on the Western Canadian industry’s expectation of future supply, not an objective analysis of future oil prices, future tar sands development rates, or future U.S. and global demand for crude oil.”¹³³¹ The ALJ accepts, as valid, this criticism.

565. Dr. Joseph also agrees.¹³³² He notes that CAPP does not provide critical assumptions underlying its forecast, such as future oil prices.¹³³³ In addition, CAPP’s forecasts do not take into account emerging carbon policies, which may reduce supply and demand.¹³³⁴ Finally, Dr. Joseph notes that CAPP “contravenes best forecasting practices” because it does not do any “sensitivity analysis” to address uncertainties in the marketplace.¹³³⁵

¹³²³ Ex. EN-15 at 17.

¹³²⁴ Ex. EN-15, Sched. 2 at 45-47 (Earnest Direct). Mr. Earnest also provides the 2016 Alberta Energy Regulators (AER) forecast for extra-heavy crude (bitumen) production through 2025. *Id.* at 47. However, because this forecast is limited to extra heavy crude, it is not considered a proper comparable forecast.

¹³²⁵ Ex. HTE-2 at 21 (Stockman Direct).

¹³²⁶ Ex. HTE-3 at 4-5 (Stockman Rebuttal).

¹³²⁷ Ex. HTE-2 at 21 (Stockman Direct).

¹³²⁸ *Id.* at 22.

¹³²⁹ *Id.*

¹³³⁰ *Id.*

¹³³¹ *Id.* at 23. See also, Ex. FOH-6 at 7 (Joseph Direct).

¹³³² Ex. FOH-6 (Joseph Direct).

¹³³³ *Id.* at i.

¹³³⁴ *Id.*

¹³³⁵ *Id.*

566. Both experts note that the CAPP forecast is created by an industry group whose express purpose is to advocate for the expansion and development of the Canadian oil industry.¹³³⁶ As explained by Mr. Stockman:

... the CAPP member forecasts are biased by a variety of factors, including their need to satisfy shareholders and attract potential investors. Thus, the CAPP member forecasts should be assumed to be biased towards an optimistic assessment of future production. CAPP is a trade association formed to advance the interests of its members. Therefore, it is reasonable to expect that its forecasts of crude oil supply in western Canada would tend toward optimistic and would generally be biased toward supporting a need for rapid pipeline development.¹³³⁷

567. According to Mr. Stockman, a “no growth” or “negative growth” forecast would discourage investment in the tar sands industry and would create doubt about its viability.¹³³⁸ As an industry group, whose mission it is to develop the tar sands industry, Mr. Stockman concludes that it is highly unlikely that CAPP would issue a negative forecast.¹³³⁹ In this way, Mr. Stockman warns that CAPP supply forecasts must be viewed with skepticism.¹³⁴⁰

568. Mr. Stockman notes that the widely divergent CAPP supply forecasts over the last decade (2007 to 2017) demonstrate that CAPP supply forecasts are simply not accurate, as demonstrated by the following chart:¹³⁴¹

¹³³⁶ Ex. HTE-2 at 23 (Stockman Direct); Ex. FOH-6 at 7 (Joseph Direct).

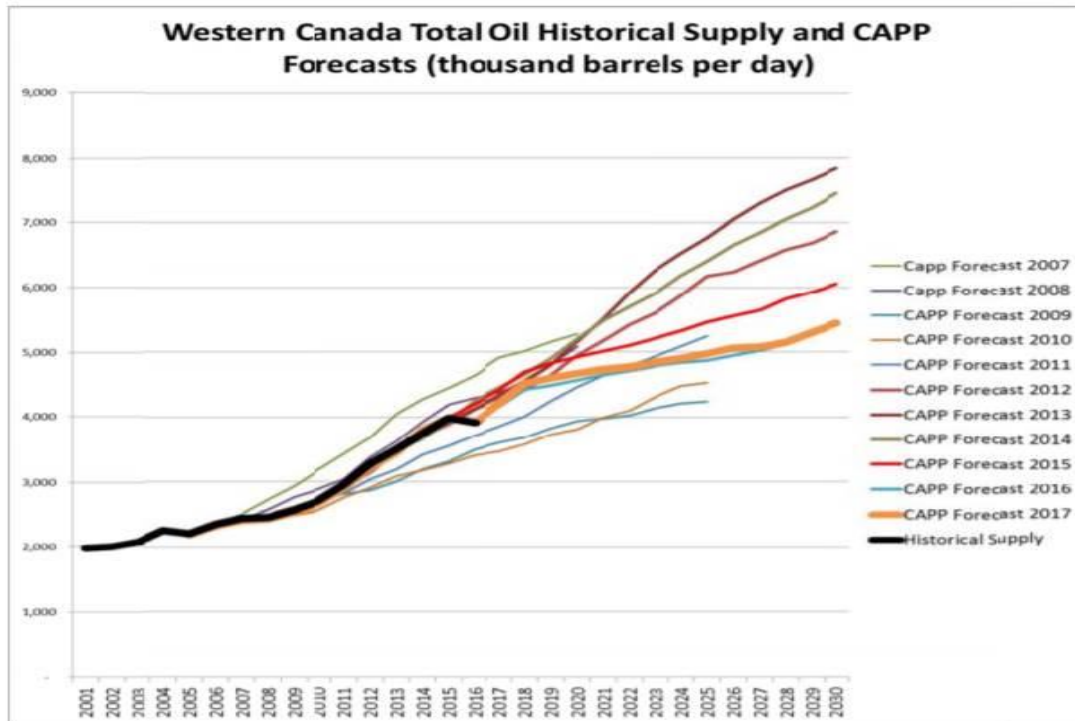
¹³³⁷ Ex. HTE-2 at 22 (Stockman Direct)

¹³³⁸ *Id.* at 24.

¹³³⁹ *Id.*

¹³⁴⁰ *Id.*

¹³⁴¹ *Id.* at 23.



569. This same deficiency was noted by Dr. Fagan. As Dr. Fagan explained, CAPP's outlooks before and after the 2015 oil price collapse demonstrate the limitation of relying upon just one supply outlook.¹³⁴² The 2013 CAPP outlook estimated that in 2030, there would be an available oil supply of approximately 6,500 kbpd; whereas, after the collapse in 2015, the 2017 CAPP forecast for 2030 estimates supply of less than 5,000 kbpd – a forecasting swing of more than 1.5 million barrels per day (b/p) in just a matter of four years.¹³⁴³

570. According to Dr. Fagan, an accurate analysis of need would include more than one supply forecast, and would include forecasts based upon high and low oil price assumptions, not merely oil producers' expectations of what they want to supply based upon their own "private" (undisclosed) price assumptions.¹³⁴⁴ Dr. Fagan testified that it is "widely recognized that current oil prices, as well as expectations for oil prices, drive future crude oil supply."¹³⁴⁵ She explained that this is why energy forecasting organizations, such as the NEB in Canada and the Energy Information Administration (EIA) in the United States, provide forecasts for oil supply that are not based on a single price assumption, but are based on a range of oil price assumptions.¹³⁴⁶ Unfortunately, Dr. Fagan did not

¹³⁴² Ex. DER-4, Sched. MF-1 at 23 (Fagan Direct).

¹³⁴³ *Id.*

¹³⁴⁴ *Id.* at 23, 38-39.

¹³⁴⁵ Ex. DER-4, Sched. MF-1 at 23 (Fagan Direct).

¹³⁴⁶ *Id.*

provide forecasts from the EIA for Canadian crude with which the ALJ could compare the CAPP forecasts.¹³⁴⁷ Such assistance would have been helpful in this case.

571. Dr. Fagan testified that, in the NEB and EIA outlooks, crude oil prices are external assumptions; “they are not generated by the internal relationships of their model....”¹³⁴⁸ Put simply, CAPP supply forecasts incorporate oil price and other assumptions made by the crude oil producers, instead of using external sources for those factors. And those assumptions are unstated in the CAPP forecast – they cannot be independently evaluated because they are not provided by CAPP.

572. The ALJ notes that CAPP members include the Canadian crude oil producers who are seeking approval of this Project (i.e., the intervening Shippers, all of whom are members of CAPP).¹³⁴⁹ Thus, the single supply forecast used by Applicant in its analysis of need is the forecast of its shippers – those same oil producers who seek to export Canadian crude oil to and through the U.S. In this way, Applicant is providing a forecast of need that is driven by the production expectations of the same oil producers with whom Applicant has entered into an agreement to build this Project.¹³⁵⁰

573. Mr. Earnest addressed this criticism in his rebuttal testimony by running his Mainline utilization analysis using other supply forecasts, including the 2017 CAPP supply forecast; the NEB low oil price forecast; the NEB reference oil price forecast; the NEB high oil price forecast; and a forecast created based on the current operating and in construction production¹³⁵¹ figures.¹³⁵² (Note that the 2017 CAPP forecast has the same limitations as the 2016 CAPP forecast in terms of potential bias and undisclosed internal assumptions.) A comparison the various outlooks is as follows:¹³⁵³

¹³⁴⁷ The EIA forecast provided by Dr. Fagan was just for the Dakotas and Rockies oil production. Ex. DER-4, Sched. MF-1 at 25 (Fagan Direct). The oil transported in this case comes solely from Canada.

¹³⁴⁸ Ex. DER-4, Sched. MF-1 at 23 (Fagan Direct).

¹³⁴⁹ Ex. SH-1 at 3 (Kahler Direct) (“The Shippers Group’s membership currently consists of Cenovus [Energy Inc.], Suncor Energy Marketing Inc., (‘Suncor’), and BP Products North America Inc. (‘BP’)”). Compare this list of companies to the Producer Members of CAPP listed on its website at <https://www.capp.ca/about-us/membership/producer-members>. See Second Am. Not. of Taking of Admin. Notice & Opportunity to Object (Mar. 29, 2018) (eDocket No. 20183-141510-01 (CN)).

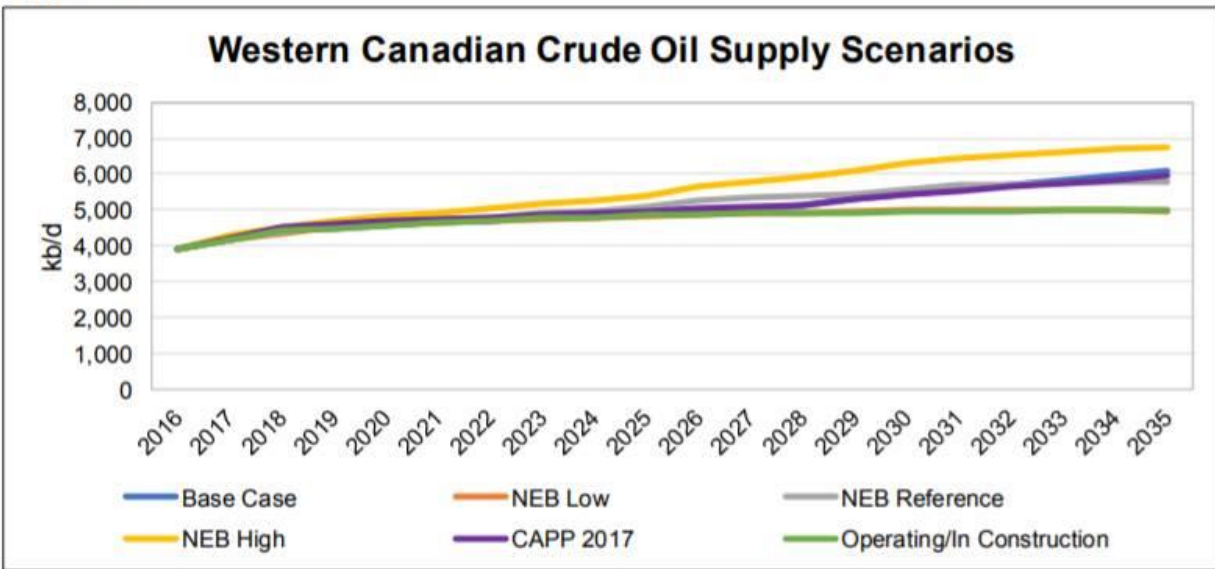
¹³⁵⁰ *Id.* See also, Ex. EN-1 at App. D (Issue Resolution Sheet).

¹³⁵¹ The Canadian oil tar sand operating and in construction scenario considers the situation in which production from the oil sands in Western Canada is limited to only the current production levels and increases from projects already under construction as of 2016). Ex. EN-86 at 19 (Crude Oil Supply Scenarios). It is unclear in the record what group created this forecast or whether this was created by Mr. Earnest himself based upon available data.

¹³⁵² Ex. EN-86 (Crude Oil Supply Scenarios).

¹³⁵³ Ex. EN-86 at Figure 5 (Crude Oil Supply Scenarios).

Figure 5



574. As these forecasts all demonstrate, crude oil supply is projected to steadily increase or at least rise and then remain constant (at around 4,500 kbpd) from 2016 to 2035.¹³⁵⁴ In none of Applicant's forecasts does Canadian crude oil supply reduce through 2035.

575. Using these various oil supply forecasts, Mr. Earnest re-ran his Muse Model to project utilization of the Proposed Line 3. Under all supply projections, Mr. Earnest's analysis shows that, given the oil supply available for transport from Western Canada, the Mainline System from Gretna to Clearbrook can operate at capacity once the Proposed Project is in service.¹³⁵⁵ In other words, regardless of which supply forecast is used, Mr. Earnest's model shows the Mainline operating at full (or close to full) utilization, with some light crude being diverted to Line 3 to fill capacity.¹³⁵⁶

576. Under Mr. Earnest's Model, regardless of which supply forecast is used, there is sufficient Canadian oil supply available for transport such that: (1) the light crude currently being transported on Line 3 can be diverted to other light crude lines that have unused capacity (according to Mr. Earnest, Lines 1, 2, and 65); (2) heavy crude can be transported on the new Line 3 to meet the demand for heavy crude, thereby eliminating apportionment on those heavy crude oil lines (Lines 4 and 67); and (3) any excess capacity on Line 3 can be used to satisfy any remaining light crude demand.¹³⁵⁷ In this way, under all supply projections, Mr. Earnest explains that the Mainline would be fully utilized to transport the projected Canadian crude oil supply through 2035.¹³⁵⁸

¹³⁵⁴ *Id.*

¹³⁵⁵ *Id.*

¹³⁵⁶ *Id.*

¹³⁵⁷ Ex. EN-86 (Earnest's Crude Oil Supply Scenarios).

¹³⁵⁸ *Id.*

577. Mr. Stockman challenges Mr. Earnest's crude oil supply projections by creating his own crude oil supply forecast. Mr. Stockman bases his analysis not on the NEB, CAPP, or AIE forecasts (all of which he rejects), but instead, on the Rystad Energy UCube Database (UCube Database). The UCube Database analyzes future oil production by individual crude oil facilities based on price of oil.¹³⁵⁹ Using an oil price assumption of \$50 per barrel (bbl) – a price that Mr. Stockman asserts is the historic “average” price of oil (adjusted for inflation) – Mr. Stockman creates a “low price forecast” for Canadian oil production through 2030.¹³⁶⁰

578. According to Mr. Stockman, the UCube Database data shows that the “breakeven” oil price for new facilities in Canada is \$77/bbl for “in situ” projects and \$110/bbl for mining projects.¹³⁶¹ Thus, if oil remains at \$50/bbl, as Mr. Stockman assumes, Mr. Stockman asserts that future tar sands development will be curtailed, leaving only those projects currently under construction to come on line. As a result, Mr. Stockman predicts that that Canadian oil supply will peak in 2020 and then begin to drop after 2023, with significant reduction in supply through 2030.¹³⁶²

579. Through his analysis, Mr. Stockman attempts to show how low oil prices could impact Canadian crude oil supply. Whether Mr. Stockman's projections of low supply will come to fruition, time will tell. Mr. Stockman and HTE do not carry the burden of proof in this case. What Mr. Stockman's analysis does, however, is demonstrate the risk of relying upon supply projections that do not disclose oil price assumptions.

580. The ALJ accepts that oil price assumptions – whether high or low – can and will impact supply projections. Because key underlying assumptions for the CAPP projections are not disclosed, the strength and reliability of those premises are untested and unknown, thereby putting into question the accuracy of Applicant's supply forecasts.

c. Demand for Refined Product

581. Dr. Fagan's second criticism of Mr. Earnest's analysis is that Mr. Earnest ignores demand for refined product and assumes that consumer demand will remain unchanged for the entire forecast period (until 2035).¹³⁶³

582. Mr. Earnest does not deny that his analysis completely ignores refined product demand. He confirms:

Dr. Fagan is correct that the demand for refined product does not play a role in the analytical modeling for assessing utilization of the Enbridge Mainline. This is fundamentally because the Enbridge Mainline transports

¹³⁵⁹ Ex. HTE-4 at 29 (Stockman Surrebuttal).

¹³⁶⁰ Ex. HTE-2 at 10 (Stockman Direct).

¹³⁶¹ Ex. HTE-2 at 8-9 (Stockman Direct).

¹³⁶² Ex. HTE-2 at 12 (Stockman Direct).

¹³⁶³ Ex. DER-4, Sched. MF-1 at 17 (Fagan Direct).

crude oil, not refined product, and it is the demand for crude oil that will drive the utilization of the Enbridge Mainline, not refined product.¹³⁶⁴

583. Mr. Earnest explains that, because he sees “no direct connection between Minnesota (and Midwestern and U.S.) crude oil runs and refined product demand,” he found “little utility in providing a refined product demand forecast.”¹³⁶⁵

584. Dr. Fagan disagrees. According to Dr. Fagan, under the economies of oil markets, demand for refined products drives refineries’ demand for crude oil.¹³⁶⁶ Dr. Fagan explained that, with very few exceptions, no one consumes crude oil except a refinery; and a refinery does not consume crude oil unless refined products are expected to be sold profitably.¹³⁶⁷ It follows that demand for refined products drives demand for crude oil, and is, therefore, is a driver of the price of crude oil.¹³⁶⁸ This means that weak demand for refined products can lead to lower prices for refined products; lower prices of refined products can lead to lower refinery margins (lower profitability), which impacts the viability of some refineries, which, in turn, can lead to lower refinery demand for crude oil.¹³⁶⁹ Thus, by focusing only on crude oil supply (as reported by Canadian oil producers) and totally ignoring refined product demand (local and global demand), Dr. Fagan concludes that Mr. Earnest’s analysis is materially flawed.¹³⁷⁰

585. The ALJ agrees. It is commonsense that reduced demand for refined products would impact the price, supply, and profitability of crude oil. By ignoring the demand for refined products -- and focusing only on the supply of Canadian crude -- Mr. Earnest’s analysis ignores an important factor in forecasting the need for additional transportation of crude.

586. Various parties have testified that recent domestic and global climate change initiatives and renewable energy policies will likely reduce the use of fossil fuels in the future (thereby reducing the demand for refined projects and lowering the price of oil).¹³⁷¹ Mr. Stockman asserts that “signals from accelerating technological change” to address climate change indicate that demand for oil will reduce in the future.¹³⁷² Examples include the “threat to oil demand” posed by electric vehicles.¹³⁷³ In addition, Mr. Stockman notes that “[c]limate change policy is alive and well all over this country and around the world....From London to Delhi and Paris to Beijing, local and national

¹³⁶⁴ Ex. EN-37, Sched. 1 at 46 (Earnest Rebuttal).

¹³⁶⁵ *Id.* at 46-47

¹³⁶⁶ Ex. DER-4, Sched. MF-1 at 18 (Fagan Direct).

¹³⁶⁷ Ex. DER-7, Sched. MF-1 at 5 (Fagan Surrebuttal).

¹³⁶⁸ Ex. DER-7, Sched. MF-1 at 5 (Fagan Surrebuttal).

¹³⁶⁹ *Id.*

¹³⁷⁰ Ex. DER-4, SCHED MF-1 (Fagan Direct).

¹³⁷¹ See e.g., Ex. YC-2 (Scott Direct); Ex. SC-4 (Twite Rebuttal); Ex. YC-1 (Swift Direct); Ex. HTE-2 (Stockman Direct).

¹³⁷² Ex. HTE-2 at 25-26 (Stockman Direct).

¹³⁷³ Ex. HTE-2 at 65 (Stockman Direct).

governments are planning to phase out petroleum to clear their aid and save millions of lives.”¹³⁷⁴

587. But Mr. Stockman has not quantified the alleged future reduction in demand for petroleum products in any measurable way, whether in the long-term or the short term.¹³⁷⁵ Mr. Stockman’s analysis is directed at the price of oil, not necessary changes in demand or consumption of refined products. Thus, while the ALJ agrees that global policy changes to reduce dependence on fossil fuels will likely reduce the global demand for oil and refined products sometime in the future, no party has put a number or timeframe to that general statement; nor has any party shown how much the supply of Canadian crude is expected to be impacted by those changes.

588. Similarly, the Sierra Club’s witness, Andrew Twite, testified that future sales of electric vehicles will decrease the demand for gasoline and diesel fuel.¹³⁷⁶ The ALJ agrees that it is reasonable to believe that the sales of electric vehicles will likely increase in the future and this increased use could reduce demand for gasoline sometime in the future.¹³⁷⁷ But Mr. Twite provided no evidence or empirical projections as to exactly how much these technologies may reduce demand for crude oil or when such reduction will likely occur.¹³⁷⁸ Accordingly, while a dramatic shift to electric vehicles may be on the horizon, Mr. Twite has not identified when this shift will come or how (in a quantifiable amount) it will reduce the demand or supply of Canadian oil into the United States.

589. Youth Climate’s witness, Anthony Swift, testified that Applicant’s forecasted oil demand “comes not from Minnesota or the United States, but from increased demand from China and India.”¹³⁷⁹ Mr. Swift notes, however, that “recent announcements by both these counties” indicate that they intend “to hasten their transition to electric vehicles, ban internal combustible engines, and take other measures that would dampen if not reverse

¹³⁷⁴ *Id.*

¹³⁷⁵ See generally Ex. HTE-2 (Stockman Direct); HTE-4 (Stockman Rebuttal); HTE-7 (Stockman Surrebuttal).

¹³⁷⁶ Ex. SC-4 at 2-3 (Twite Rebuttal).

¹³⁷⁷ Ex. SC-4 at 2-3 (Twite Rebuttal).

¹³⁷⁸ Dr. Fagan notes that the “uptake” of electric vehicles in the U.S. is growing dramatically. Ex. DER-4, Sched. MF-1 at 26 (Fagan Direct). Dr. Fagan then attempted to analyze the impact of electric vehicles on refined product demand in Minnesota and the Five-State area. Ex. DER-4, Sched. MF-1 at 28-29. Her conclusions were indecipherable. *Id.* Dr. Fagan concludes that “the Five-State Area could see a slight decline in gasoline demand, or even a significant decline in gasoline demand” as a result of electric vehicles. *Id.* at 29. In the end, Dr. Fagan does not quantify or otherwise refine her analysis to project what impact electric vehicles may, in fact, have on crude oil demand in the future. Ex. DER-7, Sched. MF-1 at 12-15 (Fagan Rebuttal). As she states, “To clarify, LEI [London Economics International] did not create a detailed model of future demand for oil, or even for gasoline in Minnesota, and the LEI testimony does not imply that.” *Id.* at 12. Accordingly, Dr. Fagan’s analysis was entirely unhelpful on this issue. Dr. Fagan then challenged Sierra Club to devise its own projections on the likely impact of electric vehicles on refined product demand. *Id.* at 15. As a result, neither the DOC-DER nor any other party provided a quantifiable analysis of how electric vehicle may impact demand for crude oil. This is unfortunate.

¹³⁷⁹ Ex. YC-25 at 3 (Swift Surrebuttal).

the demand trend that Enbridge and Canadian tar sands producers require to create and sustain the need for the Line 3 pipeline.”¹³⁸⁰

590. Mr. Swift maintains that nearly the entire international community has backed an energy transformation by committing to the Paris Accord, and that these international policy changes will likely reduce the demand for and use of fossil fuels in the future.¹³⁸¹ While this may well be true, Mr. Swift provides no data to show when, how, or how much these changes are expected to impact demand for refined product or crude oil in the near future (i.e., through 2035).

591. In sum, it is reasonable to assume that global climate change policies, mass transition to electric vehicles, and increased use of renewable energy sources will, sometime in the future, reduce global and domestic demand for refined products and, thus, demand for crude oil by refineries. However, no party has been able to quantify how or when those changes are expected to impact Canadian crude oil supply during the forecasting period (i.e., until 2035). Consequently, the ALJ is left with Applicant’s forecasts of oil supply available for transport on the Project – and whether those supply forecasts justify the construction of a new pipeline. Mere statements of change, no matter how reasonable those changes may be to anticipate – without quantification of how they will impact Canadian crude oil supply and demand -- are not sufficient to negate Applicant’s detailed projections. While they may invite doubt as to the extent of future demand for crude oil and oil transportation services, they do not negate Applicant’s projects of future oil supply.

d. Assumption of Exportation

592. The third and related criticism by Dr. Fagan of the Muse Stancil Report is that it impliedly assumes that any surplus of oil supply that is not consumed in the United States will quickly and profitably be exported to other markets.¹³⁸² Thus, if supply exceeds domestic demand for crude oil products, the international marketplace will consume those oil stocks.¹³⁸³

593. Mr. Earnest acknowledges that the proportion of Minnesota energy supply from petroleum products has been slowly declining in the last 20 years, due, in part, to the use of ethanol and Minnesota’s progressive renewable energy and conservation policies.¹³⁸⁴ (Demand for refined products in the five-state area has also remained steady.)¹³⁸⁵ While Mr. Earnest agrees that these policies have effectively reduced demand for petroleum products in Minnesota, he denies the claim that renewable energy

¹³⁸⁰ Ex. YC-25 at 5 (Swift Surrebuttal).

¹³⁸¹ *Id.*

¹³⁸² Ex. DER-4, Sched. MF-1 at 26 (Fagan Direct).

¹³⁸³ *Id.*

¹³⁸⁴ Ex. EN-15 at 4-9 (Earnest Direct).

¹³⁸⁵ *Id.* at 9.

policies and sources (including the increased use of electric cars) will substantially reduce the need for crude oil transportation in the future.¹³⁸⁶

594. Mr. Earnest reconciles his data of increased supply of oil and decreased demand in Minnesota (and unchanged demand in the five-state region) by asserting that a decrease in domestic demand for refined products does not equate to a decrease in demand for oil *by refineries*.¹³⁸⁷ Mr. Earnest explained that domestic demand for refined product has historically been lower than “crude oil runs” (i.e., the amount of crude oil transported to refineries).¹³⁸⁸ According to Mr. Earnest, this is because of the rising volume of refined product exported by the U.S. to other countries.¹³⁸⁹ In other words, U.S. refiners are receiving more oil than is necessary to meet domestic demand for refined products and are exporting their excess product outside of the U.S.¹³⁹⁰ From this information, Mr. Earnest makes the conclusion that any domestic decrease in demand for refined products will not have an effect on the demand for crude oil by refineries (and thus supply by producers) because any excess oil or product can be simply exported outside the U.S.¹³⁹¹ Consequently, Mr. Earnest’s analysis assumes that demand for refined products globally will not decrease over time and that there will always be an international market for refineries to sell their products if they are not consumed in the United States.

595. As Dr. Fagan noted, if there is an excess of oil in PADD II, it can be easily transported outside PADD II or even outside the U.S. due to the high level of integration of crude oil transportation systems worldwide.¹³⁹² But ease of moving oil stocks from one market to another says nothing about future oil demand; and Mr. Earnest’s testimony does not address the possibility of weak demand for refined products.¹³⁹³ Dr. Fagan points to the global decline of oil demand in the wake of the global financial crisis in 2007, which caused the closure of refineries in the U.S; as well as responses to the global oil crises of the late 1970s and early 1980s, which caused oversupply of oil in the market, reducing refined profit margins.¹³⁹⁴ Significant domestic and international carbon regulation could likewise have a market-dampening effect on oil supplies and, thus, the demand for transportation of oil.

596. Mr. Earnest summarily dismisses the possibility of a significant reduction in global demand for refined products and a resultant global overabundance of oil supply.¹³⁹⁵ According to Mr. Earnest, such scenarios are simply “apocalyptic” and “very unlikely,” thereby not warranting analysis.¹³⁹⁶

¹³⁸⁶ *Id.* at 4-5.

¹³⁸⁷ Ex. EN-15, Sched. 2 at 56 (Earnest Direct).

¹³⁸⁸ *Id.* at 58.

¹³⁸⁹ *Id.*; *See also*, EN-37, Sched. 1 at 46 (Earnest Rebuttal).

¹³⁹⁰ *Id.*

¹³⁹¹ Ex. EN-15, Sched. 2 at 58 (Earnest Direct).

¹³⁹² Ex. DER-4, Sched. MF-1 at 30 (Fagan Direct).

¹³⁹³ *Id.*

¹³⁹⁴ Ex. DER-7, Sched. MF-1 at 5 (Fagan Surrebuttal).

¹³⁹⁵ Ex. EN- 37, Sched. 1 at 46, fn. 42 (Earnest Rebuttal).

¹³⁹⁶ *Id.*

597. Dr. Fagan's point, however, is not lost. As Dr. Fagan noted, due to the high integration of the oil markets and the ease by which product can be transported from one location to another, demand for oil is a global, not a local, issue.¹³⁹⁷

598. Given the global recognition of the dangers of climate change and the calls to reduce dependence on fossil fuels, scenarios in which demand for oil in the international marketplace is significantly reduced (thereby causing an oversupply of oil, lowering oil prices, and reducing the opportunities for U.S. export) are very real. However, no party has presented any data actually quantifying this possibility. General discussions on global and domestic climate policy changes are not sufficient to quantify the effect that these policies may have on oil prices or demand for refined product. Therefore, the raw claims alone do not negate Mr. Earnest's assumption that (at least through 2035) surplus oil can be exported outside the U.S. (Mr. Stockman's analysis based upon oil prices is as close as a party comes to addressing a decrease in global demand and his analysis is discussed above.)

e. Additional Pipeline Availability

599. Finally, Dr. Fagan asserts that Mr. Earnest's Model and Report unrealistically assume no pipeline expansion or new pipeline construction for 14 years, from 2021 to 2035.¹³⁹⁸ According to Dr. Fagan, this assumption is inconsistent with the historical evidence of pipeline expansion and construction every few years as long as oil production is increasing.¹³⁹⁹ Dr. Fagan explains that if Canadian oil producers are truly expecting a 1.5 million bpd increase in supply by 2035, then these same producers will be seeking increased pipeline capacity from various sources (not just Line 3) to reduce the use of more costly rail transportation.¹⁴⁰⁰ Dr. Fagan notes that it would be "unrealistic" to assume new projects would not be built if oil supply remains high, as CAPP anticipates.¹⁴⁰¹

600. Mr. Earnest responds to this criticism by modeling scenarios where the Keystone XL, Energy East, Trans Mountain expansion, Ozark expansion, and Dakota Access Pipeline Expansion are all in service.¹⁴⁰² Mr. Earnest concludes, based upon his modeled scenarios, that even with these new pipelines and expansions, the Project will still be utilized.¹⁴⁰³ No party was effective in rebutting this analysis.

601. At trial, Dr. Fagan asserted generally that these additional pipeline scenarios were not realistically modeled by Mr. Earnest.¹⁴⁰⁴ For example, Dr. Fagan explained that Mr. Earnest's Model has the Keystone XL pipeline transporting a little over 100 kbpd, despite the fact that the project is anticipated to run at 800 kbpd.¹⁴⁰⁵ Dr. Fagan

¹³⁹⁷ Ex. DER-7, Sched. MF-1 at 5 (Fagan Surrebuttal).

¹³⁹⁸ Ex. DER-4, Sched. MF-1 at 30-31 (Fagan Direct).

¹³⁹⁹ Ex. DER-4, Sched. MF-1 at 31 (Fagan Direct).

¹⁴⁰⁰ Ex. DER-4, Sched. MF-1 at 32 (Fagan Direct).

¹⁴⁰¹ *Id.*

¹⁴⁰² Ex. EN-37, Sched. 1 at 29-36 (Earnest Rebuttal).

¹⁴⁰³ *Id.*

¹⁴⁰⁴ Evid. Hrg. Tr. Vol. 9B at 95-100 (Fagan).

¹⁴⁰⁵ *Id.* at 98.

asserts that such volume would not be sufficient to get the Keystone pipeline built because the Keystone XL project is being built on a “take or pay” basis, meaning that shippers must commit to shipping a certain amount on the line or it will not be built.¹⁴⁰⁶ Dr. Fagan, however, did not provide any additional analysis to show why or how Mr. Earnest’s revised utilization projections were erroneous.¹⁴⁰⁷ Her comments were essentially afterthoughts not addressed in any of her pre-filed testimony.

602. The ALJ agrees that Mr. Earnest’s initial analysis dismissing the Keystone XL pipeline as a possible means of transportation in the future was in error. The Keystone XL pipeline has now received all necessary regulatory permits and, thus, is a realistic possibility for crude oil transportation in the future.¹⁴⁰⁸ Mr. Earnest, however, updated his projections by including the Keystone XL pipeline in his Model; and Dr. Fagan provided little, if any, evidence to rebut Mr. Earnest’s updated projections.

f. Summary of DOC-DER Critique

603. Based upon her critique of Mr. Earnest’s work, Dr. Fagan concludes that the forecast assumptions for supply, demand, and infrastructure made in the Muse-Stancil Report were “unrealistic” and that she could not “conclude with confidence” that Applicant’s forecasts were accurate.¹⁴⁰⁹ Therefore, she neither rejected Applicant’s forecasts as inaccurate nor endorsed them as accurate. The DOC-DER’s expert’s lack of confidence in the forecasts fall short of an expert declaration that the Project is not needed.

604. Presumably, Dr. Fagan did not have sufficient time to fully analyze the “ultimate issue” set forth by the Commission in its Order of August 12, 2015 – namely, whether the “proposed pipeline meets the need criteria set forth in Minn. Stat. § 216B.243 and Minn. Rules Chapter 7853.”¹⁴¹⁰ The ALJ notes that the DOC-DER has not been overly helpful to the ALJ and Commission in this case. The DOC-DER’s expert, Dr. Fagan, was not retained until sometime in late July 2017 – approximately 45 days prior to when the

¹⁴⁰⁶ *Id.*

¹⁴⁰⁷ Any argument by the DOC-DER that Dr. Fagan was not permitted an opportunity to supplement her analysis is flatly rejected. The ALJ permitted the DOC-DER to submit “supplemental surrebuttal” by Dr. Fagan because she was unable to complete her work by the deadline for surrebuttal and had apparently ignored the apportionment analysis in her initial review. Any criticisms of Mr. Earnest’s rebuttal testimony by Dr. Fagan should have been included in Dr. Fagan’s surrebuttal -- or the supplemental surrebuttal she was afforded. Dr. Fagan’s lack of an analysis of these other pipeline options was not caused by any deadlines set by the ALJ.

¹⁴⁰⁸ The ALJ takes judicial notice of the status of the Keystone XL Pipeline, as set forth in the company statement contained at:

<https://www.transcanada.com/en/announcements/2018-01-18transcanada-confirms-commercial-support-for-keystone-xl/>. See, *Second Am. Notice of Taking Admin. Notice & Opportunity to Object* (Mar. 29, 2018) (eDocket No. 20183-141510-01 (CN)) and

¹⁴⁰⁹ Ex. DER-4, Sched. MF-1 at 39 (Fagan Direct).

¹⁴¹⁰ Ex. PUC-6 at 6.

DOC-DER's direct testimony was due to be filed in the case.¹⁴¹¹ As a result, Dr. Fagan admits that she did not have time to conduct any stand-alone analysis of need.¹⁴¹²

605. Instead, due to the DOC-DER's resource constraints and Dr. Fagan's late involvement in the case, she was only able to provide a critique of Applicant's Muse Stancil Report and the related Oliver Wyman Report.¹⁴¹³ Consequently, Dr. Fagan did not analyze whether denial of a CN would adversely affect the future adequacy, reliability, or efficiency of energy supply to the Applicant's customers, the people of the state, or neighboring states.¹⁴¹⁴ Nor did Dr. Fagan examine the impact on crude oil supply in Minnesota or elsewhere if the Project was denied.¹⁴¹⁵

606. Moreover, it was only after her surrebuttal had been filed that Dr. Fagan began analyzing the issue of apportionment, a major issue in this case.¹⁴¹⁶ Applicant's CN Application (filed in 2014), specifically identifies apportionment as one of the three bases of need for the Project.¹⁴¹⁷ Despite this fact, Dr. Fagan did not address apportionment until after the deadline for filing surrebuttal testimony had expired.¹⁴¹⁸ As a result, the DOC-DER submitted Dr. Fagan's "Supplemental Surrebuttal" on October 27, 2017, just days before the start of the hearing on this matter.¹⁴¹⁹

607. To ensure as robust a record as possible, and over Applicant's objection, the ALJ allowed the DOC-DER to submit untimely "Supplemental Surrebuttal" on the issue of apportionment.¹⁴²⁰ Even then, Dr. Fagan's ultimate analysis of apportionment was merely "inconclusive," providing little, if any, assistance to the ALJ and Commission.

608. Ultimately, because the DOC-DER did not conduct its own analysis of the need for this Project, the Commission and the ALJ are left with Applicant's analysis and the critiques presented by opposing parties (including the DOC-DER).

609. Despite the DOC-DER's lack of a stand-alone expert analysis of need, the DOC-DER repeatedly advised the public at the public hearings that the agency found no need for the Project -- statements that gave the impression that the agency had conducted its own expert analysis of need.¹⁴²¹ When, in fact, the DOC-DER only provided criticism of Applicant's methodologies, but no independent analysis of the need for the Project. Ultimately Dr. Fagan's conclusion were: (1) "inconclusive," and (2) "cannot conclude with

¹⁴¹¹ Evid. Hrg. Tr. Vol. 9B at 23 (Fagan). Evid. Hrg. Tr. Vol. 1A at 83.

¹⁴¹² *Id.* at 79-80 (Fagan).

¹⁴¹³ Ex. DER-4, Sched. MF-1 at 8 (Fagan Direct).

¹⁴¹⁴ Evid. Hrg. Tr. Vol. 9B at 25-26 (Fagan).

¹⁴¹⁵ *Id.* at 29-30 (Fagan).

¹⁴¹⁶ Evid. Hrg. Tr. Vol. 9B at 47 (Fagan).

¹⁴¹⁷ Ex. EN-1 at 3-1 (CN Application).

¹⁴¹⁸ Ex. DER-9 (Fagan Supplemental Surrebuttal).

¹⁴¹⁹ Ex. DER-9 (Fagan Supplemental Surrebuttal).

¹⁴²⁰ Ex. DER-9 (Fagan Supplemental Surrebuttal).

¹⁴²¹ Exs. DER-22, DER-23 (Public Hearing PowerPoint Presentations).

confidence” with respect to apportionment and Applicant’s forecast of need, respectively.¹⁴²²

g. Apportionment and Effect on Applicant’s Customers

610. Applicant does not rely solely upon the Muse Stancil analysis, however, in arguing its case of need. Rather, Applicant also argues that current apportionment on the Mainline System – and projected continued apportionment (coupled with the need to replace the aging line) -- establishes the need for the new line.

611. This evidence is based upon the testimony of John Glanzer, using historical apportionment data and future supply projections made by Mr. Earnest.

612. Mr. Glanzer is the Director of Infrastructure, Planning and Lifecycle Effectiveness for Enbridge.¹⁴²³ He testified that from June 2014 through February 2017, there was been apportionment on the Mainline System for heavy crude every month except for October 2015 and April 2016.¹⁴²⁴

Table 3.5.2-2: Enbridge Historical Mainline Apportionment within MN²

Line	Service	Apportionment Percentage by Month (2017)											
		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
2	Light	-	-										
3	Predominantly Light	-	-										
4	Predominantly Heavy	33.00	41.00										
67	Heavy	33.00	41.00										
Line	Service	Apportionment Percentage by Month (2016)											
		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
2	Light	3.00	-	-	-	-	-	-	-	-	-	-	-
3	Predominantly Light	3.00	-	-	-	-	-	-	-	-	-	-	-
4	Predominantly Heavy	16.00	14.00	2.00	-	6.00	7.00	4.00	22.00	22.00	23.00	17.00	23.00
67	Heavy	16.00	14.00	2.00	-	6.00	7.00	4.00	22.00	22.00	23.00	17.00	23.00
Line	Service	Apportionment Percentage by Month (2015)											
		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
2	Light	5.00	6.00	-	-	-	-	-	-	-	-	-	-
3	Predominantly Light	5.00	6.00	-	-	-	-	-	-	-	-	-	-
4	Predominantly Heavy	30.00	36.00	33.00	42.00	42.00	42.00	31.00	34.00	16.00	-	16.00	19.00
67	Heavy	30.00	36.00	33.00	42.00	42.00	42.00	31.00	34.00	16.00	-	16.00	19.00
65	Light, Medium	-	6.00	-	-	-	-	-	-	-	-	-	-

613. According to this data, Enbridge’s Line 4 and Line 67 run predominantly heavy crude and were unable to fill shipper nominations in 24 of the 26 months between January 2015 and February 2017.¹⁴²⁵ Apportionment for heavy crude during this time was between two and 42 percent, averaging approximately 22 percent monthly.¹⁴²⁶ In contrast, light crude experienced very little apportionment, with apportionment occurring on Line 3 only three times in the same two-year period.¹⁴²⁷ The amount of apportionment

¹⁴²² Ex. DER-9 at 10 (Fagan Supplemental Surrebuttal); Ex. DER-4, Sched. MF-1 at 39 (Fagan Direct).

¹⁴²³ Ex. EN-19 at 2 (Glanzer Direct).

¹⁴²⁴ *Id.* at 11.

¹⁴²⁵ Ex. EN-19 at 12, Table 3.5.2-2 (Glanzer Direct).

¹⁴²⁶ *Id.*

¹⁴²⁷ *Id.*

of light crude was between three and six percent, indicating that apportionment of light crude on Line 3 is not a significant issue for Applicant.¹⁴²⁸

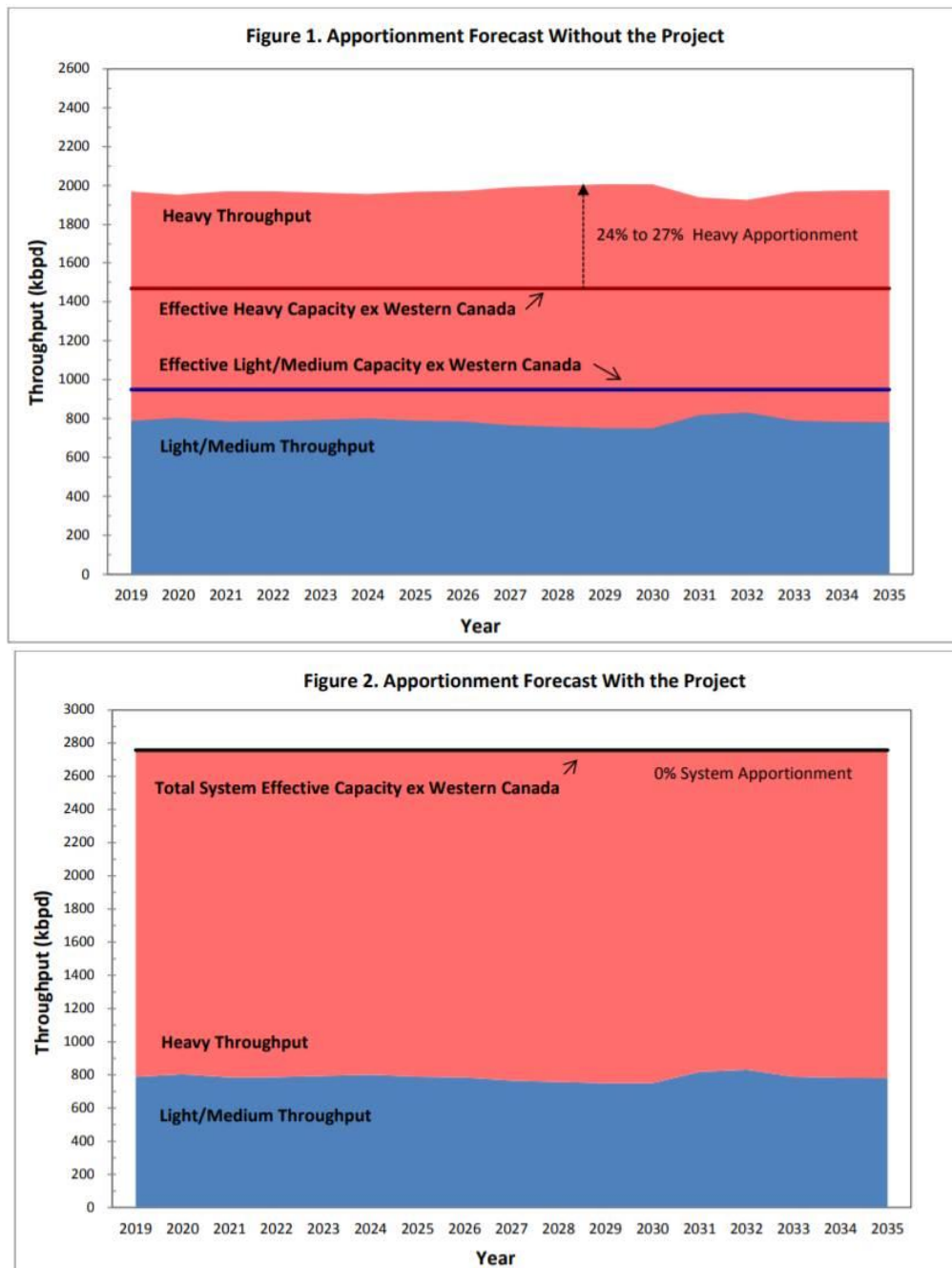
614. Using the CAPP oil supply projections provided in the Muse Report, Mr. Glanzer projected that future apportionment on the Mainline System will be between 24 and 27 percent for heavy crude from 2019 to 2035 if the Project is not approved.¹⁴²⁹ If the Project is approved, Mr. Glanzer asserts that apportionment of heavy crude will be zero, thereby remedying the issue of apportionment for the Mainline System and avoiding the use of rail as a transportation option.¹⁴³⁰ Below are Mr. Glanzer's diagrams projecting future apportionment:¹⁴³¹

¹⁴²⁸ *Id.*

¹⁴²⁹ Ex. EN-19 at Sched. 1 (Glanzer Direct).

¹⁴³⁰ *Id.* Mr. Glanzer also explained that, if Existing Line 3 were to be removed from service and not replaced (requiring the 390 kbpd of light crude currently transported on the line to be transported on other lines), apportionment would increase substantially, resulting in apportionment of heavy crude to be between 25 and 38 percent, and light crude between 27 and 41 percent. Ex. EN-38 (Glanzer Rebuttal). However, because the Commission has no authority to require Applicant to cease operations of Existing Line 3, this scenario is moot. As Applicant has repeatedly expressed, if this Project is not approved, Applicant can and will continue to operate Existing Line 3 under its current pressure restrictions (i.e., reduced capacity). Ex. EN-1 at 3-2 (CN Application).

¹⁴³¹ Ex. EN-19 at 13-14 (Glanzer Direct).

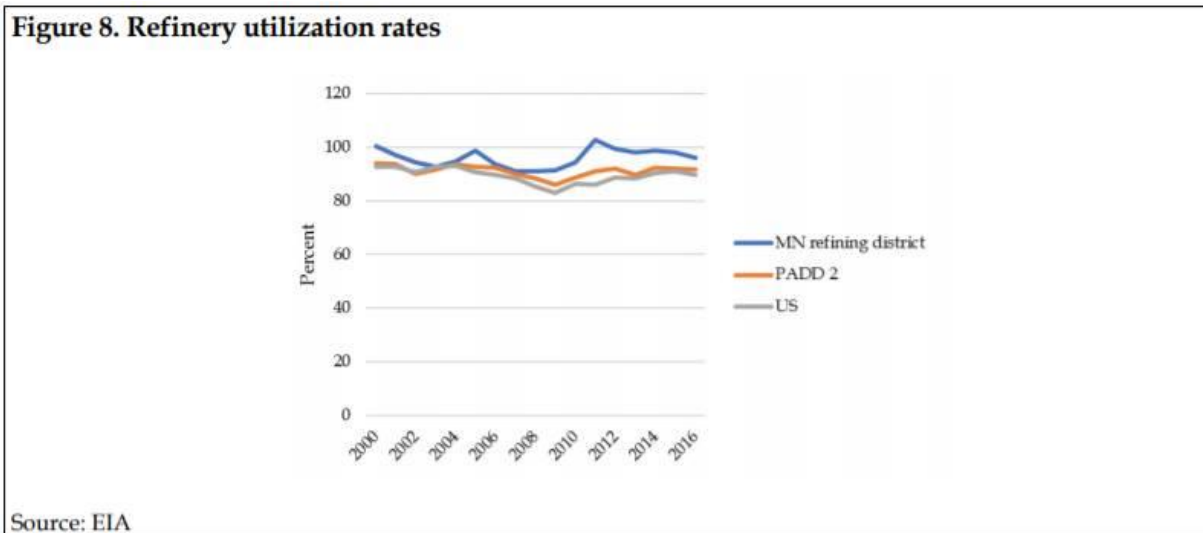


615. In addition, historical data shows that Existing Line 3 has been operating at approximately 80 percent utilization from 2012-2016, demonstrating that Line 3 is currently being used and its capacity (390 kbpd) is generally being transported.¹⁴³² In other words, the evidence demonstrates that most of the 390 kbpd of light crude currently able to be transported through Existing Line 3 is, in fact, being transported and, thus, there is need to have that 390 kbpd transportation capacity in the Mainline System.

¹⁴³² Ex. EN-19, Sched. 3 at 2 (Glanzer Direct).

h. DOC-DER Review of Applicant's Apportionment Analysis

616. Dr. Fagan did not evaluate Applicant's claims of appointment in her original analysis of the case. Instead, Dr. Fagan simply noted that refineries in the "Minnesota District" (a district that includes Minnesota, North Dakota, South Dakota, Iowa, and Wisconsin) have been operating at "high levels of utilization," close to 100 percent, for the past few years.¹⁴³³ This average level of utilization is more than the rest of PADD II and the U.S., as demonstrated below:¹⁴³⁴



617. According to Mr. Earnest, "high refinery utilization" means "that the local refiners currently operate near their current capacity."¹⁴³⁵ In other words, the refineries are using all the oil that they have capacity to refine.

618. From this utilization data, Dr. Fagan concludes that Minnesota refiners "are not only operating efficiently, they are processing all the crude [oil] they possibly can (though there could be room to adjust the crude oil diet to change the mix [of] various grades of crude)."¹⁴³⁶ According to Dr. Fagan, "This implies that crude oil for the Minnesota district has not been in short supply compared to refining capacity, though the mix of crude oil supplies might not be perfectly optimal."¹⁴³⁷

619. In her Surrebuttal, Dr. Fagan takes her analysis of this data one step further and concludes that because Minnesota District refineries are operating at high levels of utilization, the increase in capacity of the proposed Project (370 kbpd), is "not likely to be used in Minnesota."¹⁴³⁸ Put simply, Dr. Fagan concludes that because refineries in the Minnesota District are operating at high levels of utilization, they must be getting all the

¹⁴³³ Ex. DER-4, Sched. MF-1 at 14 (Fagan Direct).

¹⁴³⁴ Ex. DER-4, Sched. MF-1 at 14, Figure 8 (Fagan Direct).

¹⁴³⁵ Ex. EN-69 (Earnest Summary).

¹⁴³⁶ Ex. DER-4, Sched. MF-1 at 14 (Fagan Direct).

¹⁴³⁷ *Id.*

¹⁴³⁸ Ex. DER-7, Sched. MF-1 at 11 (Fagan Surrebuttal).

oil they need to meet their customer demands and that any excess oil transported on the line will necessarily go outside Minnesota.

620. In her “Supplemental Surrebuttal” testimony, Dr. Fagan attempts to analyze Applicant’s claims of apportionment.¹⁴³⁹ Because the claim apportionment only affects heavy crude, Dr. Fagan attempted to analyze whether Minnesota refineries are receiving all the heavy crude they need to meet their customer demands.¹⁴⁴⁰ Rather than contact the refiners directly to obtain this information,¹⁴⁴¹ Dr. Fagan looked to coker capacity and utilization.¹⁴⁴² (A “coker” is an oil refinery processing unit used for processing heavy crude.)¹⁴⁴³

621. According to Dr. Fagan, “if a coker is operating near full capacity, then it is likely that the refinery is running all the heavy crude it can; if a coker is operating at far below capacity, the refinery is probably running less heavy crude than it could.”¹⁴⁴⁴ Using this assumption, Dr. Fagan attempted to compare monthly apportionment of heavy crude to coker use at the Minnesota District refineries.¹⁴⁴⁵ She concluded that she could not find a correlation between apportionment and coker use on a monthly basis.¹⁴⁴⁶ As a result, Dr. Fagan could not determine whether apportionment “effectively limited the supply of heavy crude to Minnesota district refiners in the recent past and present.”¹⁴⁴⁷ And, her opinion as to whether Minnesota District refineries are being impacted by apportionment on the Mainline System was “inconclusive.”¹⁴⁴⁸ In other words, Dr. Fagan was unable to rebut Applicant’s claims with respect to apportionment.

622. Dr. Fagan’s analysis provides no real assistance to the ALJ or Commission on the issue of apportionment and its effect on Applicant’s customers, Minnesota, or neighboring states. Therefore, the ALJ and Commission are left with Applicant’s evidence related to apportionment to analyze.

623. It is undisputed that since at least 2015, the Enbridge Mainline System has been operating in apportionment, averaging approximately 22 percent monthly, with respect to heavy crude.¹⁴⁴⁹ Assuming shipper demand for heavy crude remains consistent with its current levels, the evidence suggests that apportionment of heavy crude on the Mainline will continue in the near future (for at least 15 years).¹⁴⁵⁰

624. No party has effectively rebutted Applicant’s claims of current or future apportionment. Thus, even if the oil supply and demand forecasts from the Muse Report

¹⁴³⁹ Ex. DER-9 (Fagan Supplemental Surrebuttal).

¹⁴⁴⁰ *Id.*

¹⁴⁴¹ This would seem to be the easiest way to obtain this important information.

¹⁴⁴² *Id.*

¹⁴⁴³ *Id.*

¹⁴⁴⁴ Ex. DER-9 at 7 (Fagan Supplemental Surrebuttal).

¹⁴⁴⁵ Ex. DER-9 at 8-9 (Fagan Supplemental Surrebuttal).

¹⁴⁴⁶ *Id.*

¹⁴⁴⁷ *Id.* at 10.

¹⁴⁴⁸ *Id.*

¹⁴⁴⁹ Ex. EN-19 at 12 (Glanzer Direct).

¹⁴⁵⁰ Ex. EN-37 (Glanzer Rebuttal).

are viewed with skepticism (which the ALJ recommends), Applicant has established that apportionment of heavy crude on the Mainline currently exists, has existed for at least the last three years, and will likely continue to exist into the near future, unless additional pipeline capacity is added to the Mainline System. Based upon the most conservative of NEB's supply forecasts, unless additional capacity on the system is added to enable the transportation of more heavy crude, apportionment will continue to be an issue for the Applicant, its shippers, and refiners.

i. Adverse Effects of Apportionment

625. Existing Line 3, due to its age and condition, does not transport heavy crude.¹⁴⁵¹ Thus, to address the issue of apportionment of heavy crude on the Mainline, Applicant seeks to replace Line 3 with a new line that can work in mixed service to give it and its customers operational flexibility, reliability, and access to adequate oil supplies.¹⁴⁵²

1. Harm Caused by Apportionment

626. Because Applicant has established current apportionment, the question then becomes whether denial of a permit (and thus continued apportionment) would adversely affect the future adequacy, reliability, or efficiency of oil supply to Applicant, to Applicant's customers, or to the people of Minnesota and neighboring states.¹⁴⁵³

627. The Commission's criteria for need requires the ALJ and Commission to consider "the future adequacy, reliability, and efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states."¹⁴⁵⁴ The rule does not differentiate among the importance of these three groups. In other words, the interests of Applicant's customers and the people of Minnesota are on equal footing. Thus, if there is an adverse impact by denial on any of these groups, it must be considered.

628. Applicant's customers are shippers of oil which, Applicant explains, include: (1) producers of Canadian tar sands oil; (2) crude marketers who purchase and sell crude; and (3) refiners who also produce or acquire supply from third parties and arrange delivery to their refineries.¹⁴⁵⁵ These customers are represented in this action by the intervening Shippers group, which includes the following companies: Cenovus, Suncor, and BP.¹⁴⁵⁶

¹⁴⁵¹ Ex. EN-19 at 5 (Glanzer Direct).

¹⁴⁵² Ex. EN-38 at 2-4 (Glanzer Rebuttal).

¹⁴⁵³ Minn. R. 7853.0130(A).

¹⁴⁵⁴ Minn. R. 7853.0130(A).

¹⁴⁵⁵ Ex. EN-14 at 3 (Fleeton Direct).

¹⁴⁵⁶ Ex. SH-1 at 3 (Kahler Direct). Suncor is a producer of Canadian tar sands oil; Cenovus is a producer of Canadian tar sands oil; and BP is a producer, refiner, marketer and trader of oil, as well as a retailer of refined products. All are members of the Canadian Petroleum Producers Association (CAPP). See Second Am. Notice of Taking Admin. Notice & Opportunity to Object (Mar. 29, 2018) (eDocket No. 20183-141510-01 (CN)), whereby the ALJ takes judicial notice of the membership of CAPP.

These companies are members of the Canadian Petroleum Producers Association.¹⁴⁵⁷ Accordingly, they are producers of Canadian crude oil.

629. Applicant does identify Minnesota refiners (Flint Hills or Andeavor) in its list of shippers or customers, although these refiners are apparently recipients of oil shipped on the Mainline System.¹⁴⁵⁸

630. Even if Minnesota refineries are considered shippers or “customers” of Applicant, based upon the evidence presented – utilization data and refiners’ comments -- Minnesota refiners are receiving the amount of oil they need to meet their refining needs, despite apportionment. Applicant has presented no evidence that Minnesota refiners are being harmed by apportionment or that these refiners are not receiving the oil supplies they need.

631. The problem presented in this case is that Minnesota refiners appear to be currently receiving a sufficient amount of oil to meet their immediate need (i.e., there is no evidence that Minnesota refiners are being directly harmed by apportionment currently). It is Applicant’s other customers – namely, Canadian oil producers -- that claim to suffer adverse impacts by apportionment. Minnesota refiners’ comments simply state that reduction of apportionment will improve their ability to access crude oil supplies and will benefit them. They did not present any evidence of harm.

632. Mr. Glanzer testified that when the Mainline is in apportionment (nearly always for heavy crude currently), all shippers are impacted because they are not able to ship all the crude they want to on the line.¹⁴⁵⁹ This causes its shippers to look to more expensive transportation sources, like rail.¹⁴⁶⁰

633. Restoring Line 3 to its original capacity and allowing it to ship both heavy and light crude oil, will reduce apportionment on the Mainline and allow refiners access to a more constant, predictable, and economical supply of crude.¹⁴⁶¹ In addition, the heavy amount of maintenance required on the line if it is not replaced (projected to be approximately 6,250 integrity digs over the next 15 years), will inevitably reduce the reliability of the line.¹⁴⁶² A new line should not require such intensive maintenance and should ensure steady, reliable supply.¹⁴⁶³

¹⁴⁵⁷ See Second Am. Notice of Taking Admin. Notice & Opportunity to Object (Mar. 29, 2018) (eDocket No. 20183-141510-01 (CN)), whereby the ALJ takes judicial notice of the membership of CAPP. See also, Applicant Objections to Proposed Taking of Admin. Notice (Apr. 5, 2018) (eDocket No. 20184-141717-01 (CN)).

¹⁴⁵⁸ See e.g., Ex. EN-56, Sched. 1 at 4 (Earnest Surrebuttal) (Flint Hills asserts that it “relies exclusively on the Enbridge pipeline system to deliver crude oil to its Minnesota refinery via the Minnesota Pipeline System.”); Ex. EN-94, Sched. 1 (Earnest Supplemental Surrebuttal) (Andeavor states that it relies on the Mainline System to provide approximately half of its crude oil needs.).

¹⁴⁵⁹ Ex. EN-38 at 3 (Glanzer Rebuttal).

¹⁴⁶⁰ *Id.*

¹⁴⁶¹ *Id.*

¹⁴⁶² *Id.*

¹⁴⁶³ *Id.*

634. According to Mr. Glanzer, Applicant's customers (its Canadian oil producers) are adversely impacted by apportionment because they are not able to ship their product as efficiently or as reliably on the Mainline System as when the system is not in apportionment.¹⁴⁶⁴ In turn, Mr. Glanzer asserts – albeit without supporting testimony from Minnesota refiners¹⁴⁶⁵ -- that refineries are affected by apportionment because they are not able to obtain all the crude oil or types of crude oil that they want from pipelines, and are then forced to obtain that oil through a more difficult or costly means (such as rail or truck).¹⁴⁶⁶

2. Shipper and Local Refinery “Support” for Line 3

635. To establish harm to its customers, Applicant relies upon the testimony of the Shippers and public comment letters submitted by the two Minnesota refineries, Flint Hills and Andeavor.

636. According to the Shippers Group, apportionment means that Shippers' members cannot ship all of the crude oil demanded by the markets.¹⁴⁶⁷ The Shippers also stated that because the pipeline is a common carrier, apportionment means that all shippers have their nominations reduced whether they serve Minnesota or downstream customers.¹⁴⁶⁸

637. According to Applicant, the fact that “shippers would invest \$7.5 billion on the Project” is sufficient evidence of need for the Project and suggests that the CAPP forecasts relied upon by Mr. Earnest must be accurate.¹⁴⁶⁹ This argument has little merit. As discussed at length above, shippers are not contractually required to utilize the new Line 3. Shippers only pay a fee if and when they use the Mainline.¹⁴⁷⁰ Therefore, the fact that shippers support the Project is not evidence of anything more than shippers seek to have more pipeline options available to them to export their oil out of Canada and into the United States – and that the shippers are willing to pay an extra surcharge for the pipeline *if they use it*.

638. Applicant's argument would be more persuasive if the Shippers had entered into “take-or-pay” contracts for the construction of the Project, thereby committing themselves to pay for the line whether or not they use it. In other words, under “take-or-pay” contracts, shippers must actually “put their money where their mouth is” with respect to their supply and demand projections. Because shippers must pay for the line whether or not they use it, shippers' shipping projections in a “take-or-pay” financing arrangement are more likely to reflect genuine necessity and not mere convenience.

¹⁴⁶⁴ Ex. EN-38 at 1-3 (Glanzer Rebuttal).

¹⁴⁶⁵ Comment letters are not testimony and do not have the reliability of under-oath testimony, which is subject to cross-examination and credibility determinations.

¹⁴⁶⁶ Evid. Hrg. Tr. Vol. 1A at 13-14 (Earnest Direct); Ex. EN-38 at 2 (Glanzer Rebuttal).

¹⁴⁶⁷ Ex. SH-1 at 5 (Kahler Direct).

¹⁴⁶⁸ Ex. SH-2 at 10 (Kahler Direct).

¹⁴⁶⁹ Ex. EN-57 at 1 (Glanzer Surrebuttal).

¹⁴⁷⁰ Ex. EN-1 at App. D (Issue Resolution Sheet).

639. Because the Project in this case will be operated on a “pay-as-you-go” basis, Shippers are not committed to anything other than a surcharge when/if they use the Mainline.¹⁴⁷¹ Shippers pay nothing if they do not end up using it. If shippers use the Mainline, but not as much as anticipated in any particular year (i.e., the threshold amount of 2350 kbpd is not met during a year), then the surcharge increases in the next year.¹⁴⁷² But the shippers are still not required to use Line 3 or the Mainline System if other forms of transportation (i.e., other pipelines, rail, or truck) prove more economical or otherwise desirable. Thus, if supply or demand for oil is low, shippers can stop using the Mainline System -- or use it less -- and are not responsible for anything more than payment of the agreed-upon surcharge for only the amount of oil that they actually ship.¹⁴⁷³ Put simply, shippers are not mandated in any way to use the Mainline or pay for it if they do not use it.¹⁴⁷⁴ Accordingly, shippers’ projections of oil supply they may seek to ship are less reliable in a “pay-as-you-go” system; and Shipper support is, thus, not dispositive evidence of need for the Project.

640. Applicant also relies significantly upon the content of letters from the two Minnesota refiners: Flint Hills and Andeavor.¹⁴⁷⁵ Notably, these refiners are not intervenors in this action and Applicant did not call witnesses from either of these companies to answer questions under oath. Accordingly, these letters are afforded significantly less weight than testimony given under oath and subject to cross examination.

641. The letters submitted by the two refineries are largely self-serving and add little to the analysis. First, neither of the refineries indicate that they are *not* receiving the volume of crude oil they need to meet their refining demands.¹⁴⁷⁶ Second, neither refinery identifies any specific, direct harm it has suffered from apportionment or will suffer if the Project is not approved.¹⁴⁷⁷

642. In its letter, Flint Hills explains in general terms how apportionment can affect refineries by: (1) creating “inefficiencies” that hinder a refinery’s ability to access its most preferred or economic crude slate; (2) making it more difficult to respond to spikes in demand or make up for supply outages or unplanned events; and (3) creating operational inefficiencies, including underutilization of equipment.¹⁴⁷⁸ Flint Hills’ letter is notably silent, however, about any actual harm it has suffered as a result of apportionment or will actually suffer if the Project is not approved. Flint Hills does not make any claims that it is not receiving the amount or type of crude oil it needs.

¹⁴⁷¹ Evid. Hrg. Tr. Vol. 9A at 72-73, 86 (Van Heyst); Evid. Hrg. Tr. Vol. 1B at 110-11 (Fleeton).

¹⁴⁷² Ex. EN-1 at Appendix D at 4 (Issue Resolution Sheet).

¹⁴⁷³ If the capital costs for Line 3 are not recouped in the 15-year term anticipated in the IRS, then Applicant is entitled to recover its “undepreciated Line 3 Replacement rate base,” but under terms to be negotiated “with the appropriate counterparty at that time.” Ex. EN-1 at Appendix D at 4 (Issue Resolution Sheet).

¹⁴⁷⁴ Ex. EN-1 at Appendix D at 4 (Issue Resolution Sheet).

¹⁴⁷⁵ Ex. EN-56, Sched. 1 (Earnest Surrebuttal); Ex. EN-94, Sched. 1 (Earnest Supplemental Surrebuttal).

¹⁴⁷⁶ Ex. EN-56, Sched. 1 (Earnest Surrebuttal); Ex. EN-94, Sched. 1 (Earnest Supplemental Surrebuttal).

¹⁴⁷⁷ Ex. EN-56, Sched. 1 (Earnest Surrebuttal); Ex. EN-94, Sched. 1 (Earnest Supplemental Surrebuttal).

¹⁴⁷⁸ Ex. EN-56, Sched. 1 at 5 (Earnest Surrebuttal).

643. At the same time that Flint Hills warns about the potential impacts of apportionment, it boasts that its Pine Bend facility “operates near its nameplate capacity of approximately 340,000 barrels per day,” thereby lending support to Dr. Fagan’s observation that Minnesota refineries are operating at utilization rates near 100 percent.¹⁴⁷⁹

644. In subsequent letters, Flint Hills notes that lack of capacity “upstream of Clearbrook” “contributes to greater apportionment and lesser reliability” of the pipeline system overall, which could result in higher fuel costs to consumers.¹⁴⁸⁰ It writes that “[a]pportionment is a significant factor in refinery economics and can affect the long-term business health of a refinery, including future investment decisions. It can also affect fuel prices and the ability of refineries to reliably supply markets.”¹⁴⁸¹ These statements speak generally and theoretically about apportionment on pipelines. The letter does not speak to any actual harm suffered by, or likely to be suffered by, Flint Hills specifically.

645. After three separate letters, Flint Hills does not identify any direct harm it has suffered or expects to directly suffer from apportionment. Nor does Flint Hills, in any of its letters, claim any deficiency in the crude oil it needs to meet its refining requirements. The closest Flint Hills comes to such a claim is stating that if Existing Line 3 “is not replaced *or shut down permanently*” (an option not presented in this case), Flint Hills “would likely be compelled to explore other alternatives for meeting its crude oil needs....”¹⁴⁸² This, of course, falls far short of maintaining that failure to approve the Project, or any other alternative, will negatively impact its operations.

646. Minnesota’s other refinery, Andeavor, provided even less help to Applicant. In its letter, Andeavor notes that it can process 103,000 barrels of crude oil per day, and relies on the Mainline System to provide approximately half of its crude oil needs (i.e., approximately 51,000 barrels per day).¹⁴⁸³ Notably, Andeavor does not indicate that it has any difficulty obtaining the crude oil it needs to meet its current refining requirements.¹⁴⁸⁴

647. With respect to apportionment, Andeavor notes that a new Line 3 with a capacity of 760,000 barrels per day will “help reduce apportionment” on the Mainline and will “improve the Refinery’s access to needed crude oil supply.”¹⁴⁸⁵ But Andeavor says nothing about any harm it is suffering, or expects to suffer, from apportionment.¹⁴⁸⁶ Nor does Andeavor indicate in any way that it is not receiving the amount or type of crude it needs to meet its needs. Surely, if either refiner was unable to obtain the amount or type

¹⁴⁷⁹ Ex. EN-56, Sched. 1 at 4 (Earnest Surrebuttal). The ALJ notes that Flint Hills attempts to retract this statement in its two subsequent comment letters. The ALJ finds that Flint Hills’ first letter most reliable.

¹⁴⁸⁰ Ex. EN-56, Sched. 1 at 1 (Earnest Surrebuttal).

¹⁴⁸¹ Comment by Flint Hills Resources (Nov. 21, 2017) (eDocket Nos. 201711-137585-01 (CN); 201711-137585-02 (RP)).

¹⁴⁸² Ex. EN-56, Sched. 1 at 2 (Earnest Surrebuttal) (emphasis added).

¹⁴⁸³ Ex. EN-94, Sched. 1 (Earnest Supplemental Surrebuttal).

¹⁴⁸⁴ *Id.*

¹⁴⁸⁵ *Id.*

¹⁴⁸⁶ *Id.*

of crude it needs, they would have mentioned that in their letters in this case. Consequently, their silence speaks louder than their words of praise.

648. Like Flint Hills, Andeavor writes to a non-existent issue. Andeavor's letter states, "If Line 3 were *shut down and not replaced*, this would exacerbate the already increasing apportionment problem on the Enbridge Mainline System and negatively impact the Refinery."¹⁴⁸⁷ Such a scenario is not contemplated in this action. None of the alternatives evaluated in this case include permanent shut down and non-replacement. Consequently, Andeavor's letter says nothing to assist Applicant in this action.

649. The fact that Minnesota refineries are not being significantly impacted by apportionment is also evident based upon the percentage of crude oil deliveries made to Minnesota by the Mainline System. Applicant provided Trade Secret data about the percentage of heavy and light crude transported on the Mainline System that was delivered "in-state" to Minnesota refineries from 2012 to 2016.¹⁴⁸⁸ That data confirms what is available in the public record: that only a small percentage of the crude transported on the Mainline System is actually delivered in Minnesota¹⁴⁸⁹ (the majority of that amount, however, being heavy crude).¹⁴⁹⁰ The ALJ hereby incorporates by reference, and directs the Commission's attention to, the Trade Secret data contained in Schedule 6 of Mr. Glazer's Direct Testimony (Ex. EN-19).

650. Unfortunately, the DOC-DER never attempted to obtain any information from the two Minnesota refineries or any of Applicant's shippers about the impact of apportionment on their ability to obtain supplies of crude oil.¹⁴⁹¹ This information would have been helpful to the ALJ and Commission in assessing need.

651. While the evidence does not establish that Minnesota refiners are currently experiencing any shortages of supply as a result of apportionment, the evidence does suggest that Minnesota refiners could, nonetheless, be affected by apportionment when it occurs because they are the recipients of some of the oil transported on the Mainline.¹⁴⁹² This is because, as a common carrier, Applicant cannot give priority to any particular shippers.¹⁴⁹³ Thus, when apportionment occurs on the Mainline, it affects all shippers in the same proportion (i.e., all shippers' nominations are reduced by the same proportion).¹⁴⁹⁴ For example, if the Mainline can only accommodate 90 percent of the verified nominations it receives in a month, then all shippers' shipments (and thus refinery deliveries) are reduced by 10 percent.¹⁴⁹⁵ It follows that apportionment for shippers

¹⁴⁸⁷ *Id.* (Emphasis added).

¹⁴⁸⁸ Ex. EN-19 at Sched. 6 (TRADE SECRET).

¹⁴⁸⁹ Ex. EN-19 at Sched. 6 (TRADE SECRET). See also, Ex. EN-1 at 8-13 (CN Application) (showing the capacity of Minnesota refineries); Ex. EN-24 at 15 (Eberth Direct); Evid. Hrg. Tr. 9A at 100 (Shahady). (testifying to the amount of oil transported on the Mainline System each day).

¹⁴⁹⁰ Ex. DER-1 at 74 (O'Connell Direct).

¹⁴⁹¹ Evid. Hrg. Tr. Vol. 9B at 49-50 (Fagan).

¹⁴⁹² See, Ex. EN-19 at Sched. 6 (TRADE SECRET).

¹⁴⁹³ Ex. EN-19 at 11 (Glanzer Direct).

¹⁴⁹⁴ Ex. EN-38 at 7 (Glanzer Rebuttal).

¹⁴⁹⁵ Ex. EN-38 at 7 (Glanzer Rebuttal).

affects Minnesota refineries (the recipients) to the extent that the refiners rely on the Mainline for receiving their crude oil stocks.¹⁴⁹⁶

j. DOC-DER Analysis of Adequacy, Reliability, or Efficiency

652. Because Dr. Fagan did not fully analyze Applicant's claims of apportionment, the DOC-DER relied upon Kate O'Connell, the Manager of the Energy Regulation and Planning Unit of the DOC-DER, to analyze need for the Project with respect to Applicant's apportionment claims.

653. Ms. O'Connell bases the first part of her analysis on the erroneous premise that Applicant has not committed to discontinue use of Existing Line 3.¹⁴⁹⁷ Ms. O'Connell states, "I conclude that, unless and until Enbridge indicates that it will take the existing Line 3 out of service, the Company has not demonstrated the need for the proposed Project."¹⁴⁹⁸

654. Ms. O'Connell's analysis on this point misses the mark. As set forth above, not only does the Consent Decree require Applicant to permanently decommission Existing Line 3 if the Project "is approved," Applicant has stated in no uncertain terms that it will take Existing Line 3 out of service permanently once the Project is operational.¹⁴⁹⁹ Ms. O'Connell's claim that "Applicant has not established need until and unless Existing Line 3 is removed from service" is without merit and only serves to avoid the material analysis needed in this case.

655. Ms. O'Connell also asserts that, based upon Dr. Fagan's analysis, Minnesota refineries are operating at high levels of utilization and are, thus, not short of a physical supply of crude oil.¹⁵⁰⁰ Ms. O'Connell provides no analysis of apportionment beyond that provided by Dr. Fagan. As a result, Ms. O'Connell was not instructive on the issue of apportionment – its existence, its impact on Applicant's customers, its effect on Minnesota refineries, or its impact on the region.

656. Despite the fact that she believes Minnesota refineries are receiving a sufficient amount of crude oil to meet their current needs, Ms. O'Connell does agree that the Project will enhance efficiency of the Mainline System by reducing apportionment and increasing operational flexibility.¹⁵⁰¹ In addition, Ms. O'Connell acknowledges that the Project would also allow Minnesota refiners more options to move heavy crude.¹⁵⁰² However, Ms. O'Connell claims -- without any legal authority -- that, in her opinion, efficiency is the "least important aspect of need."¹⁵⁰³ Ms. O'Connell's opinion of the law,

¹⁴⁹⁶ Ex. EN-38 at 7 (Glanzer Rebuttal).

¹⁴⁹⁷ Ex. DER-19 (O'Connell Summary).

¹⁴⁹⁸ Ex. DER-1 at 15 (O'Connell Direct).

¹⁴⁹⁹ Ex. EN-22 at 23 (Simonson Direct).

¹⁵⁰⁰ Ex. DER-6 at 28 (O'Connell Surrebuttal).

¹⁵⁰¹ Ex. DER-1 at 29, 79 (O'Connell Direct).

¹⁵⁰² *Id.* at 79.

¹⁵⁰³ *Id.* at 29, 79.

however, is not the law. The rule does not prioritize the importance of adequacy, reliability, or efficiency.¹⁵⁰⁴

657. With respect to apportionment, the ALJ finds that: (1) apportionment on the Mainline System exists and will likely continue into the near future (until 2035) unless the Project or other pipeline options are available to transport Canadian crude; (2) apportionment impacts Applicant's customers (mainly Canadian oil producers) because they cannot ship all the oil they want to as efficiently or economically as they can with a pipeline; and (3) Minnesota refiners do not appear to be suffering harmed as a result of apportionment.

k. ALJ Findings and Conclusions as to Accuracy of Applicant's Forecast of Demand

658. With respect to the accuracy of Applicant's forecast of demand, the ALJ concludes that Applicant's forecast does raise questions as to its focus and accuracy.

659. First, the rule speaks to the "accuracy of applicant's forecast of demand *for type of energy that would be supplied by the proposed facility*."¹⁵⁰⁵ The type of energy in this case is oil – not the transportation of oil. Applicant's forecast and analysis focuses on the demand for transportation of oil, not actually demand for oil.

660. Second, Applicant's "forecast of demand" looks only to supply of Western crude oil, not the demand for such oil. Applicant asserts that because it is a transporter of oil, not a producer of oil, the "demand" to be analyzed is the demand for transportation, which depends on supply of product to be transported, not the end-user demand for that product. In other words, Applicant's analysis focuses on supply of Canadian crude (i.e., the abundance of oil that could potentially be shipped), as opposed to the demand for refined products.

661. Third, Applicant's supply forecasts raise some questions as to reliability. Applicant's supply forecast depends heavily on CAPP projections. While these projections are relatively consistent with the NEB projections (all of which show the continued increase in Canadian oil supply until 2035), the CAPP projections do not provide, as an independent variable, an analysis of oil price assumptions. The ALJ finds that accurate supply projections should include an external analysis of oil prices and a range of projections based upon those price assumptions. It is only reasonable that there is a point where oil prices become too low for tar sands projects to remain viable. By failing to directly address oil price assumptions, Applicant's forecasts of supply are less reliable.

662. Fourth, Applicant's supply forecasts ignore the demand for refined products. The ALJ accepts, as reasonable, Dr. Fagan's conclusions that the demand for refined products is the driving force oil prices, oil supply, and demand for crude oil (including the shipping of crude). The ALJ also finds, as reasonable, intervenor testimony which

¹⁵⁰⁴ Minn. R. 7853.0130(A).

¹⁵⁰⁵ Minn. R. 7853.0130(A)(1) (emphasis added).

suggests that climate change policy and electric vehicles will likely impact the global demand for oil in the future, the price of crude oil, the available supply of crude oil, and the United States' ability to export product. However, the impacts upon oil supply that these product and policy changes may have are currently unknown and unquantified.

663. While Applicant's supply forecasts may not be entirely reliable, the fact that apportionment exists on the Mainline evidences that the *demand to transport* Canadian heavy crude exceeds the Mainline's *current* capabilities. Even adopting the most conservative of supply forecasts (the in-service and under construction figures provided by Applicant), the evidence suggests that demand to transport heavy crude from Canadian oil producers will continue in the short run (until 2035); and that apportionment will continue on the Mainline unless additional pipeline capacity to transport heavy crude is added to the system (or provided elsewhere).

664. Despite the problems with Applicant's supply forecast, the existence and likely continuance of apportionment establishes that there is a demand by Applicant's customers (i.e., Canadian oil producers) for the transportation of Canadian heavy crude through the Mainline that is not being fully met and will not be met in the short term (through 2035). Accordingly, Applicant has established by a preponderance of the evidence that its forecast *for demand for transportation* of Canadian heavy crude on the proposed Project exists. In addition, Applicant has established that apportionment has the potential to negatively impact Applicant's customers (mostly Canadian oil producers), even if harm has not been established to Minnesota or regional refineries.

665. While Applicant has not demonstrated that Minnesota refineries will be harmed by denial of the Project, evidence does exist as to the likely *benefits* of the Project to Minnesota and its refiners. These benefits include access to more and different types of oil. And, as the DOC-DER has acknowledged, the Project will increase the efficiency of the Mainline System, which, in turn, benefits Minnesota refiners.¹⁵⁰⁶ Thus, while the Project does not primarily benefit Minnesota, there are some secondary benefits that Minnesota may reap.

666. The evidence presented establishes that a new Line 3 will increase: adequacy, reliability, and efficiency of the Mainline System because it will: (1) increase the amount and types of crude transported on the Mainline; (2) remedy the reliability issues associated with an aging line that, due to integrity issues, operates at half its original capacity; and (3) allow more operational flexibility (i.e., efficiency) to the Mainline System.

667. It is a bitter pill to swallow, however, that the "need" for this Project is to primarily assist foreign oil producers in transporting their products through (and mostly out of) Minnesota. However, the rule does not prioritize the needs of Applicant's customers, the people of Minnesota, or the people of neighboring states. Each of these categories has equal priority under Rule 7853.0130(A).

¹⁵⁰⁶ Ex. DER-1 at 29, 79 (O'Connell Direct).

ii. Effects of Applicant's Conservation Programs [Minn. R. 7853.0130(A)(4)]¹⁵⁰⁷

668. The Commission must next consider the effects of Applicant's existing or expected conservation programs, and state and federal conservation programs.¹⁵⁰⁸

669. As an operator of crude oil pipelines, Applicant does not buy or sell crude oil or petroleum products. Rather, it is a transportation company that ships crude oil to market where it can be refined. Therefore, Applicant's conservation efforts are directed at its own consumption of energy.¹⁵⁰⁹ Applicant's in-house conservation programs do not have significant impact on crude oil supplies or the demand for refined products.¹⁵¹⁰

670. Minnesota Statutes section 216C.05, subdivision 2, states in relevant part, that "[i]t is the energy policy of the state of Minnesota that ... 25 percent of the total energy used in the state be derived from renewable energy resources by year 2025."

671. Similarly, Minn. Stat. 216H.02, subd. 1, states:

It is the goal of that state of Minnesota to reduce statewide greenhouse gas emissions across all sectors producing those emissions to a level of at least 15 percent below 2005 levels by 2015, to a level at least 30 percent below 2005 levels by 2025, and to at least 80 percent below 2005 levels by 2050.

672. While these provisions are goals rather than requirements, it is still important to consider whether this Project is consistent with Minnesota environmental and energy conservation policies.

673. The EIS evaluated the potential lifecycle emissions associated with the Project. These emissions included: (1) increases in upstream emissions associated with oil extraction; and (2) downstream emissions associated with oil consumption. The EIS evaluated if the proposed Project will induce new production or more consumption of fossil fuels; or will results in displacement of less greenhouse gas (GHG) intense alternative sources of oil.¹⁵¹¹ The DOC-DER concluded that the Project would result in a net increase in GHG emissions compared to not building the facility, due to: (1) increased throughput of heavy crude oil through the state overall; and (2) the ability of a new line to ship predominantly heavy crude, rather than light crude.¹⁵¹²

674. The EIS calculated the social cost of carbon (GHG emission) for the Proposed Project as follows:¹⁵¹³

¹⁵⁰⁷ See also, Minn. Stat. § 216B.243, subd. 3(2).

¹⁵⁰⁸ Minn. R. 7853.0130(a)(2).

¹⁵⁰⁹ Applicant's in-house efforts to reduce its own energy consumption and its renewable energy initiatives are discussed at Ex. EN-1 at 5-1 to 5-7 (CN Application); Ex. EN-30 at 23-26 (Eberth Rebuttal).

¹⁵¹⁰ *Id.*

¹⁵¹¹ Ex. DER-1 at 84-85 (O'Connell Direct); Ex. EERA-42 at 5-462 to 5-466 (Revised EIS).

¹⁵¹² Ex. DER-1 at 84-85 (O'Connell Direct); Ex. EERA-42 at 5-462 to 5-466 (Revised EIS).

¹⁵¹³ Ex. DER-42 at 5-462 (Revised EIS).

Table 5.2.7-10. Social Cost of Carbon (Fossil Greenhouse Gas Emissions) for the Applicant's Proposed Project (in 2007 dollars)

Year	30-Year SCC for Direct GHG Emissions*	30-Year SCC for Indirect GHG Emissions	30-Year SCC for Direct and Indirect GHG Emissions
30-Year Project Life (2020 to 2049)	\$558,917	\$672,806,234	\$673,365,150

* Estimate does not include emissions associated with lost carbon sequestration

GHG = greenhouse gas, SCC = social cost of carbon

675. The EIS also calculated the average life-cycle GHG emissions for the Project in three ways:¹⁵¹⁴

Table 5.2.7-12. Average Life-Cycle Greenhouse Gas Emissions for Various Crude Oils

Scenario	Annual Life-Cycle GHG Emissions (million tons CO ₂ e)	Incremental Annual Life-Cycle GHG Emissions (million tons CO ₂ e)	30-Year SCC for Incremental Life-Cycle GHG Emissions (2007 dollars)
Existing Line 3 (390,000 bpd WCSB light)	80.5	0	0 billion
Applicant's Proposed Project (760,000 bpd WCSB Heavy*) - No displacement	273.5	193	287 billion
Applicant's Proposed Project (760,000 bpd WCSB Heavy) - Displaces 390,000 bpd WCSB Heavy & 370,000 U.S. Light Tight Oil	115.5	35	52 billion

* Western Canada Sedimentary Basin (WCSB) heavy value based on GREET Modeling (DOS 2017)

676. The ALJ accepts these calculations as established in fact and adopts the finding of the **incremental** life-cycle GHG emissions (GHGe) for the Project will be **193 million tons** of carbon dioxide emissions (CO₂e), totaling **\$287 billion** in social costs.¹⁵¹⁵

677. The adoption of these figures by the ALJ is based upon Applicant's testimony that: (1) the Project, with a 760 kbpd capacity, will predominantly transport heavy crude; (2) the 390 kbpd of light crude currently transported through the line will be displaced by heavy crude; (3) the 390 kbpd light crude currently transported on the line will be transferred to other lines (and, therefore, does not "disappear"); and (4) the new line will add an additional 370 kbpd of (new) predominantly heavy crude on the Mainline System to eliminate apportionment.¹⁵¹⁶

¹⁵¹⁴ Ex. EERA-42 at 4-466 (Revised EIS).

¹⁵¹⁵ *Id.*

¹⁵¹⁶ See e.g., Ex. EN-15, Sched. 2 at 77 ("Consequently, once the L3R Program is completed in 2019, there no longer is unused capacity in the light crude oil pipelines (Figure 51), the volume of heavy crude oil shipped *appreciably increases* (Figure 52), and the total light crude oil shipments *are about the same* as they were in the Current Status Scenario.") (Emphasis added). See also, Ex. EN-87 (Earnest Supply Scenarios). Based upon Mr. Earnest's testimony, the 390 kbpd currently transported on Existing Line 3 will be moved onto other lines (resulting in no "new" emissions for the 390 kbpd of light crude) and the new line will transport 760 kbpd of predominantly "new" heavy crude on the system, thereby resulting in additional emissions from the new heavy crude added to the system.

678. Consequently, reducing the annual life-cycle GHG emission of non-displacement¹⁵¹⁷ (273.5 million tons CO₂e) by the annual life-cycle GHG emissions from 390 kbpd light crude (80.5 million tons CO₂e),¹⁵¹⁸ equals the “incremental” (i.e., increased) annual life-cycle emissions of the Project (193 million tons CO₂e).¹⁵¹⁹ The calculation is as follows: 273.5 million tons CO₂e (the estimated annual emissions from a new project bringing 760 kbpd of “new” heavy crude into the environment) minus 80.5 million tons CO₂e (the annual emissions from the Existing Line 3), equals 193 million tons CO₂e (the annual increased amount of emissions anticipated by the Project).¹⁵²⁰

679. Sierra Club witness Andrew Twite maintains that approving the Project will make it difficult for Minnesota to meet the GHG emission goals set forth in the U.S. Climate Alliance, which affirms states’ support the objectives of the Paris Accord.¹⁵²¹ The U.S. Climate Alliance is bipartisan coalition of governors committed to reducing GHG emissions by at least 26 to 28 percent below 2005 levels by 2025, consistent with the Paris Accord.¹⁵²² Minnesota is part of this coalition.¹⁵²³

680. The ALJ further finds that the carbon-intensive nature of tar sands oil extraction, and the increased use and production of non-renewable fossil fuels does not further Minnesota’s renewable energy and reduction of GHG emission goals set forth in Minn. Stat. 216C.05, subd. 2 and 216H.02, subd. 1. Consequently, this Project, which makes the transportation and consumption of fossil fuels easier and more economical for tar sands oil producers, does not further the renewable energy goals of this State and should be viewed as a “negative” in the application of the need criteria to this Project.

681. In recognition of these facts, the DOC-DER recommends that, if this Project is approved, Applicant be required to apply the same type of “neutral footprint program” to increased energy use that the Commission required in the Enbridge Phase 2 Upgrade to Line 67 Project.¹⁵²⁴ Applicant opposes this recommendation.¹⁵²⁵

682. Applicant’s opposition to the Neutral Footprint Program/renewable energy offsets recommended by the DOC-DER are primarily twofold: (1) the program, in Applicant’s opinion, has not always yielded direct benefits to the local communities surrounding the pipeline;¹⁵²⁶ and (2) the program will “come at a financial cost” to

¹⁵¹⁷ Meaning all oil through the line would be “new” oil brought into the system.

¹⁵¹⁸ Meaning the amount that is currently transported on the system and will continue to be transported on the system but through a different line (i.e., the existing emissions).

¹⁵¹⁹ Ex. EERA-42 at 4-466 (Revised EIS).

¹⁵²⁰ *Id.*

¹⁵²¹ Ex. SC-4 at 26-27 (Twite Rebuttal).

¹⁵²² See <https://www.usclimatealliance.org>.

¹⁵²³ *Id.*

¹⁵²⁴ Ex. DER-6 at 77 (O’Connell Surrebuttal). See *In the Matter of the Application of Enbridge Energy Limited Partnership for a Certificate of Need for the Line 67 Station Upgrade Project – Phase 2*, MPUC Docket No. PL-9/CN-13-153.

¹⁵²⁵ Ex. EN-30 at 26 (Eberth Rebuttal).

¹⁵²⁶ Ex. EN-30 at 25-26 (Eberth Rebuttal).

Applicant.¹⁵²⁷ Neither of these reasons is persuasive, given the renewable energy goals set forth in Minnesota law.

683. Very little testimony was provided on this “neutral footprint program” other than the general recommendation made by Ms. O’Connell.¹⁵²⁸ Therefore, the ALJ finds that if a neutral footprint program would further state energy conservation policies, such a program is a reasonable condition to include in any permit granted in this case.

iii. Effect of Promotional Practices Giving Rise to Increased Energy Demand [Minn. R. 7853.0130(A)(3)]¹⁵²⁹

684. The criteria for CN provides that the Commission consider “the effects of applicant’s promotional practices that may have given rise to the increase in the energy demand, particularly promotional practices that have occurred since 1974.”¹⁵³⁰

685. The Commission granted Applicant an exemption from identifying promotional activities that may have given rise to the increase in energy demand.¹⁵³¹ As a result, this precludes the ALJ and Commission from considering whether Applicant’s promotional practices have given rise to the “demand” that Applicant identifies in this case: the demand for transportation of Western Canadian crude.

686. As a result of this exemption, no evidence has been presented on this element of the CN criteria.

iv. Ability of Current Facilities and Planned Facilities not Requiring CN to Meet Future Demand [Minn. R. 7853.0130(A)(4)]

687. The criteria for a CN set forth in Rule 7853.0130(A)(24), requires that the Commission consider “the ability of current facilities and planned facilities not requiring certificates of need, and to which the applicant has access, to meet the future demand.”¹⁵³² Under this analysis, the ALJ must consider: (1) whether the Mainline System with Existing Line 3 can meet the future demand for crude oil (the “No Action” Alternative); (2) whether upgrades to Applicant’s existing Mainline facilities can meet the future demand; or (3) whether other facilities not requiring CNs, and to which Applicant has access, can meet the demand (i.e., other pipelines).

688. Applicant bears the burden to establish that possible alternatives for satisfying the demand, including upgrades to existing facilities, do not exist to meet the demand.¹⁵³³ In addition, Applicant bears the burden to establish that denial of the Project (for purposes of this criterion, the “No Action” alternative) would adversely affect the

¹⁵²⁷ See Ex. EN-30 at 26 (Eberth Rebuttal).

¹⁵²⁸ Ex. EN-30 at 26 (Eberth Rebuttal).

¹⁵²⁹ See *also*, Minn. Stat. § 216B.243, subd. 3(4).

¹⁵³⁰ Minn. R. 7853.0130(A)(3).

¹⁵³¹ Ex. EN-1 at 4-3 (CN Application).

¹⁵³² Minn. R. 7853.0130(A)(4).

¹⁵³³ Minn. Stat. § 216B.243, subd. 3(6).

adequacy, reliability, or efficiency of energy supply to the Applicant, to Applicant's customers, or to the people of Minnesota and neighboring states.¹⁵³⁴

a. Use of Existing or Planned Facilities ("No Action" Alternative)

689. Applicant asserts that its current Mainline System cannot meet the current demand to transport heavy crude oil (as evidenced by apportionment) and will not be able to meet the expected increase in demand for crude oil transportation in the future. To establish these facts, Applicant called four witnesses: (1) Mr. Earnest; (2) Mr. Glanzer; (3) Jack Fleeton; and (4) Bill Rennie.

690. As set forth above, Mr. Glanzer testified about past, current, and future apportionment. Mr. Glanzer's testimony about past and current apportionment was based upon historic data and, with respect to past and current apportionment, was largely unrefuted. His testimony about future apportionment, however, is based upon the projections of future Canadian oil supply and system utilization provided by Mr. Earnest in the Muse Stancil Report. The reliability issues related to Mr. Earnest's projections and analysis were discussed at length above and will not be repeated here. All issues related to the reliability of Mr. Earnest's projections and analysis follow through to Mr. Glanzer in so far as Mr. Glanzer's testimony about future demand relies upon Mr. Earnest's supply and utilization projections.

691. With respect to a "No Action" alternative, Applicant called Bill Rennie as a witness. Mr. Rennie is a partner at Oliver Wyman, a general management consulting firm serving the transportation and logistics sectors.¹⁵³⁵ Mr. Rennie prepared the "Report on the Impact of Crude-by-Rail and the 'No Action' Scenario for the Line 3 Project in Minnesota" (the Oliver Wyman Report).¹⁵³⁶ The Oliver Wyman Report incorporates, in whole, the future oil supply projections from the Muse Stancil Report; and analyzes how crude oil supplies, which exceed the capacity of the Mainline, could be transported if the Project is denied.¹⁵³⁷

692. Mr. Rennie explained that pipeline are highly efficient at moving large volumes of crude oil and offer "superior" economics compared to rail transportation because: (1) pipeline transport is two to three times less expensive per barrel of oil than rail transport; and (2) pipelines are not subject to certain external factors that impact rail traffic, such as extreme weather or congestion.¹⁵³⁸ As a result, Mr. Rennie concludes that if the Project is not permitted, the supply of Canadian crude that shippers cannot ship on the Mainline System will most likely be transported by rail.¹⁵³⁹

¹⁵³⁴ Minn. R. 7853.0130(A)(4).

¹⁵³⁵ Ex. EN-10 at 1 (Rennie Direct).

¹⁵³⁶ Ex. EN-10, Sched. 2 (Rennie Direct).

¹⁵³⁷ *Id.*

¹⁵³⁸ Ex. EN-10, Sched. 2 at 6 (Rennie Direct).

¹⁵³⁹ Ex. EN-10, Sched. 2 at 2 (Rennie Direct).

693. According to Mr. Rennie, rail is the “only viable alternative”¹⁵⁴⁰ to the Project for transporting large volumes of crude oil, and that the current rail system in Minnesota does not presently have the sufficient surplus capacity required to fully support the increase in crude-by-rail traffic that would occur if the Project is not approved.¹⁵⁴¹ Again, Mr. Rennie’s analysis is based entirely upon the Canadian crude oil supply and system utilization projections made by Mr. Earnest in the Muse Stancil Report.¹⁵⁴²

694. Mr. Rennie noted that Canadian crude-by-rail shipments were up 74 percent for the first seven months of 2017, as compared to the same period in 2016.¹⁵⁴³ Mr. Rennie asserts that crude-by-rail will only increase if the Project is denied.¹⁵⁴⁴ He opines that, to transport the future crude supply projected by Mr. Earnest, if the Project is denied, between two and 16 trains per day will be required to transport crude between 2019 and 2035.¹⁵⁴⁵ Mr. Rennie concludes that the added use of rail for crude would increase competition for rail service with other commodities (such as agricultural products, chemicals, minerals, etc.) and could negatively impact those industries in Minnesota.¹⁵⁴⁶

695. No party asserts that rail is a more reasonable alternative to the Project.

696. As set forth above, the Mainline System has experienced apportionment for 22 of the 26 months between January 2015 and February 2017.¹⁵⁴⁷ Apportionment for heavy crude during this time was between two and 42 percent, averaging approximately 22 percent monthly.¹⁵⁴⁸ This evidence has not been refuted.

697. In addition, it is undisputed that Existing Line 3 is operating under pressure restrictions partially imposed by a federal Consent Decree, which prevent Existing Line 3 from transporting heavy crude or transporting more than 390 kbpd of light crude.¹⁵⁴⁹ While Applicant contends that Existing Line 3 can continue to operate safely,¹⁵⁵⁰ the significant integrity issues related to the line, which have been identified by Applicant, bring into question the safety of its continued use.

698. Thus, a preponderance of the evidence establishes that the existing facilities (the Mainline System with Existing Line 3) are currently unable to meet the heavy crude transportation demands of its customers (the shippers), as set forth above. If shipper nominations remain consistent or increase (as Applicant contends), without any

¹⁵⁴⁰ Ex. EN-10 at 2 (Rennie Direct).

¹⁵⁴¹ Ex. EN-10, Sched. 2 at 61 (Rennie Direct).

¹⁵⁴² Ex. EN-10, Sched. 2 at 10 (Rennie Direct).

¹⁵⁴³ Ex. EN-58 at 1-2 (Rennie Surrebuttal).

¹⁵⁴⁴ *Id.*

¹⁵⁴⁵ Ex. EN-10, Sched. 2 at 13 (Rennie Direct).

¹⁵⁴⁶ Ex. EN-10, Sched. 2 at 61 (Rennie Direct).

¹⁵⁴⁷ Ex. EN-19 at 12, Table 3.5.2-2 (Glanzer Direct).

¹⁵⁴⁸ *Id.*

¹⁵⁴⁹ Ex. EN-12 at 21 (Kennett Direct); Ex. EN-30, Sched. 1 at 29 (Eberth Rebuttal)

¹⁵⁵⁰ EX. EN-24 at 10 (Eberth Direct) (“If the Project is not approved, Enbridge will continue to operate Line 3 in a safe and reliable manner....”); Evid. Hrg. Tr. Vol. 1A at 51-52 (Kennett).

changes to the Mainline System, then the existing facilities will also not be able to meet future demand.

699. The DOC-DER asserts that, due to increases in capacity on Enbridge's Line 67, the Mainline can, in fact, meet future demands. According to Ms. O'Connell, the Commission approved two different upgrades to Line 67 (the Alberta Clipper line) in 2013 and 2014.¹⁵⁵¹ Those upgrades increased capacity on Line 67 by 350 kbpd.¹⁵⁵² Ms. O'Connell contends that, because of these upgrades, the Mainline already has "excess capacity" to transport nearly 370 kbpd of oil without the Project, thereby rendering the Project unnecessary.¹⁵⁵³ Ms. O'Connell's analysis, however, is contrary to fact.

700. Data provided by Applicant evidences that Line 67 has been operating at an average utilization of between 95 and 98 percent since 2015 (after the implementation of the upgrades) and yet apportionment of heavy crude on the Mainline has continued since this time.¹⁵⁵⁴ Therefore, the evidence does not support Ms. O'Connell's claim that Line 67's upgrades can provide enough additional heavy crude capacity to relieve heavy crude apportionment on the Mainline System.

701. Accordingly, Applicant has established by a preponderance of the evidence that current facilities are unable to meet current customer demands for heavy crude transport, and are unlikely to meet any increases in future demand should they occur.

b. Upgrades to Current Facilities (i.e., Mainline)

702. HTE witness Mr. Stockman testified that Enbridge could increase the capacity of its Mainline System by expanding a number of its existing pipelines and reversing Line 13 (the Southern Lights Pipeline).¹⁵⁵⁵ To make this assertion, Mr. Stockman relies upon slides from presentations made to Enbridge investors between 2015 and 2017.¹⁵⁵⁶ The Projects identified include: (1) Sandpiper Expansion/Bakken Interconnect Idle; (2) Line 2A/LSR Expansion; (3) Line 2B/4 Capacity Recovery; (4) Line 4 Expansion; (5) Line 2 Expansion; (6) Line 65 Expansion; (7) Line 4 Capacity Restoration; (8) Line 13 Reversal; (9) "BEP Idle"; (10) System Station Upgrades; and (11) System Drag Reducing Agent (DRA) Optimization.¹⁵⁵⁷ However, no other evidence of these claims was presented.

703. Applicant's witnesses addressed the last five of these potential projects.¹⁵⁵⁸ According to Applicant's witnesses:

¹⁵⁵¹ Ex. DER-1 at 27-28 (O'Connell Direct)

¹⁵⁵² *Id.*

¹⁵⁵³ *Id.*

¹⁵⁵⁴ Ex. EN-19, Sched. 3 at 2 (Glanzer Direct).

¹⁵⁵⁵ Ex. HTE-2 at 32 (Stockman Direct). DOC-DER did not analyze this issue. Ms. O'Connell testified that she does not have the expertise to be able to examine whether Applicant can expand the capacity of its existing pipelines. Evid. Hrg. Tr. Vol. 12B at 55 (O'Connell).

¹⁵⁵⁶ EX. HTE-2 at 32-36 (Stockman Direct).

¹⁵⁵⁷ Ex. HTE-2 at 28-36 (Stockman Direct).

¹⁵⁵⁸ See Ex. EN-38 at 16 (Glanzer Rebuttal); Ex. EN-39 at 7-8 (Fleeton Rebuttal).

- The Line 4 Capacity Restoration project is designed to restore Line 4 back to its annual “quoted capacity.” This proposed project does provide some incremental heavy capacity out of Western Canada; however, it only reduces forecasted heavy apportionment by a “marginal amount” when compared to the Line 3 Project, and hence, is not an alternative to the Project.¹⁵⁵⁹
- The BEP Idle project is neither a capacity recovery project, nor a capacity growth project. Instead, it allows more long-haul, light-volume movements on Line 2 by reducing North Dakota receipts onto the Mainline System.¹⁵⁶⁰ The BEP Idle project does not restore or add any additional heavy capacity out of Western Canada and only facilitates additional light crude transportation. The Line 3 Project will operate in mixed service, and the BEP Idle can only feasibly be implemented after the Line 3 Project is in-service.¹⁵⁶¹
- The System DRA Optimization and System Station Upgrades projects require the Line 3 Project to be in-service, which eliminates the upgrades from being alternatives to the Line 3 Project.¹⁵⁶²
- The Line 13 Reversal project is also not an alternative to the Project due to: (i) the delayed timing of when Applicant could consider starting to develop the project because of existing contractual obligations on Line 13 through as late as 2040; (ii) limited capacity increase of only light volumes achieved from the Project; and (iii) an existing pipeline route that does not provide the same flexibility as the Project.¹⁵⁶³

704. No other evidence was presented with respect to these projects. Accordingly, on the evidence presented, Applicant has established by a preponderance of the evidence that there are no planned upgrades of the current facilities not requiring a CN that will meet the future demand asserted by Applicant in this case.

c. Other Planned Facilities not Requiring a CN

705. Finally, the DOC-DER suggested that other non-Enbridge pipelines – located outside of Minnesota -- be reviewed to determine whether these lines could meet the need for heavy crude oil transportation identified by Applicant. These pipelines include the Trans Mountain Expansion, Keystone XL, East Energy and Spectra pipelines.¹⁵⁶⁴

¹⁵⁵⁹ Ex. EN-39 at 7-8 (Fleeton Rebuttal).

¹⁵⁶⁰ Ex. EN-38 at 16 (Glanzer Rebuttal).

¹⁵⁶¹ Ex. EN-39 at 7-8 (Fleeton Rebuttal).

¹⁵⁶² Ex. EN-39 at 7-8 (Fleeton Rebuttal); Ex. EN-38 at 16 (Glanzer Rebuttal).

¹⁵⁶³ Ex. EN-39 at 7-8 (Fleeton Rebuttal).

¹⁵⁶⁴ EX. DER-1 at 54-67 (O’Connell Direct);

706. The criterion of Rule 7853.0130(A)(4) speaks to “the ability of current facilities and planned facilities not requiring certificate of need, *and to which the applicant has access*, to meet the future demand.”¹⁵⁶⁵ Because these are non-Enbridge pipelines, they are not facilities “available to Applicant.” Accordingly, these alternatives shall be reviewed below in relation to “reasonable and prudent alternatives,” under Minn. R. 7853.0130(B), as opposed to Minn. R. 7853.0130(A)(4).

v. Efficient Use of Resources [Minn. R. 7853.0130(A)(5)]

707. The final factor in Minn. R. 7853.0130(A) looks at the “effect of the proposed facility, or a suitable modification of it, in making efficient use of resources.”

708. Applicant asserts that the proposed Line 3 makes effective use of resources because: (1) it restores the line to its original capacity of 760 kbpd and avoids up to 6,250 integrity digs in Minnesota;¹⁵⁶⁶ (2) it is more energy efficient than Existing Line 3 due, in part, to the use of a 36-inch pipe and updated pumping units;¹⁵⁶⁷ (3) it allows the line to work in mixed service, which provides flexibility;¹⁵⁶⁸ (4) it enables the Mainline System to use approximately 180 kbpd of unused pipeline capacity;¹⁵⁶⁹ (5) it reduces outages required for integrity digs.¹⁵⁷⁰

709. As set forth above, the ALJ finds that a new pipeline (whether it be 34-inch or 36-inch in diameter) would significantly reduce the need for the estimate 6,250 integrity digs that Applicant anticipates Existing Line 3 requiring in the next 15 years. A new pipeline of any width should not require the type of maintenance anticipated for Existing Line 3. Thus, to the extent that a new pipeline would reduce outages and inconveniences associated with integrity digs, a new pipeline is more reliable and efficient.

710. As set forth above, the ALJ also finds that the Project’s ability to run in mixed service provides flexibility and efficiency benefits to the Mainline System and, thus, Applicant’s customers. Any new pipeline (whether 34-inch or 36-inch diameter) would be able to run in mixed service, providing the same efficiency benefits for the Mainline System.

711. No party has challenged Applicant’s evidence related to the alleged energy savings that the new line would provide over the existing line. Applicant asserts that a 36-inch pipe is more energy efficient than a 34-inch pipe because the oil moves slower in the wider line, causing less friction, and requiring less power to pump.¹⁵⁷¹ Applicant asserts that, at 760 kbpd, the Project will save 108 GWh of energy, as compared to the same volume on a 34-inch pipe.¹⁵⁷²

¹⁵⁶⁵ Minn. R. 7853.0130(A)(4) (emphasis added).

¹⁵⁶⁶ Ex. EN-39 at 4 (Fleeton Rebuttal); Ex. EN-19 at 24 (Kennett Direct).

¹⁵⁶⁷ Ex. EN-19 at 16 (Glanzer Direct); Ex. EN-22 at 21 (Simonson Direct).

¹⁵⁶⁸ Ex. EN-19 at 15 (Glanzer Direct).

¹⁵⁶⁹ Ex. EN-15, Sched. 2 at 12 (Earnest Direct).

¹⁵⁷⁰ Ex. EN-19 at 16 (Glanzer Direct).

¹⁵⁷¹ Ex. EN-19 at 16 (Glanzer).

¹⁵⁷² *Id.*

712. While not challenging the claim of energy savings associated with a 36-inch pipe, the DOC-DER counters that Applicant has not established a need for the extra capacity that a 36-inch pipe provides.¹⁵⁷³

713. According to Applicant, the 36-inch pipe for the proposed Project would have an “ultimate design capacity” of 1,016 kbpd, with an ultimate annual average capacity of 915 kbpd.¹⁵⁷⁴ As to its full design capacity, Applicant states:

The predicted maximum daily throughput, also referred to as full design capacity, for the project is 844 kbpd without planned or unplanned outages at the design mixed crude slate. The maximum daily throughput would be lower in 100% heavy service or greater in 100% light service. The pipeline will operate at flow rates up to the maximum daily throughput, in order to recover from operational outages (planned and/or unplanned), and still arrive at the annual average capacity of 760 kbpd. In addition, if there is excess supply to be pumped (for example from additional production of crude, or from an outage on another pipeline), the Project could operate at its maximum daily throughput (844 kbpd) to accommodate this excess supply, but only to the extent that excess capacity is available (i.e., the Project is not already full).¹⁵⁷⁵

714. Applicant maintains that one of the main purposes for the Project is to “restore” the capacity of the pipeline to its original operating capacity of 760 kbpd.¹⁵⁷⁶ And Applicant asserts that it will operate the facility at that capacity.¹⁵⁷⁷ However, as the DOC-DER noted, the Commission is being asked to certify a Project with a full design capacity of 844 kbpd. According to DOC-DER witness Ms. O’Connell:

Once a facility is certified for construction and built, the Commission does not monitor how much the owner uses the facility. That is, once a large energy facility is in place, the Commission does not prevent the owner from using the facility up to its full design capacity.¹⁵⁷⁸

715. Applicant asserts, however, that operating the Project at an annual average capacity greater than 760 kbpd “would require additional infrastructure.”¹⁵⁷⁹ It is unclear in the record whether this “additional infrastructure” would require Commission approval.

716. According to the DOC-DER, a 34-inch pipe would be able to provide an operating capacity of 760 kbpd, as that was the original operating capacity of Existing Line 3, a 34-inch pipeline.¹⁵⁸⁰ Thus, both a 34-inch pipe and a 36-inch pipe provide the same benefits in terms of adequacy – both can transport 760 kbpd of oil. However, as

¹⁵⁷³ Ex. DER-01 at 18-21 (O’Connell Direct); Ex. DER-6 at 50-52 (O’Connell Surrebuttal).

¹⁵⁷⁴ Ex. EN-1 at 8-3 (CN Application).

¹⁵⁷⁵ Ex. DER-1, KO-2 (O’Connell Direct).

¹⁵⁷⁶ Ex. EN-24 at 10 (Eberth Direct).

¹⁵⁷⁷ *Id.*

¹⁵⁷⁸ Ex. DER-1 at 19 (O’Connell Direct).

¹⁵⁷⁹ Ex. DER-1, KO-3 (O’Connell Direct).

¹⁵⁸⁰ Ex. DER-1 at 18, 19-20 (O’Connell Direct).

the DOC-EERA noted, a 36-inch pipe poses a greater risk to the environment because it allows more oil to flow through the pipe.¹⁵⁸¹ Applicant's witness, Benjamin Mittelstadt, confirmed that a 36-inch pipe would carry approximately 11 percent more oil.¹⁵⁸² And, in the case of a breach, leak, or spill, more volume through the pipe could result in the potential for a larger spill and more environmental damage.¹⁵⁸³ Notably, Applicant's 2010 spill near Marshall, Michigan involved the rupture of a 30-inch pipe and resulted in nearly one million gallons of oil being released into the environment and over \$1.2 billion in damages.¹⁵⁸⁴

717. It is important to note that Applicant has only asserted need for an annual capacity of 760 kbpd. By approving a 36-inch pipe, the Commission would be approving a Project that could potentially transport more oil than Applicant has represented need for in this case. While there are energy saving benefits with a 36-inch pipe, there are also environmental risks in the case of a release.

718. Apart from the energy efficiency benefits of a 36-inch pipe, Applicant has established no other benefits of a 36-inch pipe that a 34-inch pipe could not provide in terms of reliability and adequacy. A 36-inch pipe does present a somewhat larger risk to the environment than a 34-inch pipe. However, a release from a 34-inch pipe or a 36-inch pipe could be potentially catastrophic. Therefore, if the Commission approves the Project, it must weigh the energy savings of a 36-inch pipe against the heightened environmental risk.

719. The ALJ notes that Applicant's pre-purchase of all of the 36-inch pipe¹⁵⁸⁵ needed for the Project (including in Minnesota) should not weigh in as a factor in this decision because that was a business risk assumed by the company prior to approval of this Project. This business risk was acknowledged by Applicant at hearing.¹⁵⁸⁶ Moreover, any consideration of this factor would bring into question the legal issues and validity of MPCA permits granted to Applicant prior to the completion of environmental review of this Project, as articulated by public commenters, one commenter in particular, Willis Mattison.¹⁵⁸⁷

¹⁵⁸¹ Ex. EN-51 at 15-16 (Mittelstadt Rebuttal).

¹⁵⁸² Ex. EN-51 at 15-16 (Mittelstadt Rebuttal).

¹⁵⁸³ *Id.*; Evid. Hrg. Tr. Vol. 4A at 39 (Mittelstadt).

¹⁵⁸⁴ Ex. EN-1, Sched. C at 44 (CN Application); Evid. Hrg. Tr. Vol. 4A at 40 (Mittelstadt); Evid. Hrg. Tr. Vol. 7B at 105 (Eberth); Ex. EERA-29 at 10-33 (FEIS).

¹⁵⁸⁵ Evid. Hrg. Tr. Vol. 2A at 45 (Simonson).

¹⁵⁸⁶ Evid. Hrg. Tr. Vol. 2A at 36 (Simonson).

¹⁵⁸⁷ Comment by Willis Mattison (Nov. 22, 2017) (eDocket No. 201711-137662-02 (CN)); Complaint - Comment by Willis Mattison (Mar. 13, 2018) (eDocket No. 20183-140976-01 (CN)); Att. A - Comment by Willis Mattison (Mar. 13, 2018) (eDocket No. 20183-140976-03 (CN)); Att. B - Comment by Willis Mattison (Mar. 13, 2018) (eDocket No. 20183-140976-05 (CN)); Att. C - Comment by Willis Mattison (Mar. 13, 2018) (eDocket No. 20183-140976-07 (CN)); Att. D - Comment by Willis Mattison (Mar. 13, 2018) (eDocket No. 20183-140976-09 (CN)); Att. E - Comment by Willis Mattison (Mar. 13, 2018) (eDocket No. 20183-140976-11 (CN)); Att. G - Comment by Willis Mattison (Mar. 13, 2018) (eDocket No. 20183-140976-13 (CN)); Att. H - Comment by Willis Mattison (Mar. 13, 2018) (eDocket No. 20183-140976-15 (CN)); (no attachment F); Amended Complaint of Procedural Error and Attachments (April 19, 2018) (eDocket No. 20184-142135 (CN)).

vi. ALJ's Final Analysis of Adequacy, Reliability, and Efficiency

720. **Reliability.** According to Applicant, it can continue to operate Existing Line 3 in a safe and reliable manner.¹⁵⁸⁸ However, the worsening condition of the pipeline is causing an increasing amount of maintenance and repair that inconveniences landowners, puts the environment at risk, and reduces reliability of the shipments for customers.¹⁵⁸⁹ Due to the high number of integrity digs expected during the next 15 years in Minnesota to keep Existing Line 3 running safely, Applicant asserts that the cost of repair roughly equals the cost of a new line.¹⁵⁹⁰ Therefore, Applicant asserts that it is also economically efficient to replace the line in its entirety.¹⁵⁹¹ According to Applicant, even with repairs, Existing Line 3 cannot be returned to its original capacity.¹⁵⁹²

721. While the ALJ is suspect of Applicant's claims that Existing Line 3 can continue to operate safely so long as repairs are conducted, the ALJ accepts as valid that a new line will provide more reliability to the Mainline System. An aging line in constant need of repair is inherently less reliable to Applicant and Applicant's customers than a new line built with modern technology and new materials.

722. The evidence establishes that Applicant's customers, mainly the Canadian oil shippers, do suffer some adverse impacts due to the fact that the Existing Line 3 is not able to transport heavy crude to meet current shipper demand. In turn, a more reliable system would have secondary benefits to Minnesota and PADD II refiners. They are secondary benefits, at most, because these firms have not asserted (and the evidence does not establish) any existing harm or inability to receive the amounts of crude they require to meet their customer needs.

723. Minnesota refiners and Minnesota landowners who have conveyed easements for Existing Line 3 will also suffer an adverse impact by the interruptions and disruptions that can result from frequent integrity digs.¹⁵⁹³ In addition, without a new Line 3, Applicant's shipping customers would need to rely on other methods of transport -- rail and truck -- which, the evidence establishes, are more expensive, less efficient, and less desirable than pipeline transport.¹⁵⁹⁴

724. Therefore, the ALJ finds that a new Line 3 will be more reliable than the Existing Line 3; and that denial of the Project could adversely impact the reliability of energy supply to Applicant's customers -- mainly the Canadian oil producers seeking to bring their product into the United States.

725. **Efficiency.** A new Line 3 will allow the line to operate in a mixed service capacity, thereby giving the Mainline System flexibility to utilize any unused capacity

¹⁵⁸⁸ Ex. EN-24 at 10 (Eberth Direct).

¹⁵⁸⁹ *Id.*

¹⁵⁹⁰ Ex. EN-12 at 24 (Kennett Direct).

¹⁵⁹¹ Ex. EN-24 at 10 (Eberth Direct).

¹⁵⁹² *Id.*

¹⁵⁹³ Ex. EN-24 at 10 (Eberth Direct).

¹⁵⁹⁴ Ex. EN-10, Sched. 2 at 6 (Rennicke Direct).

existing on other Enbridge lines. According to Applicant, it would also eliminate apportionment of heavy crude on the Mainline System. As a result, Applicant has established that the Project will increase efficiency of the Mainline System for both Applicant and its customers. The DOC-DER agrees that the Project will increase efficiency.¹⁵⁹⁵

726. The evidence establishes that a probable result of denial of the Project is that additional amounts of heavy crude will likely be transported through other means – rail or truck – which are both more expensive, less efficient, and less desirable than pipeline transport. In this way, a denial of the Project could result in Applicant’s customers (mainly Canadian oil shippers) suffering some adverse effects in the efficient delivery of energy supply.

727. **Adequacy.** Applicant has established that the Project will increase adequacy on the Mainline System by providing more capacity for transport of heavy crude. According to Applicant, this will eliminate apportionment on the Mainline System. As long as the Mainline System remains in apportionment, Applicant’s customers (the shippers) are not able to transport as much oil as they would like to ship into the United States.

728. The evidence, however, does not establish that Minnesota refiners are being currently harmed or are suffering adverse effects with respect to the adequacy of oil supply they are able to receive. Given their utilization rates at nearly 100 percent, the evidence establishes that Minnesota refiners are able to utilize all the oil they are currently receiving and do not appear to “need” more heavy crude than they are currently receiving. No Minnesota refiner has joined this action; no Minnesota refiner has identified or quantified any existing or future harm; and Applicant has not demonstrated any current harm to these refiners if the Project is not approved.

729. Canadian oil producers (the Shippers in this case), assert that they suffer adverse effects due to apportionment because they are not able to ship all the heavy crude that they are producing and would like to export (to and out of) the U.S. Notably, the Shippers are not the Applicant in this case and do not carry the burden of proof. Nonetheless, the fact that apportionment currently exists on the Mainline System and will likely continue to exist (if the CAPP and NEB projections of Canadian oil supply through 2035 are correct), establishes that denial could result in Applicant’s customers (mainly Canadian oil producers/shippers) not being able to transport as much oil to the U.S. as they would like to ship. In turn, Minnesota refiners would benefit from the availability of increased oil supplies and mixes of crude from which to choose.

730. The ALJ finds that Applicant’s supply forecasts ignore certain, material issues, such as local and global demand for refined products; and make undisclosed assumptions about oil prices and refined product demand that do not take into account global climate change policies and the likely increase in electric vehicle usage worldwide. The international community is currently making changes to carbon policy that will likely

¹⁵⁹⁵ Ex. DER-1 at 29-30 (O’Connell Direct).

reduce demand for fossil fuels in the future and increase the use of electric vehicles, a major source of refined product demand. However, the impact of these major, global changes, in terms of quantification and timing on oil supply and demand, are currently unknown and in flux. Applicant's supply forecasts only extend to 2035 – the year that Applicant anticipates recouping its construction expenses through the Line 3 surcharge. At that time, global climate change policy changes and transition to electric vehicles will or will not have taken effect. But at this time, the near future projections (to 2035) establish the continued supply and demand for shipment of Canadian crude oil.

731. Because much can change by 2035, it is important to consider what will happen to the new Line 3 if global demand for oil significantly decreases as some parties' experts have projected; and the cost of oil is too low to make Canadian tar sands oil extraction and export profitable. The Commission should give serious consideration to the possibility that if oil prices continue to decline and Canadian oil is no longer profitable or in sufficient demand, Minnesota could be left with abandoned infrastructure encumbering nearly 300 miles of Minnesota land. Applicant's easements give Applicant the option to simply abandon and "idle" the proposed pipe on private landowner's property. As Applicant has acknowledged, such infrastructure will remain in Minnesota for thousands of years into the future¹⁵⁹⁶ – simply abandoned in the wake of a changed world. The Commission has the authority to mitigate such a result.

732. Applicant has established that Existing Line is unable to meet current customer demand (hence apportionment), and that it will not be able to meet such demand in the most reliable and efficient manner if Canadian crude oil supply and demand for transportation remains the same or increases in the future, as CAPP and NEB projections suggest.

733. Minnesota's renewable energy policy encourages a shift away from non-renewable energy sources, such as fossil fuels. The ALJ finds that this Project does not advance Minnesota's progressive environmental policies and goals. But it will assist Minnesota refiners with access to a more reliable, economical, and ample supply of petroleum – a commodity upon which most Minnesotans (and Americans) currently rely.

734. Applicant has proposed a Project that, at this time and in the very near future, will have some benefits to Applicant's customers, Minnesota refiners, and other PADD II refiners. However, the long-term cost of obtaining those benefits – to Minnesota -- is what the Commission should carefully consider in deciding this case.

735. While Applicant has established that a denial of the Project could result in some adverse impacts with respect to reliability, efficiency, and adequacy of oil supply transport for Applicant's customers (mainly Canadian oil producers), the Commission should consider these impacts in relation to Minnesota, its people and its natural resources, as discussed in more detail below.

¹⁵⁹⁶ Evid. Hrg. Tr. Vol. 2B at 22-23 (Simonson).

B. More Reasonable and Prudent Alternatives [Minn. R. 7853.0130(B)]¹⁵⁹⁷

736. The second criterion that the ALJ and Commission must apply in assessing a CN application is whether a more reasonable and prudent alternative to the proposed facility has been demonstrated by a preponderance of the evidence.¹⁵⁹⁸ Parties other than the Applicant have the burden to establish whether a more reasonable and prudent alternative to the Project exists.¹⁵⁹⁹

737. To determine whether a more reasonable and prudent alternative has been established, the ALJ and Commission must examine: (1) the appropriateness of the size, type, and timing of the proposed facility compared to those of reasonable alternatives; (2) the cost of the proposed facility compared to the costs of reasonable alternatives; (3) the effects of the proposed facility upon the natural and socioeconomic environments compared to the effects of reasonable alternatives; and (4) the expected reliability of the proposed facility compared to the expected reliability of reasonable alternatives.¹⁶⁰⁰

738. The following alternatives to the Project were identified and analyzed in this record: (1) tanker truck transport; (2) rail transport; and (3) System Alternative 04 (SA-04). The “No-Action Alternative” was addressed above with respect to whether the current facility can meet future demand (Minn. R. 7853.0130(A)(4)), as the burden to show the unreasonableness of a No-Action Alternative is on the Applicant.

i. Truck Alternative

739. DOC-DER evaluated the truck alternative to the proposed Project (i.e., the transportation of crude without a new Line 3) largely based upon information provided in the EIS.¹⁶⁰¹ DOC-DER evaluated whether it would be reasonable for trucks to transport the additional crude, should a need exist for the additional capacity.

740. The EIS highlighted the following facts regarding a truck alternative. The DOC-DER determined that a trucking alternative would require:

- 1,920 loaded tanker trucks per day to ship crude oil from Gretna to Clearbrook;
- 2,080 loaded trucks per day to ship crude from Gretna to Superior;
- a total of 4,000 tanker trucks per day to travel from Gretna to Clearbrook and Superior, for a total of 12,200 new tanker trucks;

¹⁵⁹⁷ See *also*, Minn. Stat. § 216B.243, subd. 3(6).

¹⁵⁹⁸ Minn. R. 7853.0130(B).

¹⁵⁹⁹ *Id.* (“A certificate of need shall be granted to the applicant if it is determined that...a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record *by the parties or persons other than the applicant...*”) (Emphasis added).

¹⁶⁰⁰ Minn. R. 7853.0130(B).

¹⁶⁰¹ Ex. DER-1 at 35–36 (O’Connell Direct).

- qualified drivers and support personnel to operate and maintain the trucks;
- new loading facilities;
- new or upgraded access to highways;
- permanent conversion of agricultural land and some wetlands to industrial use for loading/off-loading;
- truck off-loading facilities would be needed at Clearbrook and Superior.
- This alternative would result in more wear and tear on roads and more congestion in some areas; and
- The capital cost for new trucks is estimated at \$2.4 billion every five years, compared to a one-time \$7.5 billion capital cost of the proposed Project. Operational costs and labor would add to these costs.¹⁶⁰²

741. A trucking alternative would also pose impacts to the natural and socio-economic environments. The EIS indicated that trucks “are more likely than pipelines to have small to medium accidents and spills. . . . because the number of transits required to transport crude oil is large, which increases the risk of human error.”¹⁶⁰³ In addition, there would be higher vehicle emissions associated with the operation of the trucks on a daily basis.¹⁶⁰⁴ In fact, the EIS estimated that a truck alternative would have the highest greenhouse gas emissions of any of the evaluated alternatives, including the proposed project.¹⁶⁰⁵

742. Regarding socio-economic effects, while a truck alternative would provide more trucking jobs (at least 12,200 assuming one driver for each truck), this alternative would also place a large number of trucks on public roads.¹⁶⁰⁶ This increase would likely result in disruptions to local traffic, potential safety concerns during adverse weather, and higher road maintenance costs, which likely would be borne by local, county, and state agencies.¹⁶⁰⁷

¹⁶⁰² Ex. DER-1 at 36-37 (O’Connell Direct).

¹⁶⁰³ Ex. EERA-29 at ES-14 (FEIS).

¹⁶⁰⁴ *Id.* at ES-21.

¹⁶⁰⁵ *Id.* (see Table ES-3).

¹⁶⁰⁶ Ex. DER-1 at 38 (O’Connell Direct).

¹⁶⁰⁷ *Id.*

743. Considering the ongoing capital, operation and maintenance costs for trucks, labor costs, and other costs, the economic costs for a truck alternative are significantly higher than the proposed Project.¹⁶⁰⁸

744. The ALJ finds credible and accepts the conclusions of the Applicant and DOC-DER that a trucking alternative would not be a reasonable alternative to transport the additional crude that would be provided by the Project.¹⁶⁰⁹

ii. Rail Alternative

745. Like the truck alternative, DOC-DER concluded that the rail alternative would not be reasonable should the Commission find a demonstrated need for additional crude oil capacity.¹⁶¹⁰ While a rail alternative may be somewhat more favorable than a trucking alternative, rail transportation suffers from many of the same problems associated with moving oil by truck, including a greater risk of accidents, higher probability of spills compared to a pipeline, potentially higher costs, and potential interference with shipping other products by rail.¹⁶¹¹

746. Applicant stated the following regarding a rail alternative:

Because of the location of rail infrastructure and crude oil receipt and delivery points, much of the crude oil that would have been transported by the Project will nonetheless continue to travel to and across Minnesota. Utilizing rail would have significantly greater socioeconomic and environmental impacts compared to the Project.

The 760 kbpd to be transported by the Project would be 17 percent of total rail tonnage in Minnesota. Estimated Project volume is 44 million tons per year; Minnesota total tonnage for 2012 is 253 million. Thus, it is uncertain that rail could actually deliver the entire capacity of the Project. In any event, sufficient rail tanker capacity does not currently exist to transport 760 kbpd. Transporting 760 kbpd via rail would require the construction by third parties of rail car loading and off-loading facilities. In addition, construction of new lateral above-ground rail service lines would be required. The increased traffic on current lines, as well as new rail lines, would pose additional risk and impact to landowners and the public.¹⁶¹²

¹⁶⁰⁸ *Id.*

¹⁶⁰⁹ *Id.*

¹⁶¹⁰ *Id.* at 42.

¹⁶¹¹ *Id.*

¹⁶¹² Ex. EN-1 at 10–12 (CN Application).

747. While the DOC-DER believes that Applicant's estimated costs of rail alternatives to pipelines are likely high,¹⁶¹³ it agreed that the cost of a rail alternative would be higher than moving crude oil by pipelines.¹⁶¹⁴

748. The EIS also analyzed a rail alternative assuming, as with the trucking alternative above, that 360 kbpd would be shipped to Clearbrook and that 400 kbpd would be shipped to Superior, for a total amount of 760 kbpd.¹⁶¹⁵ This analysis assumed that at least 10 trains per day, with 110 specialized tank cars, would be needed to ship 760 kbpd, with five trains delivering oil to Clearbrook and five to Superior.¹⁶¹⁶ This analysis also assumed that the existing rail lines would primarily be used.¹⁶¹⁷ The EIS estimated that 7,200 new tank cars would be needed and that the capitalized cost would be \$1 billion (\$140,000 per rail car).¹⁶¹⁸

749. Like trucks, a rail alternative would similarly impact the natural and socio-economic environments.¹⁶¹⁹ Trains are susceptible to having small to medium size accidents and spills.¹⁶²⁰ And, while there would likely be an increase in employment to build and operate rail facilities, there would also be an increase in railroad congestion and accidents.¹⁶²¹ Moreover, the use of rail for oil makes it hard for shippers of grain, agricultural products, chemicals, and other commodities to move their products.¹⁶²² In addition to affecting general traffic, more frequent rail trains can interfere with emergency vehicles.¹⁶²³ Finally, it is unclear from the record whether BNSF and the Canadian Pacific railroads would even have available capacity to handle such traffic, at least at present.¹⁶²⁴

750. The ALJ agrees with and finds credible the conclusions of the Applicant and DOC-DER that a rail alternative would not be a reasonable alternative to transport the additional crude that would be provided by the Project.¹⁶²⁵ It would, however, be preferable to a trucking alternative.¹⁶²⁶

iii. System Alternative SA-04 and SA-04R

751. A system alternative is defined as a pipeline proposal that has a different origin, destination, or intermediate point of delivery than the Applicant's proposed

¹⁶¹³ Ex. DER-1 at 40 (O'Connell Direct).

¹⁶¹⁴ *Id.*

¹⁶¹⁵ Ex. EERA-29 at 4-9 (FEIS).

¹⁶¹⁶ *Id.*

¹⁶¹⁷ *Id.*

¹⁶¹⁸ *Id.* at 4-11–4-13. This estimate does not include that cost of constructing new rail spurs or other rail infrastructure, operation and maintenance costs, labor costs or costs of train terminal facilities to load and off-load. *Id.*

¹⁶¹⁹ Ex. DER-1 at 41 (O'Connell Direct).

¹⁶²⁰ *Id.*

¹⁶²¹ *Id.*

¹⁶²² EN-40 at 7 (Rennicke Rebuttal).

¹⁶²³ Ex. DER-1 at 41 (O'Connell Direct).

¹⁶²⁴ *Id.*

¹⁶²⁵ Ex. DER-1 at 42 (O'Connell Direct).

¹⁶²⁶ *Id.*

route.¹⁶²⁷ One system alternative, SA-04, was presented in this case. SA04 is a conceptual alternative for pipeline service directly to the Chicago market.¹⁶²⁸

a. Size Type and Timing

752. System Alternative 04 (SA-04) was proposed by FOH during the scoping process as an alternative that would avoid northern and central Minnesota, and would interconnect with the regional pipeline system closer to the majority of refineries in Central Illinois (specifically, Joliet, Illinois).¹⁶²⁹ According to its sponsor, SA-04 runs mainly through flat farmland in Minnesota; avoid many risks to Minnesota's lakes, rivers, wetlands, wild rice lakes, the Mississippi Headwaters, and drinking water resources; provides for construction jobs and property tax benefits; and allows shippers to transport oil directly to the Chicago market "where the additional crude is likely to go."¹⁶³⁰

753. SA-04 is a pipeline alternative of the same size and specification as the proposed Project (a 36-inch diameter pipe with an annual average capacity of 760 kbpd), but would not interconnect at either Clearbrook or Superior.¹⁶³¹ Instead, SA-04 would deliver crude oil directly to the Chicago market.¹⁶³² Approximately 68 percent of SA-04 is located outside of Minnesota (in North Dakota, Iowa, and Illinois).¹⁶³³

754. SA-04 is a hypothetical pipeline system. No company has proposed to build SA-04 and no shippers have expressed support for such a pipeline.¹⁶³⁴

755. A map of SA-04, as originally proposed in this proceeding, is as follows:¹⁶³⁵

¹⁶²⁷ Order Denying Motions Approving Scoping Decision as Modified & Requiring Expanded Notice at 10 (Nov. 30, 2017) (eDocket No. 201611-126917-02 (CN)).

¹⁶²⁸ Ex. DER-1 at 42 (O'Connell Direct).

¹⁶²⁹ Ex. EERA-42 at 4-8 (Revised EIS).

¹⁶³⁰ Ex. FOH-15 (Smith Summary).

¹⁶³¹ Ex. DER-1 at 43 (O'Connell Direct).

¹⁶³² *Id.*

¹⁶³³ Ex. EERA-42 at 4.9 (Revised EIS).

¹⁶³⁴ Ex. EN-45 at 24 (Simonson Rebuttal).

¹⁶³⁵ Ex. EERA-42 at 4-4 (FEIS)



756. SA-04 follows the Applicant's preferred route from Neche, North Dakota, to the vicinity of U.S. Highway 29 in the northeast corner of North Dakota, where it intersects with the Alliance pipeline corridor. It follows the Alliance pipeline corridor until it crosses into Minnesota near Wheaton, in Traverse County. In Minnesota, SA-04 parallels the Alliance pipeline right-of-way and the Minnesota River through Big Stone, Swift, Chippewa, Renville, and Nicolet Counties to near Mankato, in Blue Earth County.¹⁶³⁶

757. The route continues southeast, diagonally across Faribault and Freeborn Counties to the vicinity of Albert Lea. South of Albert Lea, the route crosses the Minnesota-Iowa border and continues southeast to the vicinity of Clinton, Iowa, generally following the Cedar River. The route crosses the Iowa-Illinois border southeast of Clinton, Iowa; and continues along existing pipelines (the Alliance pipeline, Enterprise pipeline, and NGL pipeline), where it terminates in Joliet, Illinois.¹⁶³⁷

758. The total length of SA-04 is 795 miles, with 251 miles in Minnesota, and the remaining 544 miles outside of Minnesota. It crosses North Dakota (233.5 miles); Iowa

¹⁶³⁶ Ex. EERA-42 at 4-8 (Revised EIS).

¹⁶³⁷ *Id.*

(187.9 miles), and Illinois (123 miles). Permitting requirements of other states would thus apply.¹⁶³⁸ SA-04 is approximately 450 miles longer than the proposed Project. It would require approximately 16 pump stations and numerous mainline valves.¹⁶³⁹

759. SA-04 would not interconnect with other pipelines at Clearbrook or Superior; and would not deliver to refiners in Minnesota and Wisconsin that utilize on the Enbridge Mainline System.¹⁶⁴⁰

b. Cost of Facility and Energy to be Supplied

760. SA-04 would likely impose additional costs for shippers compared to shipping crude oil through an Enbridge Mainline System with a new Line 3.¹⁶⁴¹ Applicant testified that SA-04 would have increased capital expenditures, relative to the proposed Project, due to more piping, new terminals, and new downstream pipeline.¹⁶⁴² These additional costs are \$3 billion in the United States, which would bring total costs of the Project in the United States to \$5.5 billion.¹⁶⁴³

761. In addition, SA-04 would increase transportation costs for Minnesota refiners by \$0.23 per barrel or approximately \$28 million a year.¹⁶⁴⁴ This cost increase may increase the prices of refined products.¹⁶⁴⁵

c. Effect on Natural and Socioeconomic Environment

762. The DOC-EERA undertook an extensive analysis of the impact of the APR and SA-04 on the natural and socioeconomic environment. The DOC-EERA's conclusions are set forth in the FEIS and Revised EIS.¹⁶⁴⁶

763. Using the information compiled by the DOC-EERA in the FEIS, the Minnesota Department of Natural Resources (MDNR) summarized what it believed were the most important aspects of that analysis. The MDNR highlighted the following differences between the APR and SA-04:¹⁶⁴⁷

- The APR delivers oil to Clearbrook and Superior; SA-04 does not. Instead, the SA-04 delivers directly to Illinois, by-passing Minnesota and Wisconsin refineries that rely upon the Mainline System.

¹⁶³⁸ *Id.* at 4-9.

¹⁶³⁹ Ex. EERA-29 at 4-8 (FEIS).

¹⁶⁴⁰ Ex. EN-24 at 21 (Eberth Direct); Ex. EN-14 at 11 (Fleeton Direct).

¹⁶⁴¹ Ex. DER-1 at 52 (O'Connell Direct).

¹⁶⁴² Ex. EN-19 at 18 (Glanzer Direct); Ex. EN-14 at 11 (Fleeton Direct).

¹⁶⁴³ Ex. EN-19 at 18 (Glanzer Direct); Ex. EN-14 at 11 (Fleeton Direct).

¹⁶⁴⁴ Ex. EN-37, Sched. 1 at 39 (Earnest Rebuttal); Ex. DER-1, KO-7 (O'Connell Direct).

¹⁶⁴⁵ Ex. DER-1 at 53 (O'Connell Direct).

¹⁶⁴⁶ Ex. EERA-29, Vol. 2 (FEIS); Ex. 42, Vol. 2 (Revised EIS).

¹⁶⁴⁷ Comment by MNDNR at 2-5 (Nov. 22, 2018) (Batch 18A) (eDocket No. 201711-137679-02 (CN)).

- The APR would result in the loss of 2,202 acres of forests; SA-04 would result in the loss of just 161 acres.
- The APR would permanently impact 46 acres of rare native plant communities; SA-04 would impact 3.6 acres of rare native plant communities.
- The APR would have long-term/major impacts to 440 acres of forested and scrub/shrub wetlands; SA-04 would impact 34.2 acres.
- The APR has 23,198 acres of wildlife conservation within 0.5 miles; SA-04 has 38,353 acres within the same distance.
- The APR has 227 waterbody crossings in Minnesota; the SA-04 has 172 in Minnesota.
- The APR passes through a large number of streams, lakes, wetlands, and accompanying resources, which are generally of high quality. SA-04 lies primarily in an agriculture-dominated area and generally has surface water resources of poorer quality.
- The APR is located within 0.5 miles of 17 wild rice lakes, 17 trout streams, 8 lakes of high and outstanding biological significance, and 4 tullibee lakes. SA-04 does not cross such high-quality water resources.
- The APR crosses 25,765 acres of high vulnerability water table aquifers; SA-04 crosses 30,201 acres.
- The APR has 26,382 acres of high groundwater contamination susceptibility in Minnesota; SA-04 has 4,674 acres.
- The APR crosses no karst topography; SA-04 crosses known or potential karst topography along 11 miles in Minnesota, 63 miles in Iowa, and five miles in Illinois.
- The APR crosses 87 acres of wellhead protection areas; SA-04 crosses 1,203 acres.

764. The MDNR concluded that, “The potential degree/severity of impacts and quantity of sensitive resources potentially impacted indicate that the APR would have a greater impact on the natural environment [in Minnesota] than the SA-04 alternative.”¹⁶⁴⁸ Accordingly, as between the APR and SA-04, the MDNR supports SA-04.¹⁶⁴⁹

¹⁶⁴⁸ *Id.* at 5.

¹⁶⁴⁹ *Id.* Note, however, that the MDNR ultimately concluded that “RA-07 does the best job at minimizing potential impacts to state managed natural resources.” *Id.* at 6.

765. However, the MDNR ultimately concluded that RA-07 “does the best job at minimizing potential impacts to state managed natural resources.”¹⁶⁵⁰

766. The Minnesota Pollution Control Agency (MPCA) also evaluated SA-04 in comparison to APR.¹⁶⁵¹ The MPCA concluded that SA-04, as compared to all alternatives, would have the lowest environmental justice impacts in Minnesota, both by low income population and miles in environmental justice areas of concern.¹⁶⁵² In addition, it does not cross any tribal land and, therefore, would have the lowest impact on tribal lands.¹⁶⁵³

767. The MPCA further concluded that SA-04 offers lower potential for environmental effects on surface water and groundwater resources than APR, and occupies significantly fewer areas of groundwater vulnerability.¹⁶⁵⁴ The MPCA noted that the majority of vegetative cover in the SA-04 corridor is hay/pasture and cultivated cropland, as opposed to forested uplands and woody wetlands found in APR.¹⁶⁵⁵ According to the MPCA, these agricultural areas tends to be less environmentally sensitive and would result in lesser habitat fragmentation during corridor clearing.¹⁶⁵⁶ In sum, the MPCA concluded that SA-04 has lower potential environmental impacts compared to the APR.

768. But like the MDNR, the MPCA ultimately concludes that use of an existing corridor (as provided in RA-07) would avoid the most environmental impacts than either the APR and SA-04.¹⁶⁵⁷

769. In addition to those differences highlighted by the MDNR, the following is a summary of other material differences between the Project and SA-04 from the FEIS and Revised EIS:¹⁶⁵⁸

- The APR crosses no karst topography; SA-04 crosses 2,053 acres of karst topography in Minnesota.
- The APR impacts more acres of high vulnerability water table aquifers in Minnesota (25,765 acres) than SA-04 (5,687 acres).

¹⁶⁵⁰ *Id.* at 6.

¹⁶⁵¹ Comment by MPCA (Nov. 22, 2017) (Batch 25) (eDocket No. 201711-137704-02 (CN)).

¹⁶⁵² *Id.*

¹⁶⁵³ *Id.*

¹⁶⁵⁴ *Id.*

¹⁶⁵⁵ *Id.*

¹⁶⁵⁶ *Id.*

¹⁶⁵⁷ Comment by MPCA (Nov. 22, 2017) (Batch 25) (eDocket No. 201711-137704-02 (CN)); Comment by MNDNR at 2-5 (Nov. 22, 2018) (Batch 18A) (eDocket No. 201711-137679-02 (CN)).

¹⁶⁵⁸ See Ex. EERA-42, Vol. 2 at 5-37-40; 5-100-104; 5-135-138; 5-152-154; 5-176-179; 5-226-229; 5-294-300; 5-418-426; 5-442-443; 5-480-481; 5-509-512; 5-542-544; 5-575-578; 5-607-608; 5-649-561 (Revised EIS).

- The APR impacts more acres of high groundwater contamination susceptibility in Minnesota (26,382 acres) than SA-04 (4,674 acres).
- The APR impacts more areas of high pollution sensitivity in Minnesota (16,299 acres) than SA-04 (1,493 acres).
- The APR has more waterbody crossings (192 in Minnesota) than SA-04 (172 in Minnesota), however, the bodies of water crossed by the APR are of higher value (i.e., trout streams, wild rice beds, etc.).
- The APR disturbs five water bodies and five acres of wild rice waterbodies; SA-04 does not have any wild rice waterbodies along the route.
- The APR impacts more acres of forested and scrub/shrub wetlands (440 acres) than SA-04 (34.2 acres).
- The APR impacts more emergent wetlands (178 acres) than SA-04 (252 acres).
- The APR impacts fewer acres of special flood hazard areas than the SA-04.
- The APR does not have potential for subsidence or sinkhole formation, but SA-04 does, due to the karst topography through which it travels.
- The APR would have long-term to permanent impacts on more acres of forests/woody wetlands (2,202 acres) than SA-04 (161 acres).
- The APR would cross fewer streams (174 streams, six of them trout streams) than SA-04 (636 streams), due to SA-04's longer length.
- The APR would impact fewer areas of habitat (5,617 acres) than SA-04 (10,765 acres), due to SA-04's longer length.
- The APR would impact few acres of wildlife conservation areas (512 acres) than SA-04 (847 acres).
- The APR would result in 38 miles of habitat fragmentation and SA-04 would result in none due to co-location with existing utility corridors along the entire route.
- The APR has fewer potential impacts on wildlife and plants species than SA-04.

- The APR has more impact on state land, whereas, SA-04 has more impact on federal land.
- The APR would generate approximately 50 percent less direct and indirect GHG emissions each year than SA-04 (due to the fact that SA-04 is nearly twice as long as the APR).
- The 30-year social cost of carbon for direct and indirect GHG emissions for the APR is lower (\$673,365,150) than for SA-04 (\$1,408,845,737), again due to the length of SA-04.
- The APR impacts significantly less agricultural land (2,284 acres) than SA-04 (10,155 acres).
- The impacts to recreational areas is relatively similar for both the APR and SA-04.
- The APR crosses fewer populated areas (15 areas) than SA-04 (24 areas).
- The APR would result in fewer temporary workers (4,000) and less income tax revenue (\$104 million) than SA-04 (9,000 workers and \$178 million in income tax revenue), again due to difference in length.
- The APR would impact fewer archaeological resources than SA-04.

770. One of the major concerns identified with respect to SA-04 in the FEIS was its proximity to karst topography along the route. Karst topography is a landscape that is characterized by numerous caves, sinkholes, fissures, and underground streams.¹⁶⁵⁹ Karst topography usually forms in regions of plentiful rainfall where bedrock consists of carbonate-rich rock, such as limestone, gypsum, or dolomite, that is easily dissolved.¹⁶⁶⁰ Pipelines in karst areas raise specific concerns for groundwater safety because of the potential for rapid spread of contamination should there be an accidental release of oil.¹⁶⁶¹

771. When the Commission declared the FEIS inadequate in December 2017, the Commission ordered the DOC-EERA to re-route SA-04 to avoid, as much as possible, karst topography.¹⁶⁶²

772. During their revisions to the FEIS, the DOC-EERA technical staff concluded that while avoiding or minimizing karst in Minnesota was possible, there was no reasonable route through Iowa and Illinois that entirely avoided karst; and that completely

¹⁶⁵⁹ See <http://www.dictionary.com/browse/karst-topography>.

¹⁶⁶⁰ *Id.*

¹⁶⁶¹ Ex. EERA-42, Append. U at U-1 (Revised EIS).

¹⁶⁶² Order Finding EIS Inadequate (Dec. 14, 2017) (eDocket No. 201712-138168-02 (CN)).

avoiding karst would require a major new route option crossing northern Minnesota.¹⁶⁶³ If created, this re-route would fail to address SA-04's primary objective of avoiding the Mississippi headwaters area and high quality waters of northern Minnesota.¹⁶⁶⁴ As a result, a reroute through northern Minnesota was not further considered.¹⁶⁶⁵

773. The DOC-EERA ultimately created a reroute of SA-04 in Minnesota, which would minimize crossing shallow karst (less than 50 feet below the surface).¹⁶⁶⁶ Working with intervenor FOH, technical staff created a "SA-04 FOH Reroute."¹⁶⁶⁷ This reroute resulted in a pipeline that is approximately 100 miles longer than the SA-04, and still could not "entirely avoid the groundwater vulnerabilities associated with karst that the Commission identified as a critical concern."¹⁶⁶⁸

774. Technical staff also identified shorter SA-04 modifications that also did not entirely avoid groundwater vulnerabilities associated with karst.¹⁶⁶⁹ The identified reroutes are set forth in the map below:¹⁶⁷⁰

¹⁶⁶³ Ex. EERA-42, Appendix U at U-3 (Revised EIS).

¹⁶⁶⁴ *Id.*

¹⁶⁶⁵ *Id.*

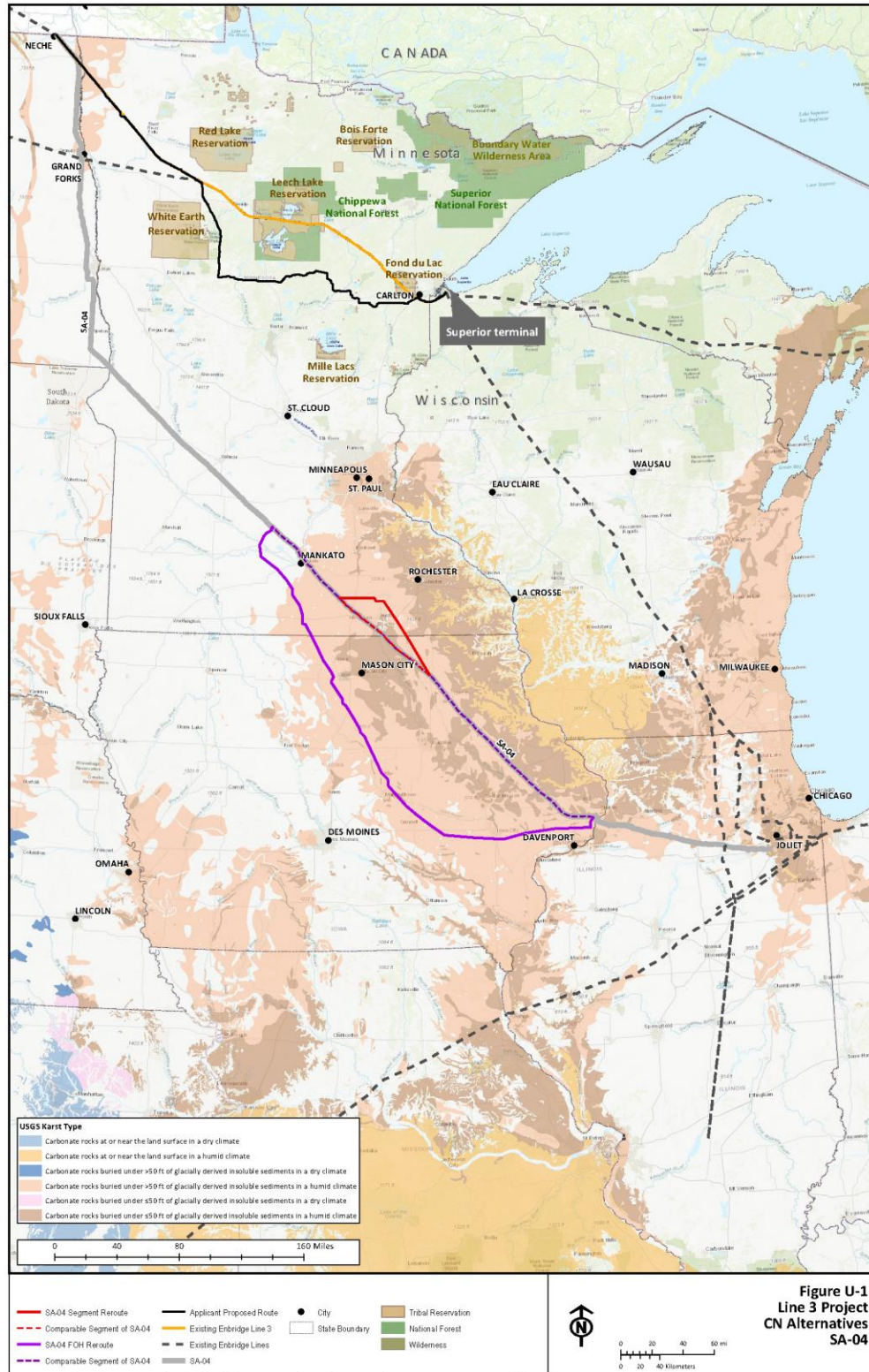
¹⁶⁶⁶ *Id.*

¹⁶⁶⁷ *Id.*

¹⁶⁶⁸ *Id.* at U-4.

¹⁶⁶⁹ Ex. EERA-42, Appendix U at U-4 (Revised EIS).

¹⁶⁷⁰ Ex. EERA-42, Appendix U at U-1 (Revised EIS).



775. Overall, although the new iterations of SA-04 presented in the Revised EIS may, to a certain extent, minimize karst, they generally also result in similar, if not greater, impacts on other resources than the original SA-04.¹⁶⁷¹ In addition, because the reroutes no longer follow the existing Alliance pipeline corridor, the benefits of co-location with that corridor would be lost.¹⁶⁷²

d. Reliability of SA-04 Compared to Project

776. There is no evidence that the conceptual SA-04 pipeline would be any more or less reliable than the Project. Both concepts involve the construction of a new pipeline, thereby addressing the reliability issues associated with the Existing Line 3. Within this finding is an assumption that new facilities are generally more reliable than 50-year-old facilities, which are operating under pressure restrictions and will require significant maintenance in the next 15 years.

777. Because reliability of the Project and SA-04 are similar, the ALJ also looks to efficiency, use of existing resources, and benefit to Minnesota. SA-04 involves the construction of a whole new pipeline separate from the Mainline System. Therefore, it does not present the same efficiency benefits of the Project for the Mainline System: it would not necessarily reduce apportionment on the Mainline;¹⁶⁷³ it would not make use of Enbridge's existing infrastructure or maximize efficiencies within the Mainline System;¹⁶⁷⁴ it does not connect in Clearbrook or Superior;¹⁶⁷⁵ it does not interconnect with the Minnesota Pipeline System; it does not directly serve Minnesota or Wisconsin refineries; and it would be significantly more expensive to build, being twice the size of the proposed Project.¹⁶⁷⁶

778. In addition, while SA-04 would avoid the headwaters of the Mississippi River and Minnesota's most water-rich environments (including wild rice lakes), SA-04 would, nonetheless, have environmental impacts to Minnesota and three other states. SA-04 and its reroutes are approximately twice the length of the proposed Project; the re-routes cannot avoid karst topography without losing the benefits of co-location; the alternative would require permitting in three other states; and, because of its length, it would double the impact on GHG emissions and carbon costs (SCC).¹⁶⁷⁷

779. While SA-04, as a concept, would allow Western Canadian oil producers to transport their products to the Midwest and the Gulf Coast, it would bypass Minnesota's refineries altogether. In this way, Minnesota would simply be used as a conduit for oil transport without Minnesota's refineries (and, thus, consumers) receiving any benefits

¹⁶⁷¹ Ex. EERA-42, Appendix U at Tables U-2 – U-9. For example, Table U-14 indicates that the SA-04 FOH Reroute would approximately triple the acres of populated areas located within 1,310 feet of the centerline. According to Table U-11, the SA-04 FOH Reroute would also increase impacts on federal lands. Similarly, it would increase impacts on archaeological resources. *Id.* at Table U-16.

¹⁶⁷² See Ex. EERA-42, Appendix U at Figure U-1.

¹⁶⁷³ Ex. EN-30 at 5 (Eberth Rebuttal).

¹⁶⁷⁴ Ex. EN-39 at 5 (Fleeton Rebuttal); Ex. EN-38 at 8-9 (Glanzer Rebuttal).

¹⁶⁷⁵ Ex. EN-30 at 5 (Eberth Rebuttal).

¹⁶⁷⁶ Ex. EERA-29, Vol. 1 at 4-9 (FEIS).

¹⁶⁷⁷ Ex. EERA-29, Vol. 1 at 4-8 to 4-9, Vol. 2 (FEIS); Ex. EERA-42 at Appendix U (Revised EIS).

from its existence.¹⁶⁷⁸ Furthermore, SA-04 would not provide the type of system benefits and efficiencies to Enbridge's Mainline that are the purpose of the Project.

780. For these reasons, the ALJ finds that SA-04 is not a more reasonable and prudent alternative to the Project, despite its important benefit of avoiding the Headwaters of the Mississippi and some of Minnesota's most valuable natural resources.

781. If a pipeline alternative is to be considered with a sole purpose of transporting crude from Canada to PADD II and the Gulf Coast, then the Commission is better off selecting a pipeline alternative that bypasses Minnesota altogether. After all, if an oil pipeline does not provide ongoing benefits to Minnesota's refiners and consumers, and poses only environmental risks to the state, then such a line should not be considered by the Commission at all. Two out-of-state pipelines alternatives have been identified by the DOC-DER, as immediately set forth below.

iv. Keystone XL Pipeline Alternative

782. In trial testimony, the DOC-DER proposed the Keystone XL as an alternative to the Project in this proceeding.

783. The Keystone XL Pipeline is a project proposed by TransCanada Corporation that would transport crude from Hardisty, Alberta (Canada) to Steel City, Nebraska, via Montana and South Dakota.¹⁶⁷⁹ From Nebraska, the pipeline would deliver crude to facilities in Wood River, Illinois, and Cushing, Oklahoma (thus serving PADD II and the Gulf Coast).¹⁶⁸⁰ As proposed, the Keystone XL pipeline would be 36 inches in diameter and ship up to 800 kbpd of oil.¹⁶⁸¹

784. The Keystone XL project was originally proposed in 2008 and received its first regulatory approvals in 2010.¹⁶⁸² In 2015, the U.S. government, under the Obama Administration, rejected the project on environmental grounds.¹⁶⁸³ In 2017, President Donald Trump revived the Keystone XL project and issued a presidential permit allowing TransCanada to build the pipeline.¹⁶⁸⁴

785. In November 2017, the Keystone XL project received the last of its needed approvals from the State of Nebraska, which approved an alternate route than that proposed by the company.¹⁶⁸⁵ TransCanada is still assessing the implications of the

¹⁶⁷⁸ Aside from temporary construction jobs and some longer-term property tax revenue.

¹⁶⁷⁹ Ex. DER-1 at 54 (O'Connell Direct).

¹⁶⁸⁰ *Id.*

¹⁶⁸¹ *Id.*

¹⁶⁸² *Id.*

¹⁶⁸³ *Id.* at 54-55.

¹⁶⁸⁴ *Id.* at 55.

¹⁶⁸⁵ The ALJ takes judicial notice of <https://www.transcanada.com/en/announcements/2018-01-18transcanada-confirms-commercial-support-for-keystone-xl>. Pursuant to Minn. R. 1400.7300, subp. 4 (2017), the ALJ advised the parties of her intention to take judicial notice of this announcement and gave the parties an opportunity to contest the facts so noticed. See Second Am. Notice of Taking Admin. Notice & Opportunity to Object (Mar. 29, 2018) (eDocket No. 20183-141510-01 (CN)). Applicant objects to judicial

alternate route, however, it claims that it has “successfully concluded the Keystone XL open season” and that it has secured approximately 500 kbpd of firm, 20-year commitments, “positioning the proposed project to proceed.”¹⁶⁸⁶ TransCanada notes that “[i]nterest in the project remains strong and TransCanada will look to continue to secure additional long-term contracted volumes.”¹⁶⁸⁷

786. Unlike the Project at issue here, the Keystone XL pipeline is being built on a “take-or-pay” basis, meaning that, before the project is constructed, a certain percentage of shippers must contractually commit to shipping a certain amount of volume on the line.¹⁶⁸⁸ Failure to ship will, thus, not reduce the commitment of the shippers to pay for the line.¹⁶⁸⁹ In exchange for a long-term (20-year) commitment to ship on the line, shippers receive a lower transportation rate.¹⁶⁹⁰

787. In analyzing the Keystone XL project, the DOC-DER concluded that if there are pipeline connections between Cushing, Oklahoma, or Wood River, Illinois, and refineries in PADD II, it would be possible for this pipeline to serve PADD II.¹⁶⁹¹ However, the DOC-DER acknowledged that transportation costs with this option may be higher than the costs on the Mainline, including the Line 3 Surcharge.¹⁶⁹² The following is the estimated delivery costs per barrel for the Keystone XL compared to the Project:¹⁶⁹³

Table 1: PADD 2 Delivery Costs per barrel, Keystone XL—Heavy Oil

Delivery Point	Enbridge Mainline (including Line 3 Surcharge)	Keystone XL Committed	Keystone XL Uncommitted
Chicago	\$5.56	\$4.88 to \$5.64	\$10.38 to \$11.14
Patoka	\$5.56	\$5.09	\$10.39
Detroit	\$6.08	\$5.94 to \$6.44	\$11.44 to \$11.94
Wood River	\$8.28	\$4.43	\$9.93

notice of this announcement. See Applicant Objections to Proposed Taking of Admin. Notice (Apr. 5, 2018) (eDocket No. 20184-141717-01 (CN)).

¹⁶⁸⁶ See <https://www.transcanada.com/en/announcements/2018-01-18transcanada-confirms-commercial-support-for-keystone-xl>. Pursuant to Minn. R. 1400.7300, subp. 4 (2017), the ALJ advised the parties of her intention to take judicial notice of this announcement and gave the parties an opportunity to contest the facts so noticed. See Second Am. Notice of Taking Admin. Notice & Opportunity to Object (Mar. 29, 2018) (eDocket No. 20183-141510-01 (CN)).

¹⁶⁸⁷ *Id.*

¹⁶⁸⁸ Ex. DER-1 at 55 (O’Connell Direct).

¹⁶⁸⁹ *Id.*

¹⁶⁹⁰ *Id.*

¹⁶⁹¹ *Id.*

¹⁶⁹² *Id.* at 55-56.

¹⁶⁹³ *Id.* at 56.

788. Applicant provided cost estimates to the DOC-DER for the cost of delivery in PADD II on a per-barrel basis.¹⁶⁹⁴ According to the DOC-DER, the lowest cost a committed shipper (one who has signed a 20-year commitment with TransCanada), would pay is \$5.14 per barrel to ship to the Gulf Coast, making the Keystone XL pipeline slightly less expensive than the Mainline (including Line 3 Surcharge).¹⁶⁹⁵ However, an uncommitted shipper (like those shipping on the Mainline) would pay between \$9.22 and \$12.99 per barrel to ship to the Gulf Coast.¹⁶⁹⁶ Thus, the Keystone XL would only be a less expensive option for a shipper who makes a long-term “take-or-pay” commitment to the Keystone XL line.¹⁶⁹⁷ For shippers who do not want to commit, it would be a significantly more expensive alternative.¹⁶⁹⁸

789. Based upon this analysis, the DOC-DER concluded that the Keystone XL could increase crude oil export capacity from Western Canada to the United States in a manner similar to the proposed Project.¹⁶⁹⁹ However, the Keystone XL would be more expensive for uncommitted shippers and would not serve Minnesota refineries directly.¹⁷⁰⁰ In addition, if shippers chose to use the Keystone XL line instead of the Mainline, it could “free up capacity” on the Mainline, thereby reducing or eliminating apportionment.¹⁷⁰¹

790. Applicant asserts that the Keystone XL project may not be built and that, even if it is built, it would not serve the same customers as the Project (refiners in Minnesota, Wisconsin, Illinois, Michigan, and Eastern Canada).¹⁷⁰²

791. The facts presented do not establish that the Keystone XL is a more reasonable and prudent alternative to the Project. Although Keystone XL, if built, would transport crude from Western Canada to the United States, it does not serve Minnesota refineries or PADD II directly. In addition, shippers could well pay more to ship on Keystone XL than the Mainline if they do not have a shipping contract with TransCanada. While Keystone XL would not have any negative impacts on the natural and socioeconomic environment of Minnesota (because it is not located in Minnesota), the Keystone XL pipeline will have its own set of environmental and socioeconomic impacts in the U.S.¹⁷⁰³ Finally, as for reliability, the fate of the Keystone XL is currently unknown and, therefore, its reliability compared to the proposed Project cannot be fully evaluated. As it stands currently, the Keystone XL continues to be a hypothetical alternative.

792. In review of system alternatives under Minn. R. 7853.0130(B), the party proposing an alternative carries the burden to prove that it is a more reasonable and

¹⁶⁹⁴ *Id.* at 56.

¹⁶⁹⁵ *Id.*

¹⁶⁹⁶ *Id.*

¹⁶⁹⁷ *Id.* at 56-57.

¹⁶⁹⁸ *Id.*

¹⁶⁹⁹ *Id.* at 57.

¹⁷⁰⁰ *Id.*

¹⁷⁰¹ *Id.*

¹⁷⁰² Ex. EN-39 at 5-6 (Fleeton Rebuttal).

¹⁷⁰³ The Keystone XL pipeline is over 500 miles longer than proposed Line 3 and would, thus have more impacts. See Ex. EN-75 at 2 (Berglund Summary); Ex. EN-46 at 13 (Berglund Rebuttal).

prudent alternative than the proposed Project. Here, no party has established by a preponderance of the evidence that the Keystone XL is a more reasonable and prudent alternative to the Project.

v. Spectra Pipeline

793. The other alternative proposed by the DOC-DER was the Spectra Pipeline, which would involve the construction of a new 36-inch diameter pipeline, with a proposed capacity of 760 kbpd. Alternatively, a smaller 370 kbpd pipeline could be built. Under both concepts, the pipelines would be built along the existing right-of-way of the Spectra Energy pipeline.¹⁷⁰⁴

794. The Spectra Energy Pipeline System is comprised of the Platte crude oil pipelines and the Express Pipeline.¹⁷⁰⁵ The Express Pipeline originates in Alberta and travels to Wyoming. The Platte Pipeline originate in Wyoming and travels to Wood River, Illinois.¹⁷⁰⁶ Using these lines, Canadian shippers could transport their products to PADD II and the Gulf Coast.¹⁷⁰⁷ In addition, these lines could connect with other Enbridge pipelines in the Illinois market.¹⁷⁰⁸ However, the Spectra System does not pass through Minnesota, and would not directly connect with Minnesota or Wisconsin refineries.¹⁷⁰⁹

795. In February 2017, Enbridge completed its purchase of Spectra Energy, including its pipeline system, making it now part of the greater Enbridge pipeline system.¹⁷¹⁰

796. Construction costs for a 760 kbpd pipeline were estimated to be \$11.72 billion (\$2.24 per barrel), which is about \$4.22 billion greater than the original project costs for the proposed Line 3.¹⁷¹¹ Estimated project costs for a 370 kbpd pipeline were estimated to be about \$9.244 billion (\$3.25 per barrel), which is approximately \$1.744 billion greater than the original project costs for the proposed Project.¹⁷¹² Therefore, the Spectra concept would be significantly more expensive than the proposed Project.

797. As for shipping costs, Applicant estimated that a 760 kbpd line would result in incremental transportation costs for Minnesota refiners of approximately \$42 million per year, or \$0.34 per barrel; and total Enbridge system throughput of approximately 2.45 million bpd throughout the forecasting period.¹⁷¹³ Applicant estimated that a 370 kbpd line (with the Existing Line 3 continuing to operate) would result in incremental transportation costs for Minnesota refiners of approximately \$35 million per year, or \$0.28

¹⁷⁰⁴ Ex. DER-1 at 59-60 (O'Connell Direct).

¹⁷⁰⁵ Ex. DER-1 at 59-60 (O'Connell Direct).

¹⁷⁰⁶ *Id.*

¹⁷⁰⁷ *Id.* at 63-64.

¹⁷⁰⁸ *Id.* at 60.

¹⁷⁰⁹ *Id.* at 60.

¹⁷¹⁰ *Id.* at 60.

¹⁷¹¹ *Id.* at 64.

¹⁷¹² Ex. DER-1 at 64 (O'Connell Direct).

¹⁷¹³ *Id.* at 67.

per barrel; and total Enbridge system throughput of approximately 2.58 million bpd throughout the forecasting period.¹⁷¹⁴

798. The DOC-DER claims that Applicant did not provide sufficient throughput data for the DOC-DER to adequately determine if the Spectra concept could be a reasonable alternative.¹⁷¹⁵ Therefore, the DOC-DER claims that it was unable to fully analyze and defend this concept.¹⁷¹⁶

799. According to Applicant, there is no proposed Spectra Pipeline Project and Applicant is not proposing such a concept.¹⁷¹⁷ Applicant states that a recent Spectra open season seeking committed shippers for expanded capacity failed to receive industry support.¹⁷¹⁸ In addition, Applicant asserts that there is limited pipeline capacity serving eastern PADD II refineries from Spectra's terminus at Wood River, Illinois.¹⁷¹⁹

800. Moreover, Applicant evaluated the Spectra concept and determined that it would cause the Mainline System to be "underutilized."¹⁷²⁰ The DOC-DER does not deny this conclusion, but argues that the underutilization may be less than Applicant's charts made it appear.¹⁷²¹

801. Under Rule 7853.0130(B), the party proposing an alternative has the burden to establish, by a preponderance of the evidence, that it is a more reasonable and prudent alternative to the proposed facility. The DOC-DER has failed to satisfy its burden with respect to the Spectra pipeline concept.

802. Given the undisputed increased costs associated with the Spectra concept, the fact that the system does not serve Minnesota's refiners, and the acknowledgement by the DOC-DER that the concept would result in underutilization of the existing Mainline System, the Spectra concept does not appear to be a more reasonable and prudent alternative to the Project.

vi. Energy East Pipeline

803. The DOC-DER initially proposed the Energy East pipeline as an alternative to the proposed Project.¹⁷²² Since that time, TransCanada has apparently abandoned its proposal for this project.¹⁷²³ Accordingly, the DOC-DER acknowledges that an Energy East pipeline is not a reasonable or prudent alternative to this Project.¹⁷²⁴

¹⁷¹⁴ *Id.*

¹⁷¹⁵ Ex. DER-1 at 68 (O'Connell Direct).

¹⁷¹⁶ Ex. DER-1 at 68 (O'Connell Direct).

¹⁷¹⁷ Ex. EN-39 at 6 (Fleeton Rebuttal).

¹⁷¹⁸ *Id.*

¹⁷¹⁹ Ex. SH-2 at 32 (Shippers Rebuttal).

¹⁷²⁰ Ex. DER-1 at 64-66 (O'Connell Direct).

¹⁷²¹ *Id.* at 66 ("Although the mainline may not be fully used, it does not appear as problematic when the graph is presented correctly.")

¹⁷²² Ex. DER-1 at 57-59 (O'Connell Direct).

¹⁷²³ Ex. EN-39 at 6 (Fleeton Rebuttal).

¹⁷²⁴ DOC-DER Initial Br. at 102 (Jan. 23, 2018) (eDocket No. 20181-139259-03 (CN)).

vii. ALJ Findings and Conclusions Regarding Alternatives to the Proposed Project

804. As set forth above, the party proposing an alternative to a proposed project has the burden to establish, by a preponderance of the evidence, that a more reasonable and prudent alternative exists. Both the FOH and DOC-DER have failed to satisfy their burdens in this case with respect to SA-04, the Keystone XL, and the Spectra pipeline concept. The evidence also does not establish that a rail or truck alternative to the Project would be more reasonable or prudent.

805. While there may be other potential pipeline concepts that could be constructed to transport crude from Western Canada to PADD II and the Gulf Coast, which could reduce apportionment on the Mainline, none of the proposed alternatives directly serves Minnesota or Wisconsin refineries. In addition, none of the pipeline alternatives utilize the existing infrastructure (Enbridge's Mainline) that the Line 3 Project proposes.

806. If the proposed Project's sole purpose was to bring Canadian oil to PADD II and the Gulf Coast, each of these alternative pipeline projects could be considered. However, a stated purpose of the proposed Project is to reallocate transport capacity on Enbridge's Mainline System to make the system itself more efficient and economical for Applicant's customers. Due to its location in Minnesota, upgrades to the Mainline System brings, as byproducts, benefits to Minnesota and Wisconsin refiners. It allows Minnesota and Wisconsin refineries access to more crude of different varieties. In this way, Minnesota's refineries receive a "benefit" from the Project that these other pipeline concepts do not offer to Minnesota.

807. On the flip side, the pipeline alternatives proposed serve to minimize (or eliminate) the impact to Minnesota's natural resources. The benefit to Minnesota refiners and Minnesotans of having ample crude availability, comes with the heightened risks that pipelines pose to Minnesota's natural resources, as discussed in more detail below.

808. SA-04 would mitigate the environmental risks to Minnesota by locating the pipeline through predominantly agricultural land and away from water-rich resources. It also avoids tribal lands (both the Leech Lake and Fond du Lac Reservations and the 1837 and 1854 Treaty-ceded territories). However, as set forth above, this alternative results in a substantially longer pipeline, traversing three other states, which cannot be designed to completely avoid karst topography. In addition, SA-04 does not provide any benefits to Minnesota's refiners.

809. The out-of-state pipeline concepts (Keystone XL and Spectra) simply transfer the environmental risks to other states and represent a "not in my backyard" solution to oil transportation without consideration of the use of Applicant's existing Mainline infrastructure or the benefits to Minnesota.

810. Ultimately, under the facts presented, none of the parties have established that an alternative to the Project would be more reasonable and prudent.

C. Consequences of Granting vs. Consequences of Denial [Minn. R. 7853.0130(C)]¹⁷²⁵

811. For its third criterion, the Commission must examine whether “the consequences to society of granting the certificate of need are more favorable than the consequences of denying the certificate.”¹⁷²⁶ In applying this criterion, the Commission must evaluate:

(1) the relationship of the proposed facility, or a suitable modification of it, to overall state energy needs;

(2) the effect of the proposed facility, or a suitable modification of it, upon the natural and socioeconomic environments compared to the effect of not building the facility;

(3) the effects of the proposed facility or a suitable modification of it, in inducing future development; and

(4) the socially beneficial uses of the output of the proposed facility, or a suitable modification of it, including its uses to protect or enhance environmental quality¹⁷²⁷

i. Overall State Energy Needs [Minn. R. 7853.0130(C)(1)]

812. The first factor in this criterion is the relationship of the proposed Project (or suitable modification of it) to the *state’s* overall energy needs.¹⁷²⁸

813. Minnesota is one of the 19 states in the U.S. that does not produce any oil.¹⁷²⁹ As a result, Minnesota relies exclusively upon imports to meet its crude oil and refined product needs.¹⁷³⁰ Minnesota has not imported crude from any country other than Canada since 2008.¹⁷³¹ Instead, all crude refined in Minnesota is imported from other U.S. states or Canada.¹⁷³²

814. Minnesota has two refineries: Flint Hills’ Pine Bend facility and Andeavor’s St. Paul Park facility. These two refineries obtain all of their pipeline crude oil supplies at Clearbrook, either from the Enbridge Mainline System or the North Dakota Pipeline¹⁷³³

¹⁷²⁵ See *also*, Minn. Stat. § 216B.243, subd. 3(5).

¹⁷²⁶ Minn. R. 7853.0130(C).

¹⁷²⁷ *Id.*

¹⁷²⁸ Minn. R. 7853.0130(C)(1) (emphasis added).

¹⁷²⁹ Ex. EN-15 at 13 (Earnest Direct).

¹⁷³⁰ Ex. EN-15 at 13 (Earnest Direct).

¹⁷³¹ Ex. EN-15, Sched. 2 at 38 (Earnest Direct).

¹⁷³² *Id.*

¹⁷³³ Ex. EN-15 at 9 (Earnest Direct).

According to Andeavor, it relies upon the Mainline System to provide approximately half of its crude oil needs.¹⁷³⁴ Flint Hills asserts that it “relies exclusively on the Enbridge pipeline system to deliver crude oil to its Minnesota refinery via the Minnesota Pipeline System.”¹⁷³⁵

815. Pipeline transportation is the predominant means by which crude oil is delivered to refineries in Minnesota and throughout PADD II.¹⁷³⁶ According to Applicant, the Enbridge Mainline provides the only pipeline source of Canadian crude oil supply for Minnesota’s refineries.¹⁷³⁷ (Minnesota refineries also receive domestic crude oil from the North Dakota Pipeline.)

816. Using the Mainline System, Western Canadian crude oil is transported from Alberta, Canada, to the Clearbrook terminal in Minnesota. From Clearbrook, crude (both Canadian and domestic) is transported to the two Minnesota refineries using the Minnesota Pipeline System.¹⁷³⁸ Accordingly, the Mainline System’s interconnection at Clearbrook, is the only part of the proposed Project that provides service to the Minnesota refineries.¹⁷³⁹ Nearly all of the heavy crude refineries in the Upper Midwest receive a portion of their oil, either directly or indirectly from Enbridge’s Mainline System.¹⁷⁴⁰

817. Wisconsin’s only refinery is the Calumet Superior Refinery, which receives most of its crude oil supply from the Mainline System at the Superior Terminal.¹⁷⁴¹ According to Calumet, “Enbridge is the sole pipeline that supplies crude oil to [its] Superior [R]efinery.”¹⁷⁴²

818. To determine how the Project will contribute to the overall state energy needs, the DOC-DER analyzed how much crude oil is transported through the Clearbrook terminal each year from 2010 to 2016.¹⁷⁴³ It examined how the total volume of oil and the mix of crude oils traveling through the Clearbrook terminal has changed in recent years.¹⁷⁴⁴ It found that the Mainline System has been delivering increasing amounts of oil to Clearbrook and Superior even with Existing Line 3 capable of delivering only light crude.¹⁷⁴⁵ The ALJ hereby adopts and incorporates Ms. O’Connell’s Highly Sensitive Trade Secret analysis into these findings and encourages the Commission to carefully consider the data underlying Ms. O’Connell’s public conclusions when making its decision.¹⁷⁴⁶

¹⁷³⁴ Ex. EN-94, Sched. 1 (Earnest Supplemental Surrebuttal).

¹⁷³⁵ Ex. EN-56, Sched. 1 at 4 (Earnest Surrebuttal).

¹⁷³⁶ Ex. EN-15 at 14 (Earnest Direct).

¹⁷³⁷ Ex. EN-15, Sched. 2 at 9 (Earnest Direct).

¹⁷³⁸ Ex. 56, Sched. 1 at 4 (Earnest Surrebuttal).

¹⁷³⁹ Ex. DER-1 at 72–94 (O’Connell Direct).

¹⁷⁴⁰ Ex. EERA-42, Vol. 1 at ES-1 (Revised EIS).

¹⁷⁴¹ Ex. SH-1 at 29 (Calumet Letter).

¹⁷⁴² *Id.*

¹⁷⁴³ Ex. DER-3 at 26 (O’Connell HSTS Direct).

¹⁷⁴⁴ *Id.*

¹⁷⁴⁵ DER-1 at 27 (O’Connell Direct).

¹⁷⁴⁶ Ex. DER-3 at 26 (O’Connell HSTS Direct).

819. The DOC-DER likewise analyzed the types of crude oil shipments being made to Minnesota's refineries from the Mainline System from 2010 to 2016.¹⁷⁴⁷ According to Ms. O'Connell's public testimony on this point, "Minnesota refineries are largely shipping heavy crude oil" on the Mainline System.¹⁷⁴⁸ And "[E]xisting Line 3 is capable of delivering only light crude."¹⁷⁴⁹ Therefore, Existing Line 3 is not significantly contributing to Minnesota refineries' crude oil needs.¹⁷⁵⁰ Again, the Commission is encouraged to review the data contained in Ms. O'Connell's Highly Sensitive Trade Secret Direct Testimony for substantiation of Ms. O'Connell's public conclusions (Ex. DER-3).

820. Despite the fact that Minnesota refineries have been receiving more oil stocks from Clearbrook in recent years and are largely receiving heavy crude, Ms. O'Connell concluded that the Mainline System has apparently been able to effectively meet the needs of the Minnesota refineries and that these refineries are not being impacted by the current apportionment of heavy crude on the Mainline System.¹⁷⁵¹

821. The public evidence is consistent with Ms. O'Connell's conclusions. Neither Flint Hills nor Andeavor has expressed an inability to obtain the amounts or types of oil it requires to meet its customer needs.¹⁷⁵² In the four comments letters submitted by the Minnesota refineries, not one of them asserts that the refineries are not currently getting the crude oil they need or want.¹⁷⁵³

822. In addition, based upon the DOC-DER's public analysis, Minnesota District refineries (refineries in Minnesota, North Dakota, South Dakota, Iowa, and Wisconsin) have been operating at high levels of utilization – near 100 percent, higher than the rest of PADD II refiners or U.S. refiners as a whole.¹⁷⁵⁴ According to Dr. Fagan, this figure indicates that Minnesota refineries "are not only operating efficiently, they are processing all the crude they possibly can (though there could be room to adjust the crude oil diet to change the mix [of] various grades of crude)."¹⁷⁵⁵

823. Accordingly, it does not appear from the public and non-public data presented by the DOC-DER that apportionment on the Mainline System has resulted in a limited supply of crude to Minnesota refiners in the recent past or the present.¹⁷⁵⁶ Nor

¹⁷⁴⁷ Ex. DER-3 at 74 (O'Connell HSTS Direct).

¹⁷⁴⁸ DER-1 at 75 (O'Connell Direct).

¹⁷⁴⁹ DER-1 at 75 (O'Connell Direct).

¹⁷⁵⁰ DER-1 at 75 (O'Connell Direct).

¹⁷⁵¹ Ex. DER-1 at 75 (O'Connell Direct).

¹⁷⁵² Ex. EN-56, Sched. 1 (Earnest Surrebuttal); Ex. EN-94, Sched. 1 (Earnest Supplemental Surrebuttal); Comment by Flint Hills Res. Pine Bend Refinery (Nov. 28, 2017) (Batch 25) (eDocket No. 201711-137704-02 (CN)).

¹⁷⁵³ Ex. EN-56, Sched. 1 (Earnest Surrebuttal); Ex. EN-94, Sched. 1 (Earnest Supplemental Surrebuttal); Comment by Flint Hills Res. Pine Bend Refinery (Nov. 28, 2017) (Batch 25) (eDocket No. 201711-137704-02 (CN)).

¹⁷⁵⁴ Ex. DER-4, Sched. MF-1 at 14 (Fagan Direct).

¹⁷⁵⁵ *Id.*

¹⁷⁵⁶ Ex. DER-9 at 4, 9-10 (Fagan Supp. Surrebuttal); Evid. Hrg. Tr. Vol. 9B at 83-84 (Fagan).

does it appear that Minnesota refineries are being significantly impacted by apportionment.¹⁷⁵⁷

824. Applicant does not challenge the data presented by the DOC-DER related to Minnesota refineries. Instead, Applicant argues that Existing Line 3's inability to transport heavy crude or its original capacity of oil (760 kbpd) contributes to apportionment on the Mainline System; and that apportionment negatively impacts the efficiency, reliability, and adequacy of the Mainline System as a whole. This, in turn, impacts Minnesota refineries who receive crude not just from Existing Line 3, but from other lines on the Mainline System.¹⁷⁵⁸

825. According to Applicant, if Existing Line 3 could operate in mixed service and return to its original capacity, then apportionment would be eliminated and the state's refineries would better be able to meet their crude oil mix needs.¹⁷⁵⁹ Thus, unlike the DOC-DER's analysis, Applicant's analysis of the Project is not limited to whether Minnesota refineries are currently getting what they need, but rather, whether the Mainline System could better serve Minnesota refineries in consistently meeting that need.¹⁷⁶⁰

826. According to Flint Hills:

Refineries operate in highly competitive commodity markets. Access to economic crude oil is a primary factor in a refinery's ability to be competitive. If a refinery cannot receive its preferred crude slate when it needs it or if the cost of that crude is artificially high due to transportation constraints, then a refiner's operations will be less competitive. Landlocked refineries, such as those in Minnesota, have fewer options to relieve apportionment than coastal refineries that have access to global crude markets or refineries in states with naturally-occurring oil. This is among the reasons why replacing Enbridge Line 3 is so important to Minnesota.¹⁷⁶¹

827. Andeavor agrees that reduction in apportionment on the Mainline System will improve its St. Paul Park Refinery's access to needed crude oil supply.¹⁷⁶²

828. Flint Hills sums it up as, "...the free-flow of crude oil on the Enbridge Mainline System contributes to a healthy and competitive marketplace that benefits fuel consumers and all those who rely on any of the multitude of different products derived from oil."¹⁷⁶³

829. While the evidence does not show that Minnesota refineries are short on oil supply or that they are unable to meet their current oil needs, there is sufficient evidence

¹⁷⁵⁷ *Id.*

¹⁷⁵⁸ See *generally* Applicant's Initial Br. (Jan. 23, 2018) (eDocket No. 20181-139252-03 (CN)).

¹⁷⁵⁹ *Id.*

¹⁷⁶⁰ See Enbridge Initial Br. at 89 (Jan. 23, 2018) (eDocket No. 20181-139252-03 (CN)).

¹⁷⁶¹ Comment by Flint Hills Res. Pine Bend Refinery (Nov. 28, 2017) (Batch 25) (eDocket No. 201711-137704-02 (CN)).

¹⁷⁶² Ex. EN-94, Sched. 1 (Earnest Supplemental Surrebuttal).

¹⁷⁶³ Ex. EN-56, Sched. 1 at 2 (Earnest Surrebuttal).

in the record that the Project will have some positive effects on the state's energy needs. This occurs by reducing or eliminating apportionment on the Mainline System and allowing Minnesota refineries more ample access to crude of all types. Thus, while the evidence does not establish that Minnesota refineries will be harmed by denial of the Project, the evidence does support a finding that they can benefit from approval of the Project. The increase in access to various types of crude will allow Minnesota refineries to have more security and greater reliability in their supplies. This, in turn, helps Minnesota's refineries remain competitive in the marketplace and reduces the cost of refined products for Minnesota consumers.

830. Accordingly, although the Project is not currently necessary for Minnesota to meet its current energy (i.e., crude oil) needs, the ALJ finds that the Project will provide some benefits to Minnesota's refiners and will contribute to Minnesota refiners' ability to meet the state's energy needs in the future. This, in turn, should benefit Minnesotans, as consumers of petroleum products.

ii. Effect on Natural and Socioeconomic Environments [Minn. R. 7853.0130(C)(2)]

831. The next factor to consider is the effect of the proposed facility (or a suitable modification of it) upon the natural and socioeconomic environments *compared to the effect of not building the facility*.¹⁷⁶⁴ The ALJ will split this analysis into two parts: the effects on the natural environment and the effects on the socioeconomic environment.

a. Natural Environment

832. In reviewing the potential effects on the natural environment by the Project, the ALJ looks to the Project as proposed (including the APR), as opposed not building the Project at all.

1. Continued Use of Existing Line 3

833. Not building the Project would result in the continued operation of Existing Line 3, as Applicant has made clear that it intends to continue operating Existing Line 3 if this Project is disapproved.¹⁷⁶⁵ The primary benefit of continuing to use Existing Line 3 is that it will not result in a new pipeline corridor or the environmental impacts from a new pipeline. This avoids the construction impacts associated with clearing a 120-foot wide right-of-way and trenching over 340 miles across Minnesota – over half of which will create a new pipeline corridor through Minnesota.¹⁷⁶⁶ The no-build option, thus, avoids habitat fragmentation, new disturbances, and the exposure of state resources to the risk of accidental release from a pipeline in a new corridor.¹⁷⁶⁷

¹⁷⁶⁴ Minn. R. 7853.0130(C)(2) (emphasis added).

¹⁷⁶⁵ Ex. EN-24 at 10 (Eberth Direct).

¹⁷⁶⁶ Ex. EERA-29 at ES-12 (FEIS).

¹⁷⁶⁷ *Id.*

834. However, there are two primary drawbacks with continued use of Existing Line 3: (1) the disturbance and inconvenience associated with the numerous integrity digs that Applicant anticipates in the next 15 years to keep the old line running; and (2) the heightened risk of release associated with an aging pipeline that has known integrity issues. If Line 3 remains in service, it is anticipated that there will be the need for approximately 6,250 integrity digs in Minnesota over the next 15 years, thereby inconveniencing landowners and disturbing the environment.¹⁷⁶⁸ Moreover, Applicant has stated that Existing Line 3's integrity threats cannot be fully remedied by maintenance on the 50+-year-old pipeline.¹⁷⁶⁹ According to Applicant, no feasible technology or operational changes can arrest or reverse the external corrosion on Existing Line 3 or remove the risks inherent with flash-weld pipe, as discussed in Section IV, A (History of Releases and Line 3 Integrity Issues), above.¹⁷⁷⁰

835. The ALJ does not find that the inconvenience and disruption of the repairs (i.e., integrity digs) to be a substantial factor in this analysis. The more significant issue is the integrity risk that Existing Line 3 will continue pose to the state.

836. The cause of the Marshall, Michigan, spill was "corrosion fatigue," which led to cracks and an ultimate catastrophic rupture.¹⁷⁷¹ The same integrity risks are present in the Existing Line 3 and, according to Applicant, cannot be fully mitigated through repair or operational changes.¹⁷⁷² Therefore, continuing the operation of Existing Line 3 has significant risks to Minnesota.

2. Potential Effects of Accidental Release

837. According to the DOC-DER, the primary concern with any crude oil pipeline is the risk of accidental release.¹⁷⁷³ The EIS states that: "Although the probability of a large or major oil release at any specific location is extremely low, the probability of a release of some kind along the entire pipeline during its lifetime is not low."¹⁷⁷⁴ Further, while it is true that transportation of oil by pipeline has a lower probability of release than by truck or rail, the potential volume of oil spilled in an individual incident (and thus the consequences of an individual spill) are much larger for pipeline than for truck or rail.¹⁷⁷⁵ The average size of a crude oil spill from a tanker truck is 16 barrels; from a train accident is 40 barrels; and from a pipeline leak is 462 barrels, making a pipeline release the potentially most devastating to the environment.¹⁷⁷⁶

838. Length of a pipeline is also a key component in calculating the probability of pipeline failure because a longer pipeline has a greater area that could be exposed to threats, such as third-party damage, construction defects, corrosion, and equipment

¹⁷⁶⁸ Ex. EN-12 at 23-24 (Kennett Direct).

¹⁷⁶⁹ Ex. EN-12 at 12 (Kennett Direct); Ex. EN-68 at 2 (Kennett Summary).

¹⁷⁷⁰ Ex. EN-12 at 20 (Kennett Direct).

¹⁷⁷¹ Ex. SC-2 at 82 (NTSB Report); Ex. SC-1 at 5 (Kornheiser Direct).

¹⁷⁷² Ex. EN-12 at 20 (Kennett Direct).

¹⁷⁷³ Ex. DER-1 at 80 (O'Connell Direct).

¹⁷⁷⁴ Ex. EERA-29 at 10-1 (FEIS).

¹⁷⁷⁵ See *Id.* at 10-141-10-167.

¹⁷⁷⁶ Ex. EERA-42, Vol. 1 at ES-14 (Revised EIS).

failure.¹⁷⁷⁷ In general, the EIS determined that pipelines pose a greater total risk of incident than other transportation alternatives.¹⁷⁷⁸

839. In addition to the irreparable damage that can be caused to the environment by an oil spill, the cleanup costs of an accidental release by a pipeline can be enormous. For example, Enbridge's Marshall, Michigan spill in 2010 cost over \$1.2 billion in cleanup costs.¹⁷⁷⁹ After over five years of remediation, it remains to be seen whether the long-term impacts on land and water resources that would be impacted by a spill will ever be sufficiently remediated.¹⁷⁸⁰

840. Applicant explains that while oil leaks are possible, they are preventable. To that end, Applicant presented evidence about its leak detection systems. Applicant asserts that since the Michigan spill in 2010, it has developed a Leak Detection Department of 40 professionals to improve its leak detection systems and protocols.¹⁷⁸¹ This department utilizes a variety of overlapping leak monitoring methods, including computational pipeline monitoring (CPM), leak detection systems, and leak detection sensors.¹⁷⁸² Applicant asserts that the leak detection system planned for the new Line 3 "will meet all federal requirements and industry standards, utilize the most up-to-date leak detection technology, and be part of a multi-faceted, long-term commitment to safety."¹⁷⁸³

841. In addition, in 2011, Enbridge added a 24-hour-a-day, seven-day-a-week Pipeline Control Center and backup center in Edmonton, Canada, staffed with "highly trained and qualified" personnel to respond to identified potential leaks and concerns.¹⁷⁸⁴ Enbridge also implemented a new Control Room Management Plan and enhanced its corporate "safety culture and operational discipline."¹⁷⁸⁵

842. At hearing, Applicant acknowledged that its leak-detection system is only designed to automatically shut down an oil pipeline in the case of a full rupture.¹⁷⁸⁶ Otherwise, Applicant's personnel have 10 minutes after a leak-detection system alarm indicates that a leak might exist, to shut down the affected line.¹⁷⁸⁷ After 10 minutes of a leak-detection alarm, without human intervention, the line shuts down.¹⁷⁸⁸ For detecting oil leaks in general, Applicant employs a leak detection strategy, which employs a "combination of people processes and technology."¹⁷⁸⁹ With smaller leaks, Applicant must often conduct flow measurements in order to detect any abnormalities.¹⁷⁹⁰ Even

¹⁷⁷⁷ Ex. EERA-42, Vol. 1 at ES-14 (Revised EIS).

¹⁷⁷⁸ Ex. EERA-29 at 10-141 (FEIS).

¹⁷⁷⁹ Ex. DER-1 at 81 (O'Connell Direct).

¹⁷⁸⁰ *Id.*

¹⁷⁸¹ Ex. EN-35 at 2-3 (Philipenko Rebuttal).

¹⁷⁸² *Id.*

¹⁷⁸³ *Id.*

¹⁷⁸⁴ Ex. En-81 (Baumgartner Summary).

¹⁷⁸⁵ Ex. EN-16 at 4-5 (Baumgartner Direct).

¹⁷⁸⁶ See Evid. Hrg. Tr. Vol. 4A at 116 (Philipenko).

¹⁷⁸⁷ *Id.*

¹⁷⁸⁸ *Id.*

¹⁷⁸⁹ *Id.* at 90.

¹⁷⁹⁰ *Id.*

then, Applicant testified that part of its strategy is to rely on the public to report leaks, in addition to other methods, like surveillance.¹⁷⁹¹ Applicant's reliance on the public to report certain smaller leaks, indicates there are leaks that evade Applicant's own leak-detection system. Applicant, however, testified that it will eventually find any leak: "It's just a matter of the amount of time."¹⁷⁹²

843. While the technical and operational changes that Applicant has made since the 2010 Marshall spill are certainly helpful in detecting and responding to leaks, the Marshall spill remains a real-life example of what can happen when a leak occurs and goes undetected. In Marshall, Enbridge failed to detect the spill for over 17 hours, by which time, approximately one million gallons of oil had been released into the environment.¹⁷⁹³ Ultimately, the spill was detected because local residents reported strong odors to first responders, who then notified Enbridge.¹⁷⁹⁴ While Applicant vows that its spill detection mechanisms have been enhanced since 2010, Applicant still relies, in part, on the public to report leaks, and the Marshall spill remains a recent example of how aging pipelines, combined with a fallible leak detection system, can have catastrophic results.

844. The number of water crossings along APR heightens the risk or could exacerbate the impact of an accidental release.¹⁷⁹⁵ This concern is significantly higher on the Clearbrook-to-Superior segment than on the Neche-to-Clearbrook segment, because of the entirely new route and pipeline corridor created from Park Rapids to the Wisconsin border.¹⁷⁹⁶

845. The northcentral and northeastern portions of Minnesota where the APR would run contain some of the highest quality water resources in the state.¹⁷⁹⁷ The proposed Project would impact 25,765 acres of high vulnerability water table aquifers; 26,382 acres of high groundwater contamination susceptibility; and 16,299 acres of high pollution sensitivity areas.¹⁷⁹⁸ The APR would expose 12,318 acres of unusually sensitive ecological (high consequence) areas and 2,444 acres of high consequence drinking water sources to the risks of accidental release.¹⁷⁹⁹ And the APR would place over 83,000 acres of drink water areas of interest at risk of potential releases.¹⁸⁰⁰ Moreover, the APR is located within 2,500 feet of over 28,000 acres of Minnesota Biological Survey (MBS) sites of biodiversity significance, which would be placed at risk in an event of release.¹⁸⁰¹

846. In sum, the Project would cross 227 waterbodies, has 46 designated waterbody crossings; and would cross 174 streams, six trout streams, 16 impaired water

¹⁷⁹¹ *Id.* at 91.

¹⁷⁹² *Id.* at 90.

¹⁷⁹³ Ex. SC-2 at 1, 3 (NTSB Report); Ex. SC-1 at 6 (Kornheiser Direct).

¹⁷⁹⁴ *Id.*

¹⁷⁹⁵ Ex. DER-1 at 81 (O'Connell Direct).

¹⁷⁹⁶ *Id.*

¹⁷⁹⁷ Ex. EERA-42 at ES-16 (Revised EIS).

¹⁷⁹⁸ Ex. EERA-42 at 5-37 (Revised EIS).

¹⁷⁹⁹ Ex. EERA-42 at 10-147 (Revised EIS).

¹⁸⁰⁰ Ex. EERA-42 at 10-153 (Revised EIS).

¹⁸⁰¹ Ex. EERA-42 at 10-149 (Revised EIS).

bodies, and five wild rice waterbodies.¹⁸⁰² In addition, within 2,500 feet of the APR there are 181 wild rice lakes and within 10 miles downstream of the APR, there are 982 wild rice lakes, which could be potentially subject to impact in the case of accidental release.¹⁸⁰³

847. In Applicant's analysis, the Project would cross 15 major watersheds in Minnesota, containing 7,937 lakes.¹⁸⁰⁴ Of those lakes, Applicant claims that only 215 would be "hydrologically connected to the [P]roject."¹⁸⁰⁵ In addition, Applicant asserts that "only" 88 wild rice waters would have "hydrologic connections" to the pipeline.¹⁸⁰⁶

848. Applicant's analysis regarding the proposed Project's potential impact to lakes, groundwater, and wild rice waters does not consider factors such as site-specific typical conditions, seasonality, crude oil type and volume, or oil spill response times.¹⁸⁰⁷ Applicant's expert agreed that these factors could impact how spilled crude oil travels.¹⁸⁰⁸ In addition, Applicant did not evaluate any particular points along the APR that could have the greatest impacts to lakes or groundwater.¹⁸⁰⁹ Applicant's analysis only evaluated the potential impacts of release to first downstream lakes within a mile of the Project.¹⁸¹⁰

849. Moreover, Applicant's expert did not fully evaluate the potential impact to drinking water sources should an accidental release occur.¹⁸¹¹ Applicant's witness simply opined that oil travels slowly and that most small leaks will move to the ground surface where they can be visually observed by a human and remedied.¹⁸¹² For larger releases, Applicant asserts that the spill can be contained and remediated before the oils seeps into the water table.¹⁸¹³ And, for any oil that actually reaches the water table, Applicant's witness states that "there are natural processes" (such as microbes) that will "substantially limit the impact on ground water."¹⁸¹⁴ Of course one could only hope that an oil spill will be remediated before it reaches the water table. However, Applicant's analysis simply avoids the impact of an oil spill on groundwater resources by claiming that spills would likely be cleaned up before impacts occur.¹⁸¹⁵

850. The ALJ does not find Applicant's testimony or analysis with respect to potential effects on lakes, groundwater, or wild rice waters credible or persuasive. Given the number of high quality surface, ground, and drinking water sources within or near the APR, the impact of an accidental release on those important resources must be

¹⁸⁰² Ex. EERA-42 at 5-100 to 5-103, 5-294 (Revised EIS).

¹⁸⁰³ Ex. EERA-42 at 10-150 (Revised EIS).

¹⁸⁰⁴ Ex. En-17 at 6 (Wuolo Direct).

¹⁸⁰⁵ Ex. En-17 at 6 (Wuolo Direct).

¹⁸⁰⁶ Ex. EN-18 at 5 (Lee Direct).

¹⁸⁰⁷ See Evid. Hrg. Tr. Vol. 4B at 90-105 (Wuolo).

¹⁸⁰⁸ *Id.* at 95.

¹⁸⁰⁹ See *id.* at 96.

¹⁸¹⁰ *Id.* at 97-98.

¹⁸¹¹ Evid. Hrg. Tr. Vol. 4B at 99 (Wuolo).

¹⁸¹² Ex. EN-49 at 3 (Wuolo Rebuttal); Ex. EERA-25 at 10 (Pinhole Release Report).

¹⁸¹³ Evid. Hrg. Tr. Vol. 4B at 126-127 (Wuolo).

¹⁸¹⁴ Evid. Hrg. Tr. Vol. 4B at 115, 126-127 (Wuolo); Ex. EN-17 at 8-9 (Wuolo Direct).

¹⁸¹⁵ Evid. Hrg. Tr. Vol. 4B at 126-127.

considered a weighty risk in approving this Project. The ALJ finds that the analysis provided by the EIS is more balanced, reliable, and persuasive on the issue of potential impact of a release on water resources in Minnesota.

3. Impacts of a New Pipeline Corridor

851. Another consideration, and of particular significance in this case, is the fact that the APR for the Project results in a new pipeline corridor for a majority (47 percent) of the route (the Park Rapids-to-Wisconsin border segment). The North Dakota border-to-Clearbrook segment of the APR shares the existing Mainline corridor. Therefore, this segment would have very few new impacts to the environment. However, the Clearbrook-to-Superior segment (more specifically, the Park Rapids-to-Wisconsin border segment) involves an entirely a new pipeline corridor.¹⁸¹⁶ A new pipeline corridor means new impacts to a new area of the state not currently affected or put at risk by crude oil pipelines.

852. As the EIS noted:

Along existing pipeline corridors, resources have already been affected. New impacts occur only at the margin of these previously disturbed and permanently altered areas, thereby minimizing further habitat fragmentation or degradation of aesthetics. Also, where pipeline corridors are shared, spill risks are incrementally increased as the addition of a new pipeline in an existing corridor adds to the overall probability of an incident, but does not change the type or distribution of resources exposed if an accidental release does occur.¹⁸¹⁷

853. There are unique environmental concerns with establishing a new pipeline corridor.¹⁸¹⁸ Trees cut down to construct a new pipeline would be permanently cleared.¹⁸¹⁹ New water ways would be crossed by a crude oil pipeline where there was not one before, with all its appurtenant effects.¹⁸²⁰

854. According to the EIS, the Project would have long-term to permanent/major impacts to 440 acres of wetlands and 2,202 acres of forests or woody wetlands.¹⁸²¹ As the EIS noted:

¹⁸¹⁶ From Clearbrook to Park Rapids, the APR follows the Minnesota Pipeline corridor. However, from Park Rapids to Carlton County, this Project would create an entirely new pipeline corridor. See, Ex. EN-22 at 9 (Simonson Direct).

¹⁸¹⁷ Ex. EERA-42 at ES-23-24 (Revised EIS).

¹⁸¹⁸ See Ex. DER-1 at 82 (O'Connell Direct).

¹⁸¹⁹ Evid. Hrg. Tr. Vol. 2A (Nov. 2, 2017) at 69 (Simonson).

¹⁸²⁰ Ex. DER-1 at 81 (O'Connell Direct). See also Evid. Hrg. Tr. Vol. 2B (Nov. 2, 2017) at 142 (Bergman):

Q. Would it be your opinion that the presence of a crude oil pipeline poses a risk that would otherwise not be present if the line were not there?

A. Phrased the way you phrased it, if there was nothing there at all, there would be no risk.

¹⁸²¹ Ex. EERA-42 at 5-135, 5-226 (Revised EIS).

The proposed Project would require that an approximately 120-foot-wide construction work area be cleared in upland areas and an approximately 95-foot-wide construction work area be cleared in wetlands. Forested uplands and woody wetlands within the permanent right-of-way through northern Minnesota would be permanently converted, thereby permanently affecting more forested land cover and wildlife habitat than any other CN Alternative. A total of 38 miles of the Applicant's proposed Project, for example, would cross and permanently fragment 21 large-block forested and wood wetland habitats (i.e., habitats larger than 100 acres). This would permanently impact approximately 2,202 acres of forest and woody wetlands.¹⁸²²

855. In total, the proposed Project crosses 10,959 acres of highly populated areas; 12,318 acres of unusually sensitive ecological areas; 2,443 acres of drinking water sources; 102,426 acres of biological areas of interest; and 3,704 acres of recreational/tourism areas of interest.¹⁸²³ Moreover, it is located in an area of high-quality water sources,¹⁸²⁴ as set forth above.

856. Moreover, establishing a new corridor for crude oil pipelines creates a higher probability of using the new corridor for other new or rerouted pipelines.¹⁸²⁵ This is particularly true in this case because Applicant has not released the easements it purchased for the Sandpiper Project and, instead, purchased new easements adjacent to the Sandpiper easements for use in this Project.¹⁸²⁶ The Line 3 and Sandpiper easements, together, authorize Applicant to place at least two pipelines in the easement area (so long as the Commission approves this and future projects).¹⁸²⁷ By acquiring new easements for this Project (rather than using the easements they purchased for Sandpiper), Applicant has laid the groundwork for either: (1) relocating its aging pipelines from the Mainline corridor in this new corridor; or (2) building a new, additional pipeline in the area.¹⁸²⁸ The consequences of a new pipeline corridor being established, combined with the abandonment of the Existing Line 3 in the Mainline corridor (thereby inviting the future abandonment of the other five lines in that corridor), presents another level of impact to the state. See Section VII below for further discussion on this issue. See *also*, Minn. R. 7852.1900, subp. 3(F) ("in selecting a route the commission shall consider...use of existing rights-of-way and right-of-way sharing or paralleling.")

¹⁸²² Ex. EERA-42 at ES-17 (Revised EIS).

¹⁸²³ Ex. EERA-42 at ES-15 (Revised EIS).

¹⁸²⁴ Ex. EERA-42 at ES-16 (Revised EIS).

¹⁸²⁵ Ex. DER-1 at 81 (O'Connell Direct). See *also*, Ex. EERA-42 at 12-39 (Revised EIS).

¹⁸²⁶ Evid. Hrg. Tr. Vol. 1A at 131 (McKay); Evid. Hrg. Tr. Vol. 1B at 36 (McKay).

¹⁸²⁷ See *e.g.* Exs. HTE-5 and HTE-6 (Executed Easements).

¹⁸²⁸ This is especially true considering that tribal sentiment about pipelines makes renegotiating the current Mainline pipeline easements with tribes uncertain. Note that Commission approval of new or relocated pipelines would be required.

4. Climate Change

857. The Project also has the potential to impact the global environment by contributing to climate change.

858. First, the Project itself will result in increased GHG emissions. The proposed Project will have direct GHG emissions of nearly 376 tons of CO₂e per year and indirect GHG emissions of nearly 453,000 tons of CO₂e per year.¹⁸²⁹ The resulting 30-year social cost of carbon from those emissions is estimated to be \$673,365,150.¹⁸³⁰ In addition, based upon Applicant's intent to operate the line with predominantly heavy crude, the incremental life-cycle GHG emissions from the Project are estimated at nearly 200 million metric tons of CO₂ equivalent per year, and the 30-year social cost of carbon for the incremental life-cycle GHG emissions is estimated at \$287 billion.¹⁸³¹

859. Second, the Project also serves to increase the availability and consumption of fossil fuels, the extraction and burning of which are known and primary contributors to climate change.¹⁸³² As the EIS noted:

The proposed pipeline is part of a larger crude oil extraction, production, refining, and consumption system that is affected by changes in the availability and price of transportation to get crude oil from the point of extraction to the refineries that process the oil. An increase in the availability of options for transport via pipeline, for example, could lower the overall cost of transporting crude oil to market, thereby improving its market prospects. Similarly, increased upstream activity induced by the Project could ultimately result in increased end-use of refined products – gasoline, for example becomes more abundant and cheaper as additional oil is extracted, and pipeline transport becomes cheaper.¹⁸³³

860. This means that the Project has the potential to increase extraction and consumption of fossil fuels, which are inconsistent with carbon-reduction, climate change, and environmental policies at home and worldwide.¹⁸³⁴

861. Fossil fuel emissions and tar sands oil production are significant contributors to climate change.¹⁸³⁵ Climate change is real, it is currently occurring, and its impacts are potentially devastating to mankind.¹⁸³⁶ Climate change amplifies temperature extremes and drought/flood cycles; impacts the migration of living species;

¹⁸²⁹ Ex. EERA-42 at ES-21 (Revised EIS).

¹⁸³⁰ *Id.*

¹⁸³¹ Ex. EERA-42 at 5-466 (Revised EIS).

¹⁸³² Ex. EERA-40 (Miltich Summary) ("All greenhouse gas emissions contribute to cumulative climate change."); Ex. YC-14 at 2-3 (Abraham Direct); Ex. YC-27 (Scott Summary) ("Pipelines facilitate tar sands production growth....Any increase in tar sands production also leads to an increase in climate pollution, directly undermining efforts to address the climate crisis.")

¹⁸³³ Ex. EERA-42, Vol. 1 at ES-21 (Revised EIS).

¹⁸³⁴ *Id.*

¹⁸³⁵ Ex. YC-14 at 4-5 (Abraham Direct); YC-33 (Abraham Summary).

¹⁸³⁶ Ex. YC-32 (Kruhoeffer a/k/a Douglas Summary).

affects agriculture; rises the sea level; increases the frequency of wildfires, windstorms, and insect infestations; diminishes forest growth and health; and increases the severity and frequency of storms and flooding, among other things.¹⁸³⁷ Climate change also has human health impacts.¹⁸³⁸

862. In addition, climate changes negatively impact lands and resources that are particularly important to preserving traditional ways of life.¹⁸³⁹ Changes to Minnesota's land and natural resources affect hunting, fishing, wild rice farming, maple sugar gathering, and the collection of plants for medicines, spiritual and ceremonial purposes, shelter, and other need – all critically important to the Anishinaabe culture.¹⁸⁴⁰

5. Impact to Indigenous Populations

863. In addition to climate change, the potential direct effects of the Project on Minnesota's natural resources would disproportionately impact Minnesota's Native American population, whose culture and belief system is dependent upon the natural environment.

864. Traditional American Indian cultural beliefs consider all elements of an ecosystem to be interconnected, and that certain species of wildlife and plants are relatives and spiritual messengers.¹⁸⁴¹ Consequently, certain natural elements, species, and plants hold special sacred significance to America's Indigenous people, including but not limited to, water and, for the Anishinaabe people, wild rice.

865. For Native American tribes, cultural resources have evolved in concert with natural resources, such that one is dependent on the other.¹⁸⁴² Accordingly, there is no distinction between what is considered a "cultural resource" and a "natural resource."¹⁸⁴³ All natural resources have cultural and spiritual value to Native Americans.¹⁸⁴⁴

866. The Project area includes territory that was originally ceded by Minnesota's Ojibwe and Chippewa tribes (collectively referred to as the Anishinaabe tribes or people).¹⁸⁴⁵ (A discussion of usufractory rights retained by Minnesota's Indian tribes is contained in Section IV, G above.) In addition, several Anishinaabe tribes are located within or near the Project area, including the Leech Lake, Red Lake, White Earth, Mille

¹⁸³⁷ Ex. YC-21 at 3-5 (Reich Direct); YC-14 at 2 (Abraham Direct); Ex. YC-32 at 4-9 (Kruhoeffer a/k/a Douglas Direct); Ex. EERA-40 (Miltich Summary).

¹⁸³⁸ Ex. YC-16 at 2-3 (Snyder Direct); Ex. YC-23 at 3-5 (Manning Direct).

¹⁸³⁹ Ex. EERA-42 at ES-22 (Revised EIS).

¹⁸⁴⁰ Ex. EERA-42 at ES-22 (Revised EIS).

¹⁸⁴¹ Ex. EERA-29 at 9-19 (FEIS).

¹⁸⁴² Ex. EERA-29 at 9-19 (FEIS).

¹⁸⁴³ *Id.*

¹⁸⁴⁴ *Id.*

¹⁸⁴⁵ See Ex. HTE-9 (Treaty-Ceded Territory Map), EN-99 (Enbridge Map Overlay); Second Am. Notice of Taking of Admin. Notice & Opportunity to Object, Attachment A (Mar. 29, 2018) (eDocket No. 20183-141510-01 CN)). (Treaties).

Lacs, Fond du Lac tribes.¹⁸⁴⁶ The analysis contained herein, thus, focuses on the specific impacts to Minnesota's Anishinaabe people.

867. Because of the interconnection between nature and Native American cultures and spiritual beliefs, the EIS determined that the Project could result in a “diminishment of Indian interests.”¹⁸⁴⁷ The potential impacts to tribal resources identified in the EIS include:¹⁸⁴⁸

- **Water** – the disruption of water bodies and the potential degradation of water quality impacts the Native Americans’ spiritual connectedness to water, a sacred element to Native culture.
- **Hunting** – the loss of natural resources and destruction of habitat caused by forest fragmentation associated with a new pipeline corridor; and the potential for contamination caused by release, all have the potential to impact hunting rights and activities of tribal members.
- **Fishing** – the potential loss of resources from contamination and habitat destruction have the potential to impact the fishing rights and activities of tribal members.
- **Wild Rice** – the potential impact to wild rice beds caused by contamination and habitat destruction have the potential to impact the health, vitality, and existence of wild rice, a resource of particular significance to the Anishinaabe people.
- **Spiritual practices** – construction activities and operation of the pipeline, as well as the potential for contamination related to release, have the potential to impact sacred sites, areas of religious or cultural significance, and natural resources used or worshiped in spiritual practices.
- **Medicinal and traditional plants and food** – a loss of resources that could occur from contamination and habitat destruction have the potential to impact plants used by the Natives for food, medicine, and spiritual practices.
- **Community health and mental well-being** – the loss of tribal connections to natural resources; the potential for contamination of natural resources; and the use of tribal land for an oil pipeline can cause tribal members to experience “cultural trauma” reminiscent of historical

¹⁸⁴⁶ See Ex. EERA-29 at 9-3 (FEIS).

¹⁸⁴⁷ *Id.* at 9-23.

¹⁸⁴⁸ Ex. EERA-29 at 9-23 (FEIS).

actions that stripped Native Americans of their land, rights, and access to natural resources.¹⁸⁴⁹

868. Anishinaabe tribes depend on traditional land use activities and related natural resources that exist in the Project Area, such as wild rice gathering locations, hunting and fishing habitats, hunting trails, and areas for harvesting plants for food, medicinal, and spiritual purposes.¹⁸⁵⁰ Thus, impacts to natural resources in the Project area have a particularly personal impact to Minnesota's Anishinaabe people.

869. According to Terry Kemper, a member of the Mille Lacs Band, "The Anishinaabe have a rich and long-standing spiritual connection to the land and the water. That connection is still strong today – the people and the land cannot be separated. For example, the land is used for traditional ceremonies, as well as hunting, fishing, and gather of plants with medicinal and spiritual uses."¹⁸⁵¹

870. Natural resources are interconnected with, and inseparable from, the health and well-being of the tribal communities.¹⁸⁵² As a result, tribal members maintain a cultural and spiritual responsibility to safeguard the land, water, air, and climate from harm.¹⁸⁵³

871. Wayne Dupuis is the Environmental Program Manager of the Fond du Lac Band.¹⁸⁵⁴ Mr. Dupuis spoke to the close relationship that the Anishinaabe people have with the plant and animal world, and how critical these resources are to the survival of the Anishinaabe people.¹⁸⁵⁵ Mr. Dupuis warns that industrial development in the northern Minnesota region has severely diminished the populations of native species in the area and reduced the abilities of the Anishinaabe people to harvest and maintain their traditional way of life.¹⁸⁵⁶ Mr. Dupuis asserts that the Project would add further damage to the natural environment and contribute to climate change.¹⁸⁵⁷

872. Without diminishing the importance of all natural resources to the Anishinaabe people, there are two sacred resources in particular that could be impacted by this Project: water and wild rice or "Manoomin," as it is called by the Anishinaabe

¹⁸⁴⁹ See *also*, YC-28 (Lamb Summary) (discussing the health impacts, loss of medicinal and ceremonial plants and cultural practices, importance of water for Anishinaabe people, and disparities suffered by Native Americans due to "historical trauma."); Ex. ML-2 (Kemper Summary) (discussing importance of water, wild rice, medicinal plants, and wildlife to the language, customs, and beliefs of the Anishinaabe.); Ex. RL-1 (Ferris Summary) (discussing the Project's potential to interfere with and diminish treaty-ceded rights to hunt, fish, and gather).

¹⁸⁵⁰ Ex. EERA-29 at 9-23 (FEIS).

¹⁸⁵¹ Ex. ML-2 (Kemper Summary).

¹⁸⁵² Ex. EERA-29 at 9-24 to 9-25 (FEIS); Ex. YC-19 at 5-11 (Lamb Direct).

¹⁸⁵³ Ex. EERA-29 at 9-24 to 9-25 (FEIS).

¹⁸⁵⁴ Ex. FDL-1 at 1 (Dupuis Direct)

¹⁸⁵⁵ *Id.*

¹⁸⁵⁶ *Id.* at 2-3.

¹⁸⁵⁷ *Id.* at 3-4.

people.¹⁸⁵⁸ To the Anishinaabe, water and Manoomin are not commodities, but rather, a means of sustenance and way of life.¹⁸⁵⁹

873. Manoomin is sacred not only to the Anishinaabe, but also to other American Indian tribes.¹⁸⁶⁰ Minnesota and northern Wisconsin are the largest producers of wild rice in the U.S., making it an economic mainstay, as well as a federally-protected tribal resource.¹⁸⁶¹ Tribal members believe that Manoomin is priceless; it nourishes the soul, community, and bodies of the Anishinaabe.¹⁸⁶²

874. The importance of wild rice to the Anishinaabe dates back hundreds of years prior to the colonization of North America. According to the Seven Fires Prophecy, the westward migration of the Ojibwe people resulted from a prophecy that instructed them “to find and settle where food grows on water.”¹⁸⁶³ Moving west in search of food, the Ojibwe ultimately came upon Great Lakes area of Minnesota and Wisconsin where they found Manoomin, a food source that grows on water.¹⁸⁶⁴ Manoomin, thus, has critical spiritual and cultural importance to the Anishinaabe people, not limited to sustenance or economic value.¹⁸⁶⁵ Wild rice is rare, extremely sensitive to ecological changes, and difficult to re-establish once impacted.¹⁸⁶⁶

875. A total of 17 wild rice lakes are located within 0.5 miles of the centerline of APR; whereas SA-04 has none, RA-06 has five; RA-07 has 11; RA-08 has nine; and RA-03AM has 11.¹⁸⁶⁷ Therefore, the APR has the most potential impact – and mostly new impact -- on wild rice waters. The APR would result in impacts on approximately 4.92 acres of wild rice lakes during construction and operation.¹⁸⁶⁸

876. Nancy Schuldt, the Water Projects Coordinator for the Fond du Lac Band, testified to the critical importance of Manoomin to the Anishinaabe people.¹⁸⁶⁹ Ms. Schuldt explained that “Minnesota is really the last place in the United States where Manoomin occurs with widespread prevalence, and it has been severely diminished here in recent decades....”¹⁸⁷⁰ Based upon her experience, Ms. Schuldt explained that restoring wild rice beds to harvestable stands, once impacted, is extremely difficult.¹⁸⁷¹ Because it is so difficult to restore a population once it is damaged, protecting the remaining healthy areas of wild rice waters should be a priority for the State of

¹⁸⁵⁸ Ex. EERA-29 at 9-28 (FEIS).

¹⁸⁵⁹ *Id.*

¹⁸⁶⁰ Ex. EERA-29 at 9-30 (FEIS).

¹⁸⁶¹ *Id.*

¹⁸⁶² *Id.*

¹⁸⁶³ *Id.* at 9-23 to 9-24.

¹⁸⁶⁴ *Id.*

¹⁸⁶⁵ Ex. EERA-42 at 9-23, 9-24.

¹⁸⁶⁶ *Id.* at 9-31.

¹⁸⁶⁷ *Id.* at 9-31.

¹⁸⁶⁸ *Id.* at 9-33.

¹⁸⁶⁹ Ex. FDL-8B (Schuldt Summary).

¹⁸⁷⁰ Ex. FDL-2 at 3 (Schuldt Direct).

¹⁸⁷¹ Ex. FDL-8B (Schuldt Summary).

Minnesota.¹⁸⁷² And any risks posed to the remaining healthy populations of wild rice should be reviewed with a high level of scrutiny.¹⁸⁷³

877. Ms. Schuldt notes that the APR “is just about the worst place in the United States to put a heavy crude oil pipeline. Any spill from this line has the potential to severely damage the remaining Manoomin, and that would be a profound loss for the Fond du Lac Band[,] as well as the greater population of Minnesota.”¹⁸⁷⁴ This is due to the “extraordinarily water-rich environment” and “interconnection” of the waters along the APR, which would make spills not only difficult to contain and clean up, but could easily spread contamination to nearby wild rice waters.¹⁸⁷⁵ As Ms. Schuldt explains, “[t]he introduction of heavy crude oil into a wild rice water could mean the permanent expiration of any wild rice in that water body.”¹⁸⁷⁶

878. Applicant’s witness, Heidi Tillquist, testified that after an oil spill, “recovery of the natural environment and socioeconomic conditions” can occur, but will depend on numerous factors, such as magnitude of release, site-specific environment conditions, and efficacy of emergency response and cleanup.”¹⁸⁷⁷ Consequently, “recovery” may take days, decades, or longer to occur.¹⁸⁷⁸ And recovery for spills that impact groundwater may take the longest.¹⁸⁷⁹

879. By “recovery,” however, Ms. Tillquist explained that she meant returning an environment to a point where it meets regulatory standards.¹⁸⁸⁰ This does not necessarily mean returning the environment to the conditions that existed before the spill.¹⁸⁸¹ For example, if a spill were to detrimentally impact a particular food source in an area, such as wild rice, wildlife would adopt and choose another food source for subsistence.¹⁸⁸² Ms. Tillquist’s analysis, however, did not consider the cultural loss that would occur as a result of damage to the natural environment, including the impacts to wild rice.¹⁸⁸³ Ultimately, Ms. Tillquist agreed that it is better to prevent a spill than to try to clean up one after-the-fact.¹⁸⁸⁴

880. Like Manoomin, water is a sacred resource for the Anishinaabe people.¹⁸⁸⁵ It is the source of all life and its interconnectedness with all of nature, makes it a primary

¹⁸⁷² *Id.*

¹⁸⁷³ *Id.*

¹⁸⁷⁴ *Id.*

¹⁸⁷⁵ *Id.*

¹⁸⁷⁶ *Id.* See also, Ex. WE-1 (Goodwin Direct) (discussing the importance of Manoomin to the Anishinaabe people; the need for good water quality to grow wild rice; the potential impacts of diluted bitumen on wild rice; and the difficulty of an oil clean up in wild rice waters.)

¹⁸⁷⁷ Evid. Hrg. Tr. Vol. 5B at 107-108 (Tillquist).

¹⁸⁷⁸ Evid. Hrg. Tr. Vol. 5B at 108, 128-129 (Tillquist).

¹⁸⁷⁹ Evid. Hrg. Tr. Vol. 5B at 122, 128-129 (Tillquist). Ms. Tillquist acknowledged that her analysis did not consider the potential impacts of the Project at hand. *Id.* at 117

¹⁸⁸⁰ Evid. Hrg. Tr. Vol. 5B at 120, 135 (Tillquist); Evid. Hrg. Tr. Vol. 6A at 21 (Tillquist).

¹⁸⁸¹ Evid. Hrg. Tr. Vol. 5B at 120, 131, 134, 135–136 (Tillquist); Evid. Hrg. Tr. Vol. 6A at 21 (Tillquist).

¹⁸⁸² Evid. Hrg. Tr. Vol. 5B at 139-140 (Tillquist).

¹⁸⁸³ Evid. Hrg. Tr. Vol. 5B at 125-127, 149 (Tillquist).

¹⁸⁸⁴ Evid. Hrg. Tr. Vol. 5B at 112 (Tillquist).

¹⁸⁸⁵ Ex. EERA-29 at 9-29 (FEIS).

resource to protect.¹⁸⁸⁶ Therefore, any negative impacts to water in the Project area would have increased impact to the Anishinaabe people.¹⁸⁸⁷

881. Potential impacts of the Project on Minnesota's water resources are discussed extensively above. Decreases in water quality and quantity can impact traditional ways of life in irreparable ways, including the loss of culturally important species, medicinal plants, traditional foods, and cultural sites.¹⁸⁸⁸ Because of the spiritual and cultural connection between water and Native American people, any impacts upon Minnesota's water resources have particular impacts to Minnesota's Indigenous populations.¹⁸⁸⁹

882. Mr. Kemper explained, "Water is tied to many tribal ceremonies, and has a spiritual significance. Water quality also has direct impact on other cultural resources – especially wild rice and fisheries....These traditions and customs bind us together and maintain the identity of the community....Our cultural resources and natural resources are the same thing."¹⁸⁹⁰

883. Finally, impacts to Minnesota's natural resources have cumulative cultural and social impacts on Minnesota's Indian tribes. According to several witnesses at the hearing and many others at the public hearings, development in tribal areas, which impacts the land and waters, threatens the cultural identity of Indigenous communities.¹⁸⁹¹ In general, Minnesota's Anishinaabe tribes view the Line 3 Project has an affront to their way of life and the continuation of their culture.¹⁸⁹² According to the EIS:

In the distant and recent past, Minnesota tribes have survived relocation, termination, assimilation, and other traumatic events and persevered against overwhelming odds. As presented during consultation, they now see Enbridge's Line 3 Project as yet another threat to their culture and future generations. For tribal communities, the Project threatens the rich watersheds in the region and is a threat to everything that depends on water.

The effects of land dispossession, cultural destruction, and loss of sovereignty rights have cumulatively subjected American Indians in Minnesota to poverty, economic vulnerability, and limited political capacity. Some tribal advocates have referred to the Applicant's preferred route and

¹⁸⁸⁶ Ex. EERA-29 at 9-25 (FEIS).

¹⁸⁸⁷ *Id.*

¹⁸⁸⁸ Ex. EERA-42, Vol. 1 at ES-22 (Revised EIS).

¹⁸⁸⁹ *Id.* at 29.

¹⁸⁹⁰ Ex. ML-2 (Kemper Summary).

¹⁸⁹¹ Ex. YC-23 at 7 (Manning Direct); ML-1 at 6 (Kemper Direct); YC-19 at 3-9 (Lamb Direct); LFD-12 (Dupuis Summary); YC-20 at 4-6 (Paulson/Beshig Biosh Summary). See Summary of Public Hearing Comments above and Attachment C (Summary of Written Comments Received).

¹⁸⁹² Ex. EERA-42 at 9-24 (FEIS); See *also*, Ex. YC-36 (Paulson/Beshig Biosh Summary); ML-2 (Kemper Summary). See *also*, Summary of Public Hearing Comments above and Attachment C (Summary of Written Comments Received).

its alternatives as environmental racism due to its disproportionate impact on Native resources and rights....¹⁸⁹³

884. Mr. Kemper summed up the sentiments of the Anishinaabe tribes as follows:

The Anishinaabe are taught to look at how we will impact future generations, and to think about the consequences that our actions will have seven generations from now. We have lived in this region for generations, and have gathered wild rice, harvested plants, and retained ceremonial sites and burial sited in this region for hundreds of years. Any major changes to the land and environment will not just affect us, but our children, our grandchildren, and their grandchildren. When we lose our cultural resources, our customs and traditions are taken away. There are not a lot of natural resources left – only a fraction of the resources that once thrived in this region. The Anishinaabe people are trying hard to preserve these resources and this project will expose these resources to unnecessary and unacceptable risk.¹⁸⁹⁴

885. To this end, the Fond du Lac Band has been instrumental in organizing a Tribal Cultural Resources Survey, currently underway, that seeks to identify the natural and cultural resources at risk as a result of the Project, from the Anishinaabe perspective.¹⁸⁹⁵ This survey has not yet been completed and the final results of this survey have not been included in the record of this proceeding. This survey, however, is only of the APR and does not address other route alternatives.

6. Abandonment

886. The Project also proposes to abandon Existing Line 3 in the ground in its current location, including through the Leech Lake and Fond du Lac Reservations. Abandonment of the line presents certain risks to Minnesota's natural resources and residents.

887. First, abandonment would prevent the discovery of contamination that may be present in the corridor and prevent remediation of such contamination.¹⁸⁹⁶ Second, an abandoned pipeline presents safety, subsidence, and contamination conduit risks.¹⁸⁹⁷ As there is no guaranty that Applicant will remain responsible for the line and continue to maintain it decades in the future, it leaves the possibility that Minnesota will become responsible for the infrastructure if Applicant one day decides to stop monitoring Existing Line 3 (as well as other abandoned pipelines in the Mainline corridor). Third, abandonment results in a permanent burden and nuisance to landowners who will not be able to fully utilize their properties and whose complaints may not be responded to so

¹⁸⁹³ Ex. EERA-42 at 9-24.

¹⁸⁹⁴ Ex. ML-2 (Kemper Summary).

¹⁸⁹⁵ Ex. FDL-12 (Dupuis Summary); Survey Progress Report (Feb. 1, 2018) (eDocket No. 20182-140105-03).

¹⁸⁹⁶ Ex. EERA-29 at 8-1 (FEIS).

¹⁸⁹⁷ *Id.* at 8-1.

long as a pipeline remains in-ground.¹⁸⁹⁸ Fourth, state-sanctioned abandonment sets a precedent for corporations to simply discard their infrastructure waste in Minnesota when it is no longer economically useful to the company or when the costs of removal are considered too great. If abandonment is allowed in this case, it will not likely end with Existing Line 3. Enbridge and other pipeline companies will likely expect to simply abandon their other infrastructure on Minnesota property when it is no longer used, including the other pipelines in the Mainline System and any new Line 3 that the Commission may approve. This is especially true considering Applicant's easements for a new pipeline allow for "idling in place."¹⁸⁹⁹ For more discussion of these impacts, see Section VII below.

888. Abandonment has particular impacts on the tribal communities through which Existing Line 3 runs; specifically, the Leech Lake and Fond du Lac Reservations. As the EIS noted, abandonment affects the environment, tribal resources, and the health and well-being of tribal members.¹⁹⁰⁰ Tribes have expressed serious concern about abandonment.¹⁹⁰¹ The first concern is associated with the responsibility for the abandoned pipe.¹⁹⁰² The tribes are concerned that they would ultimately become responsible for any costs associated with removal, contamination, and remediation for pipe on their reservations.¹⁹⁰³ Second, the tribes expressed concern about their ability to reclaim the land currently occupied by the pipelines.¹⁹⁰⁴ Without removal of the pipelines, the ability of the tribes to reclaim and fully use the land is limited. Third, the tribes expressed that abandonment would cause irreparable harm and violate spiritual beliefs and practices.¹⁹⁰⁵ Anishinaabe beliefs dictate the restoration of the environment to its natural state after impacts by man.¹⁹⁰⁶ As explained by one tribal member, nature must be allowed an opportunity to "heal."¹⁹⁰⁷

7. ALJ Findings and Conclusions (Natural Resources)

889. The ALJ finds that the effects of the Project, *as proposed*, upon Minnesota's natural resources and Native American people (particularly the Anishinaabe), weigh

¹⁸⁹⁸ See e.g., Ex. DY-1 (Dyrdal Direct); Ex. DY-14 (Dyrdal Surrebuttal); and Ex. DY-18 (Dyrdal Summary) (Describing one landowner's frustrations with Existing Line 3 and Applicant's response to complaints of burden, pipe exposure, and nuisance. Mr. Dyrdal testified to 40 years of "extreme frustration and expense" caused by numerous maintenance digs, replacement of unproductive soil on agricultural land, introduction of "pernicious" weeds, drainage problems caused by shallow pipes, exposed pipe, and impacts on his farming operations. See Ex. DY-18 (Dyrdal Summary))

¹⁸⁹⁹ Ex. HTE-5 (Easement); Ex. HTE-6 (Easement); Ex. EN-6 (McKay Direct) at Sched. 3 (Template Easement).

¹⁹⁰⁰ Ex. EERA-42 at 9-34, 9-35.

¹⁹⁰¹ *Id.*

¹⁹⁰² *Id.* at 9-34.

¹⁹⁰³ *Id.*

¹⁹⁰⁴ *Id.*

¹⁹⁰⁵ *Id.*

¹⁹⁰⁶ *Id.*

¹⁹⁰⁷ *Id.* at 9-34, 9-35.

heavily against granting of a CN to a project that would abandon an old pipeline and establish a new pipeline corridor through Minnesota.

890. The ALJ further finds that the impacts on Minnesota's natural resources could be mitigated by: (1) a route alternative that utilizes the existing Mainline corridor where impacts have already occurred and the risk of contamination can be contained to one, existing corridor; (2) a permit that does not allow for abandonment of roughly 300 miles of steel pipe; and (3) a route that does not open a new pipeline corridor through some of Minnesota's most precious water and natural resources – a new corridor that could be used to locate or relocate other pipelines before or after 2029, when Enbridge's Mainline easements expire.

b. Socioeconomic Effects [Minn. R. 7853.0130(C)(2)]

891. The second part of the analysis under the Rule 7853.0130(C)(2) criterion evaluates the Project's effects on the socioeconomic environment compared to the effect of not building the facility.¹⁹⁰⁸

892. As set forth above, for Native American tribes, there is no distinction between what is considered a "cultural resource" and a "natural resource."¹⁹⁰⁹ Consequently, any impacts the proposed Project would have on natural resources, as discussed above, would have socioeconomic impacts to the Native American community in and around the Project area.¹⁹¹⁰ These impacts are most prevalent for the creation of new pipeline corridors because at least two tribes (Leech Lake and Fond du Lac) have six pipelines currently crossing their Reservations, five lines of which will continue to exist regardless of the outcome of this proceeding.¹⁹¹¹

893. The potential socioeconomic effects of the Project on Native American culture and communities are set forth above in the Natural Environment Section and incorporated herein.

894. Other socioeconomic impacts that the parties have identified in this case involve the economic impact of the Project on Minnesota and its residents – particularly in the northern region where the proposed Project would be located.

895. To establish the economic impact that the Project may have on Minnesota, Applicant procured a study conducted by Richard Lichty, Ph.D and Julie Carey of Navigant Consulting, Inc.¹⁹¹² The study utilized IMPLAN, an economic modeling and software data package, to quantify the types of economic benefits that may arise from the Project.¹⁹¹³

¹⁹⁰⁸ Minn. R. 7853.0130(C)(2).

¹⁹⁰⁹ Ex. EERA-29 at 9-19 (FEIS).

¹⁹¹⁰ *Id.*

¹⁹¹¹ See Ex. LL-1 (LL Easement); Ex. FDL-1 (FDL Easement).

¹⁹¹² Ex. EN-11 at Sched. 2 (Lichty Direct).

¹⁹¹³ Ex. EN-11, Sched. 2 at 5 (Lichty Direct).

896. Dr. Lichty's analysis was strictly a benefits analysis and did not consider any costs related to the Project.¹⁹¹⁴ Dr. Lichty did not consider the negative externalities¹⁹¹⁵ of the Project (e.g., the social cost of carbon produced by the Project, the costs related to impacts on the environment, etc.).¹⁹¹⁶ Nor did his analysis consider the potential job losses that could be caused by the Project, the impact on current or future labor shortages in Minnesota, or the job shifting that would occur (i.e., employed individuals transferring from one job to another).¹⁹¹⁷ Dr. Lichty's work evaluated only the possible economic benefits of the Projects without deducting any potential costs.¹⁹¹⁸

897. As Dr. Lichty testified, any new project that involves the spending of billions of dollars is going to result in a positive economic impact using his IMPLAN analysis.¹⁹¹⁹ For example, as Dr. Lichty acknowledged that the cleanup of a multi-billion-dollar oil spill would result in an economic benefit under Dr. Lichty's analysis, because no negative externalities (i.e., costs) are considered.¹⁹²⁰

898. From Dr. Lichty's benefits-only analysis, Applicant argues that the Project would result in:

- (1) direct economic benefits resulting from the hiring of workers and the purchasing of supplies, equipment, and services;
- (2) indirect economic benefits results from Minnesota industries buying and selling goods and services to one another (such as a contractor of Applicant paying its worker, who then spend that money in the community)); and
- (3) "induced impact" resulting from workers spending their income in the state on discretionary items.¹⁹²¹

899. Dr. Lichty estimates that the Project would result in 7,292 full-time equivalent (FTE) jobs directly, 2,481 FTE jobs indirectly, and 3,830 FTE "Project-induced" jobs in the three-state area (Minnesota, North Dakota, and Wisconsin) during construction of the Project, with most benefits occurring during the 14-to-15-month construction period.¹⁹²² Approximately half of these jobs would be filled with Minnesota residents and

¹⁹¹⁴ Evid. Hrg. Tr. Vol. 1B at 165-165, 166, 169, 170, 176 (Lichty).

¹⁹¹⁵ According to Dr. Lichty, an "externality" is "a cost or benefit that accrue to someone other than the producer or consumer of a good." Evid. Hrg. Tr. Vol. 1B at 165 (Lichty). The Merriam-Webster dictionary defines "externality" as "a secondary or unintended consequence." See, <https://www.merriam-webster.com/dictionary/externality>.

¹⁹¹⁶ Evid. Hrg. Tr. Vol. 1B at 165-165, 166, 169, 170, 176 (Lichty).

¹⁹¹⁷ Evid. Hrg. Tr. Vol. 1B at 164-166, 173, 176 (Lichty).

¹⁹¹⁸ Evid. Hrg. Tr. Vol. 1B at 165-165, 166, 169, 170, 176 (Lichty).

¹⁹¹⁹ Evid. Hrg. Tr. Vol. 1B at 164-165 (Lichty).

¹⁹²⁰ *Id.*

¹⁹²¹ Ex. EN-11, Sched. 2 at 4 (Lichty Direct).

¹⁹²² Ex. EN-11, Sched. 1 at 7 (Lichty Direct); Ex. EN-41 at 3, 5 (Lichty Rebuttal).

half from out-of-state residents.¹⁹²³ In other words, only half of the jobs created would be filled by Minnesota workers.¹⁹²⁴

900. Dr. Lichty opined that the majority of jobs would be in the construction industry.¹⁹²⁵ Applicant anticipates that at least 50 percent of the construction jobs would "...be expected to be employed from local union halls. Many of these will be union jobs."¹⁹²⁶ Union jobs are mainly "high quality," high-paying jobs with benefits; and although they are predominately temporary jobs (lasting only during the time of construction), they would provide jobs for workers who travel from project-to-project as part of their vocation.¹⁹²⁷ As Dr. Lichty put it, "The jobs are temporary. The industry is not."¹⁹²⁸

901. In contrast to the number of temporary jobs that could be created by the Project, Dr. Lichty estimated that only approximately 369 FTE direct, indirect, or Project-induced permanent jobs could be created by the Project in the three-state area (thus, not just in Minnesota).¹⁹²⁹ All other jobs identified by Dr. Lichty would be only temporary jobs, most lasting only during the time of construction, estimated to be a 14-to-15-month period.¹⁹³⁰

902. Dr. Lichty explained that any permanent jobs created by the Project would be created in the management and maintenance operations of the new line in three states (North Dakota, Wisconsin, and Minnesota).¹⁹³¹ In his analysis, however, Dr. Lichty did not consider the shutdown of Existing Line 3 and the jobs lost or transferred as a result of that aspect of the Project.¹⁹³² According to Dr. Lichty, the continued use of Existing Line 3 could conceivably require more maintenance jobs than a new line,¹⁹³³ thereby resulting in a loss of jobs as a result of the Project.

903. Dr. Lichty could not estimate the number of FTE permanent jobs that could be created by the Project in Minnesota alone.¹⁹³⁴ Nor did he provide a number of the out-of-state employees that would be used in the Project.¹⁹³⁵ In addition, Dr. Lichty's study only estimated the number of jobs (new or existing) associated with construction of a new pipeline.¹⁹³⁶ He did not identify the number of "new" jobs that would be created in the

¹⁹²³ Evid. Hrg. Tr. Vol. 1B at 166 (Lichty).

¹⁹²⁴ *Id.*

¹⁹²⁵ Ex. EN-41 at 3 (Lichty Surrebuttal).

¹⁹²⁶ Ex. EN-22 at 18 (Simonson Direct).

¹⁹²⁷ Ex. LC-5 at 2 (Engen Direct); LC-4 (Whiteford Summary); Ex. UA-1 at 9-10 (Barnett Direct).

¹⁹²⁸ Evid. Hrg. Tr. Vol. 1B at 161 (Lichty).

¹⁹²⁹ Ex. EN-41 at 3 (Lichty Rebuttal); Evid. Hrg. Tr. Vol. 1B at 162, 167 (Lichty).

¹⁹³⁰ Ex. EN-41 at 3, 5 (Lichty Rebuttal); Evid. Hrg. Tr. Vol. 1B at 162 (Lichty).

¹⁹³¹ Evid. Hrg. Tr. Vol. 1B at 162, 174 (Lichty).

¹⁹³² Evid. Hrg. Tr. Vol. 1B at 164, 173, 176, 177, 178, 179 (Lichty).

¹⁹³³ *Id.* at 179.

¹⁹³⁴ Evid. Hrg. Tr. Vol. 1B at 162-163 (Lichty).

¹⁹³⁵ *Id.* at 166.

¹⁹³⁶ *Id.* at 172-173.

marketplace as a part of the Project; nor did he consider the jobs lost or transferred as a result of the Project as a whole.¹⁹³⁷

904. Notably, Applicant expects to employ only between “zero and 20” fulltime permanent employees as a result of the Project.¹⁹³⁸ At the evidentiary hearing, Applicant narrowed this estimate to “five, ten, twenty, something in that neighborhood.”¹⁹³⁹

905. Dr. Lichty did not obtain or use this information from Applicant when conducting his analysis, thereby casting doubt on Dr. Lichty’s permanent job number estimate.¹⁹⁴⁰ Under Dr. Lichty’s analysis, a majority of the permanent jobs created by the Project would be in the maintenance, management, and operation of the new line (i.e., those employed by Applicant).¹⁹⁴¹ However, Dr. Lichty did not deduct from this figure how many jobs will be transferred or lost as a result of the shutdown of Existing Line 3.¹⁹⁴² As Dr. Lichty acknowledged, if one deducts the number of jobs shifted or lost as a result of the Project as a whole, the net result could be no increase – or even a loss – in permanent jobs associated with the Project.¹⁹⁴³

906. The record is silent as to how many jobs would be lost or transferred as a result of the shutdown of Existing Line 3.¹⁹⁴⁴ Consequently, the ALJ finds that the number of *permanent jobs* created in Minnesota as a result of this Project is likely closer to Applicant’s figures (0 to 20) than Dr. Lichty’s number (369). Either way, the number of permanent jobs created by the Project is insignificant in relation to the size and expense of the Project.

907. The number of *temporary jobs* created, however, is not insignificant.

908. The DOC-EERA also analyzed the potential economic impact of the Project by retaining an economic impact study prepared by the University of Minnesota-Duluth Labovitz School of Business and Economics.¹⁹⁴⁵ The DOC-EERA concluded that the Project would result in approximately 4,200 jobs (a combination of union and non-union workers) over a one-year construction period.¹⁹⁴⁶ The DOC-EERA’s study estimated income tax revenues of approximately \$98 million in Minnesota -- an amount that is less than one percent of the amount Minnesota receives in income tax revenue each year.¹⁹⁴⁷

¹⁹³⁷ *Id.* at 172-173, 178.

¹⁹³⁸ Hinckley Pub. Hrg. Tr. (Vol. 5B) at 115 (Oct. 12, 2017) (Eberth).

¹⁹³⁹ Evid. Hrg. Tr. Vol. 7B at 133 (Eberth).

¹⁹⁴⁰ Evid. Hrg. Tr. Vol. 1B at 183 (Lichty).

¹⁹⁴¹ Evid. Hrg. Tr. Vol. 1B at 162, 177-179 (Lichty).

¹⁹⁴² Evid. Hrg. Tr. Vol. 1B at 164, 173, 177-179 (Lichty).

¹⁹⁴³ *Id.* at 177-179.

¹⁹⁴⁴ Dr. Lichty acknowledged he did not study the potential economic impact of the shutdown of Existing Line 3. Evid. Hrg. Tr. Vol. 1B at 178 (Lichty).

¹⁹⁴⁵ Ex. EERA-29 at Append. 6 (FEIS).

¹⁹⁴⁶ Ex. EERA-42 at 5-593 (Revised EIS).

¹⁹⁴⁷ Ex. EERA-42 at 5-594 (Revised EIS).

The EIS notes that this positive impact would be limited to the duration of the construction timeframe -- a little over one year.¹⁹⁴⁸

909. Based upon his benefits-only analysis, Dr. Lichty opined that the total “economic output” (combined direct, indirect, and induced economic benefits) of the Project over a three-year period could be in excess of \$2.2 billion across three states (\$1.9 billion in Minnesota),¹⁹⁴⁹ with roughly approximately half of this amount (\$864 million) generated from labor income in three states.¹⁹⁵⁰ These benefits span from the purchase of supplies (other than pipe, which was purchased outside of Minnesota); the hiring of new labor and contractors; and the indirect and induced benefits of money spent by the workers within the region (such as the monies spent on temporary housing, restaurants, and retail businesses).¹⁹⁵¹

910. The DOC-DER also analyzed the economic benefits of the Project for Minnesota. While the DOC-DER did not dispute that “some level of direct benefit, through construction jobs, for example, will occur as a result of the Project,” it could not confirm Applicant’s estimates as reasonable.¹⁹⁵² To that end, the DOC-DER’s analysis, was, once again, inconclusive.

911. As for the long-term economic benefits related to the Project, Applicant asserts that the Project would bring property tax revenue to Minnesota counties in the Project area.¹⁹⁵³ [As a partnership, Applicant does not pay income tax in the State of Minnesota.¹⁹⁵⁴ The only taxes paid by Applicant to Minnesota (aside from sales tax on goods purchased here) are property taxes.¹⁹⁵⁵]

912. Applicant does not provide evidence proving the amount of *new* property tax revenue from *the proposed Project*.¹⁹⁵⁶ Instead, Applicant’s witness testified, without providing supporting documentation, that “Enbridge’s operations in Minnesota contribute more than \$30 million per year in local property taxes.”¹⁹⁵⁷ This figure is the alleged sum of *all of Enbridge’s current operations* in Minnesota (i.e., the operations of the entire Mainline located in Minnesota), not the estimated amount that the *proposed Project* will generate.¹⁹⁵⁸ Nor does Applicant state what amount of annual property taxes, if any, will

¹⁹⁴⁸ *Id.* at 5-593 (Revised EIS).

¹⁹⁴⁹ Evid. Hrg. Tr. Vol. 1B at 169 (Lichty).

¹⁹⁵⁰ Ex. EN-11, Sched. 2 at 9 (Lichty Direct).

¹⁹⁵¹ Ex. EN-11 at 4 (Lichty Direct).

¹⁹⁵² Ex. DER-1 at 70 (O’Connell Direct).

¹⁹⁵³ See, Ex. EN-30 at 7 (Eberth Rebuttal).

¹⁹⁵⁴ Evid. Hrg. Tr. Vol. 6B at 28-29 (Johnston).

¹⁹⁵⁵ *Id.*

¹⁹⁵⁶ In its CN Application, Applicant asserts that the Project will generate \$19.56 million in additional annual property tax revenue to Minnesota. Ex. EN-1 at 4-5 (CN Application). However, Applicant provided no evidence of this assertion during the evidentiary hearing and has since backed away from this claim, instead stating that “Enbridge’s operations” in the state generate approximately \$30 in property tax revenue each year. This figure does not assist the ALJ in determining the property tax revenue that would be generated from the proposed Project.

¹⁹⁵⁷ Ex. EN-30 at 7 (Eberth Rebuttal). Mr. Eberth asserts, without providing supporting evidence, that this amount was calculated assuming Enbridge is successful in its pending tax appeal. *Id.* at 32.

¹⁹⁵⁸ *Id.*

be lost by abandonment of the line. Accordingly, Applicant has failed to establish the amount of property taxes the proposed Project will generate and how much, if any, will be reduced by the abandonment of Existing Line 3.

913. While Applicant boasts of the property tax benefit to Minnesota as a result of this Project, it must be also be noted that, in 2013, Applicant initiated an action in Minnesota Tax Court seeking recovery of approximately \$50 million dollars from Minnesota counties – an amount that Applicant asserts it has overpaid in Minnesota property taxes.¹⁹⁵⁹ The Tax Court action was still pending at the time of the evidentiary hearing. The result of this action could have devastating impacts to Minnesota counties in northern Minnesota, who would be responsible for reimbursing Applicant for this amount.¹⁹⁶⁰ How Minnesota taxpayers – both inside and outside those northern counties - will be affected by this lawsuit is yet to be seen.¹⁹⁶¹

914. Applicant did not evaluate the economic benefits to Minnesota of removal of Existing Line 3. Removal of Existing Line 3 is generally the reverse of constructing a pipeline, and would, thus, have economic benefits to Minnesota similar to construction of a new line.¹⁹⁶² According to the EIS, removal of Existing Line 3 would “create approximately half as many jobs as construction of a new line.”¹⁹⁶³ In other words, removal of the old line would create 50 percent more jobs than construction and abandonment would create.¹⁹⁶⁴

915. According to the Laborers’ Council witness, Evan Whiteford, there would be no difference in pay or benefits for workers whether they are installing or removing a pipeline.¹⁹⁶⁵ Consequently, removal of Existing Line 3 would result in similar economic

¹⁹⁵⁹ Pursuant to Minn. R. 1400.7300, subp. 4, the ALJ takes judicial notice of the public statement made by Applicant’s spokesperson in <http://www.startribune.com/a-high-stakes-dispute-over-minnesota-pipeline-taxes/441776413/>. See Second Am. Notice of Taking Admin. Notice & Opportunity to Object (Mar. 29, 2018) (eDocket No. 20183-141510-01 (CN)). See also, Applicant Objections to Proposed Taking of Admin. Notice (Apr. 5, 2018) (eDocket No. 20184-141717-01 (CN)). At the evidentiary hearing, Mr. Eberth asserted that Enbridge was seeking to recover \$20 million in overpaid taxes. Evid. Hrg. Tr. Vol. 10B at 121 (Eberth). The company spokesperson quoted in this article puts the number at \$50 million – a significantly larger sum. Due to the discrepancy between Enbridge’s public statement and the information provided under oath, the ALJ takes judicial notice of this fact over Applicant’s objection.

¹⁹⁶⁰ For the reasons set forth above, pursuant to Minn. R. 1400.7300, subp. 4, the ALJ takes judicial notice of the public statement made by Applicant’s spokesperson in <http://www.startribune.com/a-high-stakes-dispute-over-minnesota-pipeline-taxes/441776413/>. See Second Am. Notice of Taking Admin. Notice & Opportunity to Object (Mar. 29, 2018) (eDocket No. 20183-141510-01 (CN)). See also, Applicant Objections to Proposed Taking of Admin. Notice (Apr. 5, 2018) (eDocket No. 20184-141717-01 (CN)).

¹⁹⁶¹ See House Bill 2674 (2017) proposed to provide relief to Minnesota counties affected by Enbridge’s tax appeal and making the Minnesota Department of Revenue (i.e., Minnesota taxpayers as a whole) responsible for any repayment of property taxes to Enbridge. Authors: Reps. Matt Dean, Debra Kiel, Tim Miller, Mary Franson, Sandy Layman. <https://www.revisor.mn.gov/bills/bill.php?b=House&f=HF2674&ssn=0&y=2017>

¹⁹⁶² Ex. EERA-42 at 8-11 (Revised EIS).

¹⁹⁶³ *Id.*

¹⁹⁶⁴ *Id.*

¹⁹⁶⁵ Evid. Hrg. Tr. Vol. 5A at 63 (Whiteford).

benefits as the installation of a new line.¹⁹⁶⁶ Like construction of a new line, removal would require the hiring of highly-skilled construction workers, contractors, and suppliers; and there would be direct, indirect, and induced benefits of that construction process as well.¹⁹⁶⁷ As Mr. Whiteford testified, “That would create lots of jobs for [union] members.”¹⁹⁶⁸ Mr. Whiteford continued, “We [union members] would love to install the pipeline, we would love to take the old one out....”¹⁹⁶⁹ Thus, in-trench replacement would provide an opportunity for significantly *more* economic benefit to the state than abandoning the existing line and installing a new one in a new corridor.

916. In comparing the economic benefits of the Project to not building the Project, some have argued that the 30-year social cost of carbon attributable to the Project outweighs any temporary benefit that the Project can bring to the state.¹⁹⁷⁰ The DOC-EERA estimates, and the ALJ has adopted as a finding, that the 30-year social costs of carbon for direct and indirect GHG emissions associated with this Project is approximately \$673,365,150; and the 30-year social cost of carbon for incremental life-cycle GHG emissions is \$287 billion.¹⁹⁷¹ The Applicant’s and DOC-DER economic analysis does not take into account these costs.

917. With respect to a “No Build” alternative, because Existing Line 3 already exists, there would be no new economic impacts on employment, income, or property taxes if the Project is not built.¹⁹⁷² However, there could be a few jobs created and some minor tax revenue resulting from increased use of rail or truck transportation if additional transportation is needed to supplement the amounts shipped on the Mainline.¹⁹⁷³ Thus, with respect to economic benefit only, there are more economic benefits (primarily temporary ones) to the state in building the Project, than in not building the Project. But that there would be more economic benefit to the state in the in-trench replacement of Existing Line 3 than abandonment, as proposed by Applicant.¹⁹⁷⁴

918. Overall, the ALJ finds that the socioeconomic benefits to this Project are concentrated in the short-term economic benefits associated with the 14-to-15-month construction period for the Project, including the temporary jobs it will offer. This benefit, however, does not deduct for the costs of the Project, including the jobs transferred or lost as a result of the shutdown of Existing Line 3 or the environmental and other socioeconomic externalities of the Project.

919. Applicant has not established the amount of property tax benefits that would arise from the Project in isolation from all of Enbridge’s other pipelines. Moreover, the record does not indicate the loss of property taxes that will result from an abandoned line.

¹⁹⁶⁶ *Id.*

¹⁹⁶⁷ Evid. Hrg. Tr. Vol. 5A at 66 (Whiteford).

¹⁹⁶⁸ *Id.*

¹⁹⁶⁹ *Id.*

¹⁹⁷⁰ See e.g., Sierra Club Initial Br. (Jan. 23, 2018) (eDocket No. 20181-139263-04 (CN)); Youth Climate Intervenor Initial Br. (Jan. 24, 2018) (eDocket No. 20181-139273-02 (CN)).

¹⁹⁷¹ Ex. EERA-42 at 5-462, 5-466 (Revised EIS).

¹⁹⁷² Ex. EERA-42 at 5-595 (Revised EIS).

¹⁹⁷³ Ex. EERA-5-607 to 5-608 (Revised EIS).

¹⁹⁷⁴ Evid. Hrg. Tr. Vol. 5A at 63 (Whiteford).

The loss of property taxes from an abandoned line would need to be deducted from the property tax benefits of a new line to obtain the net property tax benefits of the Project, as proposed. Thus, because the record is silent as to the amount of property taxes that may be lost from abandonment of Existing Line 3, the ALJ cannot, on this record, find property taxes as a long-term benefit of the Project.

920. Despite the temporary nature of most of the economic benefits that could be generated by the Project, these potential economic benefits are, nonetheless, important to the northern region of the state, where job growth and economic development has been slow, as noted in the public hearings and written comments.¹⁹⁷⁵ Hundreds of individuals, organizations, elected officials, and governmental units have provided comment touting the importance of these economic opportunities for the region.¹⁹⁷⁶ The importance of these economic benefits to northern Minnesota are not insubstantial, but, as Applicant's witness explained, would exist with respect to any infrastructure project of this magnitude without consideration of environmental and other socioeconomic externalities (i.e., costs).¹⁹⁷⁷

iii. Effects of Project on Inducing Future Development [Minn. R. 7853.0130(C)(3)]

921. The next subpart of the third criterion evaluates "the effects of the proposed facility or a suitable modification of it, in inducing future development."¹⁹⁷⁸

922. A new Line 3 capable of transporting more crude and heavy crude would reduce apportionment on the Mainline System, thereby making it easier and more economical for Canadian tar sands oil producers to transport their product.¹⁹⁷⁹ Less expensive and more efficient transport, combined with increased volume of available oil, however, has the likely result of encouraging – or least not reducing -- the use and dependence on fossil fuels locally, nationally, and globally.¹⁹⁸⁰ Such a result is a negative consequence from an environmental perspective, where most governments around the world, including Minnesota, are seeking to reduce GHG emissions, increase the use of renewable energy sources, and decrease reliance on fossil fuels.¹⁹⁸¹

923. Instead of focusing on the benefits of the Project to Canadian oil producers, Applicant focuses on the benefits to Minnesota and regional refiners. As set forth above, a benefit of the Project is that it would reduce apportionment on the Mainline System¹⁹⁸²

¹⁹⁷⁵ See Public Hearing Comments (above) and Written Comment Summary (Attachment C hereto).

¹⁹⁷⁶ *Id.*

¹⁹⁷⁷ Evid. Hrg. Tr. Vol. 1B at 164-165 (Lichty).

¹⁹⁷⁸ Minn. R. 7853.0130(C)(3).

¹⁹⁷⁹ Ex EN-19 at 15 (Glanzer Direct).

¹⁹⁸⁰ Ex. YC-14 at 4-5 (Abraham Direct); Ex. EERA-42, Vol. 1 at ES-21 (Revised EIS).

¹⁹⁸¹ Ex. HTE-7 (Stockman Summary); Ex. SC-4 at 26-27 (Twite Rebuttal); Ex. YC-1 at 3-6 (Swift Direct); Ex. EERA-42, Vol. 1 at ES-21 (Revised EIS). See also, Minn. Stat. § 216C.05, subd. 3, 216H.02, subd. 1.

¹⁹⁸² Ex. EN-37, Sched. 1 at 6 (Earnest Rebuttal).

– a pipeline system upon which Minnesota and PADD II refiners do, indeed, rely.¹⁹⁸³ Reduction in apportionment should provide Minnesota refiners with better access to more crude and more options for types of crude (light, heavy, etc.) via a pipeline -- a more efficient and economic mode of transport for oil.¹⁹⁸⁴ It will also reduce reliability and integrity issues associated with an aging line that would be subject to numerous repairs and continued reduced capacity.¹⁹⁸⁵ The increased reliability of the system and the accessibility to more and different mixes of oil would better allow Minnesota refiners to remain competitive in the market, which could result in benefits to Minnesota consumers in terms of price for refined products.¹⁹⁸⁶

924. The trade-off for increased and more economical access to oil is that it is not compatible with reducing dependence on fossil fuels or GHG emissions, particularly tar sands oil which can be more carbon intensive in its extraction than conventional oil extraction methods.¹⁹⁸⁷ This issue is discussed more thoroughly in Section V, D below.

925. In addition, opening a new oil pipeline corridor in Minnesota opens the possibility that the corridor could be used and expended for additional crude oil pipelines.¹⁹⁸⁸ This includes any other Enbridge pipelines that Applicant may want to relocate in future years.

926. Finally, as discussed in Section V, C, ii, b above, the Project would provide temporary jobs and indirect and induced economic benefits to the state during the period of construction, as well as the potential for long-term property tax benefits to Northern Minnesota counties.¹⁹⁸⁹

iv. Socially Beneficial Uses and Environmental Quality [Minn. R. 7853.0130(C)(4)]

927. The rule criteria require the Commission to consider the “socially beneficial uses of the output of the proposed facility, or a suitable modification of it, including its uses to protect or enhance environmental quality.”¹⁹⁹⁰

928. The oil that would be transported through the Project has beneficial uses to humans. Petroleum products are used to meet basic human needs, such as the production of food and the transportation of people and products.¹⁹⁹¹ In addition,

¹⁹⁸³ Ex. EN-69 (Earnest Summary) (Stating that the “Enbridge Mainline is the only pipeline source of Canadian crude oil for Minnesota refineries,” and that Canadian crude oil is a feedstock for both refineries); Ex. EN-56, Sched. 1 at 4 (Earnest Surrebuttal) (Flint Hills asserts that it “relies exclusively on the Enbridge pipeline system to deliver crude oil to its Minnesota refinery via the Minnesota Pipeline System.”); Ex. EN-94, Sched. 1 (Earnest Supplemental Surrebuttal) (Andeavor states that it relies on the Mainline System to provide approximately half of its crude oil needs.).

¹⁹⁸⁴ Ex. EN-19 at 14 (Glanzer Direct).

¹⁹⁸⁵ Ex. EN-12 at 27 (Kennett Direct).

¹⁹⁸⁶ Ex. EN-19 at 5 (Glanzer Direct); Ex. EN-56, Sched. 1 at 2 (Earnest Surrebuttal).

¹⁹⁸⁷ Ex. YC-14 at 4 (Abraham Direct); Ex. EERA-42, Vol. 1 at ES-21 (Revised EIS).

¹⁹⁸⁸ Ex. EERA-42 at 12-39 (Revised EIS).

¹⁹⁸⁹ Ex. EN-11, Sched. 2 at 8-9 (Lichty Direct); Ex. EN-30 at 7 (Eberth Rebuttal).

¹⁹⁹⁰ Minn. R. 7853.0130(C)(4).

¹⁹⁹¹ Ex. EN-1 at 4-1 (CN Application).

Petroleum products are used in a wide variety of products upon which Americans have become reliant.¹⁹⁹² These products span all areas of life – not just gasoline.¹⁹⁹³ They include tires, asphalt for roads, jet fuel, medical equipment and products, plastics, furniture, flooring, shingles, insulation, heating fuel, appliances, carpet, clothing, and a variety of other products upon which Americans have become accustomed in their daily lives.¹⁹⁹⁴ In short, petroleum is an integral resource in our society. For this reason, the DOC-DER agrees that the refined products created by crude oil do have socially beneficial uses.¹⁹⁹⁵

929. In addition to the socially beneficial uses of crude oil, the Project would provide some additional protection for the environment because it replaces a 50+-year-old pipeline. Applicant has acknowledged that Existing Line 3, due to its age and integrity issues, is in need of replacement or extensive repair over the next 15 years.¹⁹⁹⁶ According to Applicant, the integrity issues related to Existing Line 3's polyethylene coating and its flash welded seams makes the line particularly susceptible to external corrosion and stress corrosion cracking.¹⁹⁹⁷ While external corrosion problems (caused by the polyethylene coating defects) can be addressed through an extensive dig and repair program, the integrity threats related to the flash-welded seams (a manufacturing issue) cannot be fully remediated without total replacement.¹⁹⁹⁸

930. As Ms. Kennett testified, "[t]here is no feasible technology or operational changes that can arrest or reverse the external corrosion on Line 3 and/or remove the defects that were inherent in the way the pipe was originally manufactured."¹⁹⁹⁹

¹⁹⁹² *Id.*

¹⁹⁹³ *Id.*

¹⁹⁹⁴ *Id.* See also, Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 41-47 (Sept. 26, 2017) (Krogstad); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 66-68 (Sept. 26, 2017) (Rice); Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 86-88 (Sept. 26, 2017) (Kavajecz); Thief River Falls Pub. Hrg. Tr. (Vol. 1B) at 100-101 (Sept. 26, 2017) (Sollum); St. Paul Pub. Hrg. Tr. (Vol. 2A) at 34-37 (Sept. 28, 2017) (Beck); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 32-35 (Sept. 28, 2017) (Macmillan); St. Paul Pub. Hrg. Tr. Vol. 2B at 43-47 (Sept. 28, 2017) (Bouska); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 55-57 (Sept. 28, 2017) (Archambault); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 82-83 (Sept. 28, 2017) (Kennedy); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 121-122 (Sept. 28, 2017) (Tobin); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 194-196 (Sept. 28, 2017) (O'Connor); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 204-206 (Sept. 28, 2017) (Johnson); St. Paul Pub. Hrg. Tr. (Vol. 2B) at 219-222 (Sept. 28, 2017) (Hodge); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 69-73 (Oct. 10, 2017) (Forsman); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 138-139 (Oct. 10, 2017) (Stock); Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 165-167 (Oct. 10, 2017) (MacMillan); Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 38 (Oct. 10, 2017) (Keup); McGregor Pub. Hrg. Tr. (Vol. 4A) at 124-127 (Oct. 11, 2017) (Hnatko); McGregor Pub. Hrg. Tr. (Vol. 4B) at 88-90 (Oct. 11, 2017) (Globus); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 29-33 (Oct. 12, 2017) (Hodek); Hinckley Pub. Hrg. Tr. (Vol. 5A) at 121-122 (Oct. 12, 2017) (Nystrom); Bemidji Pub. Hrg. Tr. (Vol. 6A) at 40-42 (Oct. 17, 2017) (Wahlberg); Bemidji Pub. Hrg. Tr. (Vol. 6B) at 188-190 (Oct. 17, 2017) (Sparhawk); Duluth Pub. Hrg. Tr. (Vol. 7A) at 41-43 (Oct. 18, 2017) (Jacobson); Duluth Pub. Hrg. Tr. (Vol. 7B) at 55-58 (Oct. 18, 2017) (Mark); Cross Lake Pub. Hrg. Tr. (Vol. 8A) at 54-58 (Oct. 25, 2017) (Compton); Cross Lake Pub. Hrg. Tr. (Vol. 8B) at 121-123 (Oct. 25, 2017) (Heldt).

¹⁹⁹⁵ Ex. DER-1 at 91 (O'Connell Direct).

¹⁹⁹⁶ See generally, Ex. EN-12 (Kennett Direct).

¹⁹⁹⁷ Ex. EN-12 at 12 (Kennett Direct).

¹⁹⁹⁸ Ex. EN-32 at 5 (Kennett Rebuttal).

¹⁹⁹⁹ Ex. EN-12 at 20 (Kennett Direct).

Therefore, even with extensive repairs, the long-seam cracking risks inherent to the flash-welded seams on the pipe will continue to exist unless the pipe is fully replaced.²⁰⁰⁰

931. The proposed new line would have fusion-bonded epoxy coating (a superior coating to polyethylene tape); would be manufactured using modern, superior welding technologies (no flash-welded seams); and would be constructed with thicker and stronger steel than Existing Line 3.²⁰⁰¹ According to Applicant's witness, Benjamin Mittlestadt:

Modern pipelines are less susceptible to integrity threats than vintage pipelines. Modern pipeline construction incorporates improvements in construction, manufacturing, protective coating, inspection, and testing which did not exist when the existing Line 3 was constructed and installed.²⁰⁰²

932. As a result, Applicant contends that the new Line 3 will remedy the integrity threats currently associated with Existing Line 3, and make the pipeline less susceptible to ruptures or accidental releases.²⁰⁰³ Following that same logic, a new line would pose less threat to the environment than the continued use of Existing Line 3.

933. Accordingly, an application of Minn. R. 7853.0130(C)(4) supports the approval of the Project.

D. Compliance with Relevant Policies, Rules, and Regulations [Minn. R. 7853.0130(D)]

934. The final criterion under Minn. R. 7853.0130(D) requires the Commission to consider whether:

it has not been demonstrated on the record that the design, construction, or operation of the proposed facility will fail to comply with those relevant policies, rules, and regulations of other state and federal agencies and local governments.²⁰⁰⁴

935. Applicant asserts that it will comply with all applicant state and federal laws and regulations related to the design, construction, installation, operation, and maintenance of a pipeline²⁰⁰⁵ and there was no evidence presented to the contrary.

²⁰⁰⁰ Ex. EN-32 at 5 (Kennett Rebuttal).

²⁰⁰¹ Ex. EN-68 at 3 (Kennett Summary).

²⁰⁰² Ex. EN-80 (Mittlestadt Summary). See also, Ex. EN-79 (Gerard Summary) ("Pipelines built today are constructed with improved materials, better construction management practices, better installation, greater depth of cover, improved backfilling techniques and higher quality coating.")

²⁰⁰³ Ex. EN-12 at 28-29 (Kennett Direct); Ex. EN-51 at 20 (Mittlestadt Rebuttal); Ex. EN-79 (Gerard Summary).

²⁰⁰⁴ Minn. R. 7853.0130(D).

²⁰⁰⁵ Ex. EN-22 at 30 (Simonson Direct). See also, Ex. EN-79 (Gerard Summary); Ex. EN-85 (Haskins Summary).

936. While FOH witness Richard Kuprewicz testified that federal pipeline safety regulations are inadequate to reduce the risk of spills and that federal oil spill response regulations are deficient,²⁰⁰⁶ there has been no evidence presented that the Project's design, construction, or operation will be in violation of any applicable laws, rules, or regulations.

937. The APR does not cross any Indian Reservations. Accordingly, tribal laws and regulations will not apply to the APR. If a route is selected that crosses Reservation land, Applicant will be required to obtain all necessary tribal permits, easements, and consents from the applicable tribes and federal government. As set forth above, Indian tribes are sovereign governments that can withhold approval.²⁰⁰⁷

938. Several parties have argued that the EIS was deficient in this case because it failed to include a Tribal Cultural Resources (TCR) Survey on the APR and all route alternatives as part of the EIS.²⁰⁰⁸ The issues with respect to the adequacy of the EIS conducted on this Project were referred to ALJ Eric L. Lipman, who considered the issues argued by the parties and recommended a finding that the FEIS be found adequate.²⁰⁰⁹ Because the adequacy of the EIS is not within the matters delegated to this ALJ for decision, the issue of whether the EIS should have include a TCR Survey is now before the Commission for final decision. Therefore, it is not addressed in this Report.

939. Finally, the DOC-DER argues that the Project will be inconsistent with Minnesota's energy policies set forth in Minn. Stat. §§ 216C.05 and 216H.02, subd. 1. Minnesota Statutes section 216C.05, subdivision 2, states in relevant part, that "[i]t is the energy policy of the state of Minnesota that 25 percent of the total energy used in the state be derived from renewable energy resources by year 2025."

940. Similarly, Minn. Stat. 216H.02, subd. 1, states:

It is the goal of that state of Minnesota to reduce statewide greenhouse gas emissions *across all sectors producing those emissions* to a level of at least 15 percent below 2005 levels by 2015, to a level at least 30 percent below 2005 levels by 2025, and to at least 80 percent below 2005 levels by 2050.²⁰¹⁰

941. While these provisions are goals rather than requirements, it is still important to consider whether this Project is consistent with Minnesota environmental and energy conservation policies.

²⁰⁰⁶ See Ex. FOH-16 (Kuprewicz Summary).

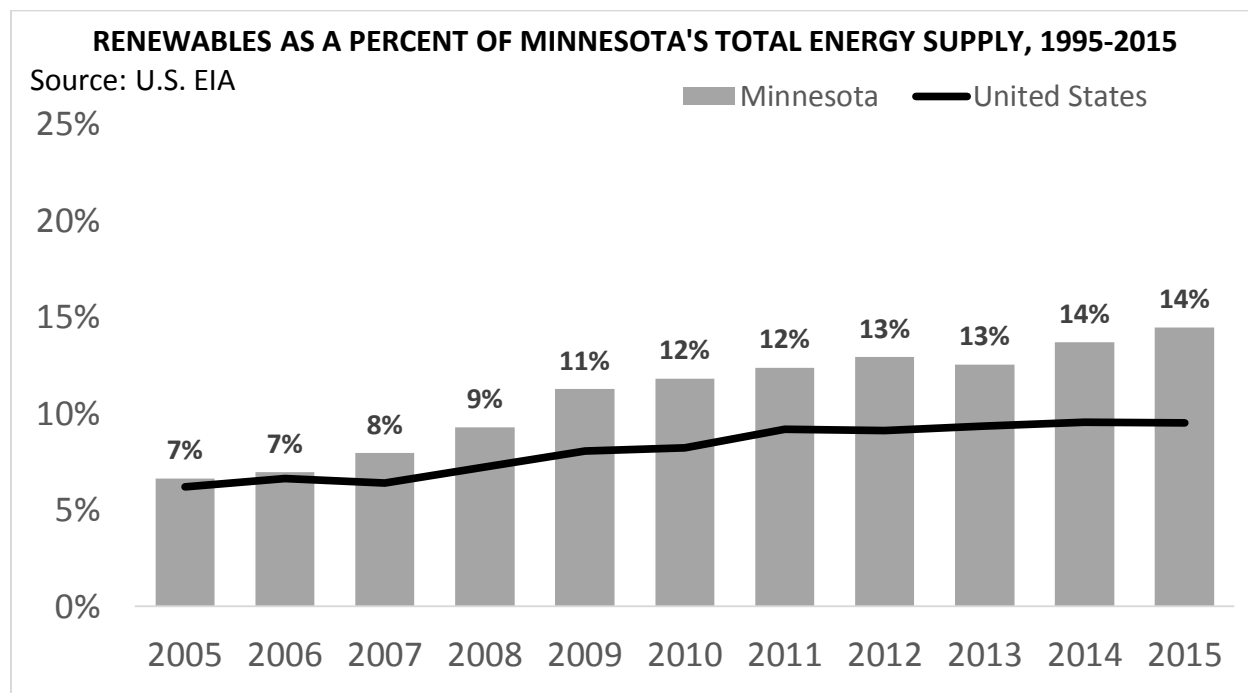
²⁰⁰⁷ Ex. EERA-42 at 9-1 (Revised EIS).

²⁰⁰⁸ Fond du Lac Band Initial Post-Hearing Br. at 25-42 (Jan. 23, 2018) (eDocket No. 20181-139268-01 (CN)); Fond du Lac Band Reply Br. at 16-17 (Feb. 16, 2018) (eDocket No. 20182-140255-01 (CN)); Mille Lacs Band Initial Br. at 25-28 (Jan. 23, 2018) (eDocket No. 20181-139245-01 (CN)); Mille Lacs Band Reply Br. at 10-11 (eDocket No. 201712-138290-01 (CN)); HTE Initial Br. at 9 (Jan. 23, 2018) (eDocket No. 20181-139262-02 (CN)).

²⁰⁰⁹ Report of the Administrative Law Judge (Nov. 1, 2017) (eDocket No. 201711-137079-01 (CN)).

²⁰¹⁰ Emphasis added.

942. As the chart below demonstrates, as of 2015, Minnesota must still make progress if it is to meet its 2025 renewable energy goals:²⁰¹¹



943. Although there is no energy actually “generated” by the Project, the purpose of the Project is to transport crude oil, a fossil fuel (specifically, Canadian heavy crude).

944. The EIS evaluated the potential lifecycle emissions associated with the Project.²⁰¹² The EIS concluded that the Project would result in a net increase in GHG emissions compared to not building the facility, due to: (1) increased throughput of heavy crude oil through the state overall; and (2) the ability of the existing 390 kbpd to ship heavy crude, rather than light crude.²⁰¹³

945. The EIS calculated the social cost of carbon (GHG emission) for the Proposed Project as follows:²⁰¹⁴

²⁰¹¹ Ex. DER-1 at 82 (O’Connell Direct).

²⁰¹² Ex. DER-1 at 84-85 (O’Connell Direct); Ex. EERA-42 at 5-462 to 5-466 (Revised EIS).

²⁰¹³ Ex. DER-1 at 84-85 (O’Connell Direct); Ex. EERA-42 at 5-462 to 5-466 (Revised EIS).

²⁰¹⁴ Ex. DER-42 at 5-462 (Revised EIS).

Table 5.2.7-10. Social Cost of Carbon (Fossil Greenhouse Gas Emissions) for the Applicant's Proposed Project (in 2007 dollars)

Year	30-Year SCC for Direct GHG Emissions*	30-Year SCC for Indirect GHG Emissions	30-Year SCC for Direct and Indirect GHG Emissions
30-Year Project Life (2020 to 2049)	\$558,917	\$672,806,234	\$673,365,150

* Estimate does not include emissions associated with lost carbon sequestration

GHG = greenhouse gas, SCC = social cost of carbon

946. The EIS also calculated the average life-cycle GHG emissions for the Project in three ways:²⁰¹⁵

Table 5.2.7-12. Average Life-Cycle Greenhouse Gas Emissions for Various Crude Oils

Scenario	Annual Life-Cycle GHG Emissions (million tons CO ₂ e)	Incremental Annual Life-Cycle GHG Emissions (million tons CO ₂ e)	30-Year SCC for Incremental Life-Cycle GHG Emissions (2007 dollars)
Existing Line 3 (390,000 bpd WCSB light)	80.5	0	0 billion
Applicant's Proposed Project (760,000 bpd WCSB Heavy*) - No displacement	273.5	193	287 billion
Applicant's Proposed Project (760,000 bpd WCSB Heavy) - Displaces 390,000 bpd WCSB Heavy & 370,000 U.S. Light Tight Oil	115.5	35	52 billion

* Western Canada Sedimentary Basin (WCSB) heavy value based on GREET Modeling (DOS 2017)

947. For the reasons set forth in Section V, A, ii above, the ALJ accepts these calculations as established in fact and adopts the finding of the incremental life-cycle GHGe for the Project will be approximately 193 million tons of carbon dioxide emissions (CO₂e), totaling approximately \$287 billion in social costs.²⁰¹⁶

948. In addition, the Project serves to increase the availability and consumption of fossil fuels, the extraction and burning of which are known contributors to climate change.²⁰¹⁷ Accordingly, the Project does not further Minnesota's environmental policies and goals to reduce the GHG emissions across all sectors and to facilitate the use of renewable energy sources.

²⁰¹⁵ Ex. EERA-42 at 4-466 (Revised EIS).

²⁰¹⁶ *Id.*

²⁰¹⁷ Ex. EERA-40 (Miltich Summary) ("All greenhouse gas emissions contribute to cumulative climate change."); Ex. YC-14 at 2-3 (Abraham Direct); Ex. YC-27 (Scott Summary) ("Pipelines facilitate tar sands production growth....Any increase in tar sands production also leads to an increase in climate pollution, directly undermining efforts to address the climate crisis.").

VI. PERMIT CONDITIONS

A. Conditions Recommended by the DOC-DER

949. The DOC-DER has recommended a number of conditions in the event that the Commission approves the Project. These conditions require Applicant to:²⁰¹⁸

- provide a decommissioning fund to ensure the payment of issues arising with a decommissioned Line 3;
- install no more than a 34-inch pipeline to replace the Existing Line 3 pipeline;
- add and maintain two pipeline maintenance shops to any route that extends east beyond Clearbrook;
- provide the Commission with an updated, final Field Emergency Response Plan for the Superior Region prior to commencing construction of the Project;
- provide periodic updates to the Commission, upon request, related to the adequacy of Applicant's cyber security systems;
- use thicker pipeline diameter (0.750 inches) along the entire right-of-way in Minnesota;
- demonstrate that it has adequate and reliable facilities, such as distributed generation or other back-up power available for use to provide power to valves if there is an interruption in power;
- have and continually maintain road access, or access that does not require the use of equipment or machinery, to reach all shutoff valves in Minnesota;
- remove all exposed segments of Existing Line 3 in Minnesota;
- report annually to the Commission about each exposed pipeline segment with identification of how Applicant will meet its Minnesota operating permit conditions, as well as federal requirements;
- apply the neutral footprint approved in the second upgrade to Line 67 (Docket No. EL9/CN-13-153) to increased electricity use;
- obtain a corporate guaranty from Enbridge, Inc.; and

²⁰¹⁸ Ex. DER-6 at 76-77 (O'Connell Surrebuttal).

- implement the insurance requirements recommended by DOC-DER's expert witness David Dybdahl.

950. Applicant has agreed to provide an updated final Field Emergency Response Plan for the Superior Region.²⁰¹⁹ In addition, at the evidentiary hearing, Applicant verbally agreed to remove all exposed, decommissioned pipe should a permit be issued in this case.²⁰²⁰ Accordingly, these conditions are considered undisputed and agreed to by Applicant; and should be included as conditions to any the permit granted in this case.

951. In addition, Applicant has agreed to add one pipeline maintenance shop between Clearbrook and Superior, but not two, as recommended by the DOC-DER.²⁰²¹ Accordingly, at a minimum, the Commission should require at least one additional pipeline maintenance shop between Clearbrook and Superior, should any permit be granted in this case.

952. Applicant has not contested the DOC-DER recommendations related to demonstrating the adequacy of its cybersecurity system and its backup systems; nor has it contested the requirement of maintaining road access to the facilities or annual reporting of exposed pipe. The ALJ finds these conditions undisputed and reasonable.

953. The DOC-DER has withdrawn its request for thicker pipeline.²⁰²² Accordingly, this recommendation will not be discussed further and will not be incorporated by the ALJ in her recommendations.

954. In addition, parties and public commenters have expressed concern about potential issues of sex trafficking during the construction of the Project. Applicant currently has no mitigation plans with respect to the problem of sex trafficking in its construction settlements.²⁰²³ Applicant agreed during testimony at the evidentiary hearing that it is willing to employ mitigation techniques suggested in the EIS at § 11.4.1.²⁰²⁴

955. With respect to the diameter of pipe to be used in this Project, this issue was discussed in Section V., A., v. above.

956. With respect to the neutral footprint program recommended by the DOC-DER, this issue was discussed in Section V., A., ii. above.

957. The remaining recommendations are discussed below.

²⁰¹⁹ Ex. DER-6 at 76 (O'Connell Surrebuttal).

²⁰²⁰ Evid. Hrg. Tr. Vol. 8A at 45-46 (Eberth).

²⁰²¹ Evid. Hrg. Tr. Vol. 4B at 139 (Haskins).

²⁰²² Ex. DER-6 at 59 (O'Connell Surrebuttal).

²⁰²³ Evid. Hrg. Tr. Vol. 2A at 66-67 (Simonson).

²⁰²⁴ Evid. Hrg. Tr. Vol. 2A at 120-121 (Simonson).

B. Decommissioning Trust

958. With respect to the DOC-DER recommendation for the establishment of a decommissioning trust, Applicant asserts that, due to its ability to pay all costs of decommissioning of Existing Line 3 from its operating funds, there is no need for a decommissioning trust to ensure payment.²⁰²⁵ Applicant, however, has established no evidence of its own financial ability in this case, as discussed, in detail, below.

959. Canada's National Energy Board (NEB) requires that Enbridge, Inc. fund a decommissioning trust as surety for the cost of decommissioning and reclamation of all pipelines owned by Enbridge, Inc. in Canada, if those lines are abandoned in the future by Enbridge, Inc.²⁰²⁶ The amount Enbridge, Inc. must pay into the decommissioning trust each year is \$45 million for 40 years, which Appellant asserts will equate, through investment, to approximately \$2 billion over the life of the assets.²⁰²⁷ As a result, in Canada, Enbridge, Inc., the "parent" company -- not its subsidiaries or affiliated limited liability entities -- is financially responsible for the future fate of all pipelines operated by Enbridge-related entities in Canada.²⁰²⁸

960. Applicant estimates that the present-day cost to decommission the proposed Line 3 in Minnesota would be \$74 million.²⁰²⁹ Strangely, Applicant estimates the cost to decommission Existing Line 3 is \$85 million,²⁰³⁰ despite the fact that Existing Line 3 is approximately 58 miles shorter than the APR.

961. Applicant confirms that it has the financial wherewithal to put \$45 million a year into a decommissioning trust for this Project.²⁰³¹

962. The DOC-DER is recommending a "decommissioning trust," not a removal trust. The cost for removal would be significantly more than decommission. For example, for Existing Line 3, the cost of removal is approximately \$1.2 billion.²⁰³²

963. For the reasons set forth in Section VII below, the ALJ finds that sufficient financial assurances should be provided by Applicant for the removal of any new line permitting in this case. Therefore, the ALJ finds that if a trust is required in this case, it should be an "abandonment trust" and should be fund in an amount sufficient to cover the future costs of removal, not just decommissioning of the new line.

C. Corporate Guaranty and Insurance

²⁰²⁵ Ex. EN-42 at 9 (Johnston Rebuttal); Evid. Hrg. Tr. Vol. 6B at 61-63 (Johnston).

²⁰²⁶ Evid. Hrg. Tr. Vol. 6A at 111-112 (Johnston).

²⁰²⁷ Evid. Hrg. Tr. Vol. 6A at 111-112 (Johnston).

²⁰²⁸ Evid. Hrg. Tr. Vol. 6A at 113 (Johnston).

²⁰²⁹ Evid. Hrg. Tr. Vol. 6B at 61 (Johnston).

²⁰³⁰ Ex. EERA-42 at 8-11 (Revised EIS).

²⁰³¹ Evid. Hrg. Tr. Vol. 6B at 36 (Johnston).

²⁰³² Ex. EERRA-42 at 8-13 (Revised EIS).

964. With respect to insurance and corporate guaranty requirements, the DOC-DER recommends that:

- Enbridge, Inc. execute a legal document agreeing to guaranty the payment of, and indemnify and hold harmless the State of Minnesota from, pollution losses arising out of the Line 3 pipeline.
- Enbridge, Inc. maintain at least \$100 million of General Liability (GL) insurance dedicated to Line 3. This policy should include “time element” pollution or “sudden and accidental” exceptions to the pollution exclusion, as well as an automatic reinstatement of limits. In addition, this policy should include an automatic reinstatement of limits option or a \$200 million policy aggregate.
- Enbridge, Inc. purchase \$100 million of Environmental Impairment Liability (EIL) insurance dedicated to Line 3. This policy should include one automatic reinstatement of limits or a policy aggregate of \$200 million.
- Both the GL and EIL policies should increase by \$10 million every five years during the operation of Line 3.
- Enbridge, Inc. include the State of Minnesota as an Additional Insured under both the GL and EIL policies.
- All recommended insurance policies include the specifications set forth in Appendix A to Mr. Dybdahl’s Direct Testimony (Ex. DER-5).²⁰³³

These recommendations are discussed, in detail, below.

i. Lack of Financial Assurances Necessitating a Corporate Guaranty

965. A number of the insurance and financial security recommendations made by the DOC-DER are based upon the lack of economic assurances provided by Applicant in this case. Accordingly, as a starting point for reviewing the DOC-DER corporate guaranty and insurance recommendations, Applicant’s financial ability to cover losses in the event of a catastrophic release must be considered.

966. It is important to note that the Applicant in this case is not the same applicant as in the Sandpiper Project. In Sandpiper, the applicant was North Dakota Pipeline Company, LLC, a joint venture between Enbridge Energy Partners, Limited Partnership (EEP), and Williston Basin Pipeline LLC, a wholly-owned subsidiary of Marathon

²⁰³³ Ex. DER-1 at 124-126 (O’Connell Direct); Ex. DER-6 at 76-77 (O’Connell Surrebuttal).

Petroleum Corporation.²⁰³⁴ Here, the Applicant is Enbridge Energy, Limited Partnership – a separate legal entity from Enbridge, Inc. or EEP.

967. Enbridge Energy, Limited Partnership (i.e., Applicant) is a *limited partnership* comprised of two *general* partners, Enbridge Pipelines (Lakehead) LLC (Lakehead) and Enbridge Pipelines (Wisconsin) Inc. (Enbridge-WI); and one *limited* partner, Enbridge Energy Partners, L.P. (EEP).²⁰³⁵ The significance of these facts will be explained in more detail below.

968. Applicant and its partners, are part of a “family” of corporate entities known as Enbridge, Inc., a Canadian corporation.²⁰³⁶ Enbridge, Inc. is the third largest company in Canada, with net cash flow in of approximately \$4 to \$5 billion, assets of over \$100 million, and a market capitalization of \$95 billion.²⁰³⁷ Enbridge, Inc., however, is not the applicant in this case and has not offered to provide any financial assurances in this case.

969. To understand Applicant’s financial stability and ability to cover the costs of any accidental release event that could result from a new Line 3, it is important to understand its place in Enbridge, Inc.’s overall corporate structure. To begin this analysis, one must look to Enbridge, Inc.’s United States operations. The corporate structure of Enbridge, Inc.’s United States operations is set forth below:²⁰³⁸

²⁰³⁴ *In the Matter of the Application of North Dakota Pipeline Company, LLC for a Certificate of Need for the Sandpiper Pipeline Project in Minnesota*, MPUC Docket No. PL-6668/CN-13-473, Findings of Fact, Summary of Public Testimony, Conclusions of Law, and Recommendation at 3 (April 15, 2015).

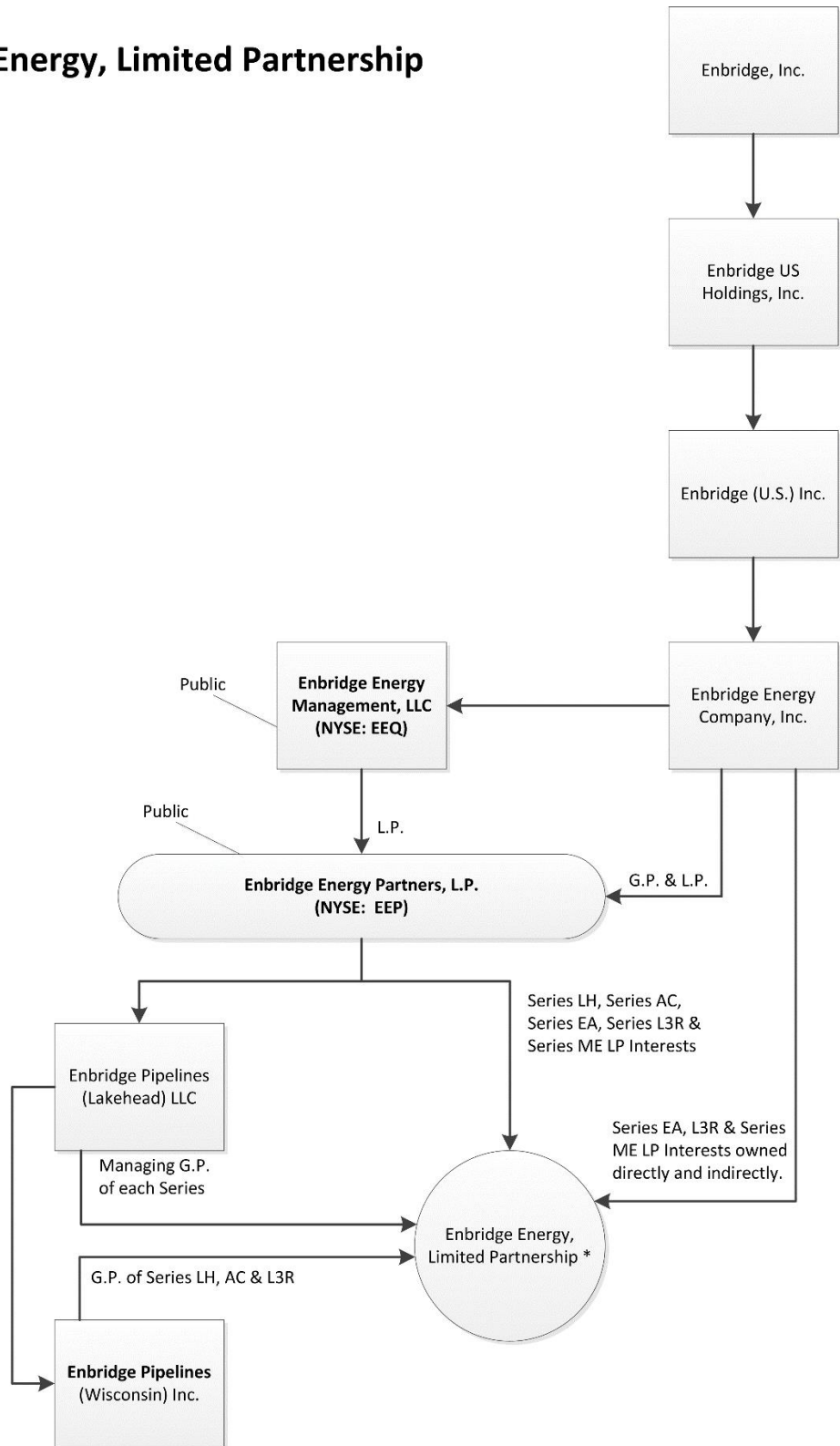
²⁰³⁵ Ex. DER-13 (Enbridge’s U.S. Operations Corporate Structure); Evid. Hrg. Tr. Vol. 6A at 81-82 (Johnston).

²⁰³⁶ Ex. DER-13 (Enbridge’s U.S. Operations Corporate Structure).

²⁰³⁷ Evid. Hrg. Tr. Vol. 6A at 130-131 (Johnston).

²⁰³⁸ Ex. DER-13 (Enbridge’s U.S. Operations Corporate Structure).

Enbridge Energy, Limited Partnership



* Existing joint funding arrangements in place for the Mainline Expansion, Eastern Access and Line 3 Replacement project.

970. As this diagram demonstrates, Enbridge, Inc. directly or indirectly owns a 100 percent interest in Enbridge US Holdings, Inc., Enbridge (U.S.), Inc., and Enbridge Energy Company, Inc.²⁰³⁹ Enbridge, Inc., however, has no direct ownership interest in Applicant.²⁰⁴⁰ While profits from Applicant could ultimately flow to Enbridge, Inc. through a complicated corporate structure of limited partnerships and limited liability companies, Enbridge, Inc. is shielded from the liabilities of its various operations, including the operations of Applicant, as more fully described below.²⁰⁴¹

971. As explained by Applicant's own witness, Chris Johnston, **neither Enbridge, Inc. nor Applicant's limited partner, EEP, would be liable for spills or costs of cleanup that could or might result from the Line 3 Project.**²⁰⁴² As Mr. Johnston explained, as a *limited partner*, EEP's financial exposure and risk is limited solely to its capital contribution in Applicant.²⁰⁴³

972. Unlike profits, which can move up a corporate chain from a limited partnership (Applicant), to a limited partner (EEP), to a general partner (Enbridge Energy Company, Inc.), then to a corporation parent (Enbridge, Inc.); liability does not move up the corporate chain in the same way. Instead, corporate entities can be established to isolate liabilities to certain entities and insulate other entities from liabilities. To understand this concept fully, it is important to note which entities comprise Applicant.

973. As set forth above, Applicant is a *limited partnership* comprised of: (1) Lakehead and Enbridge-WI as the *general* partners; (2) and EEP as its *limited* partner.²⁰⁴⁴ While the general partners (Lakehead and Enbridge-WI), together own just .01 percent of Applicant's assets,²⁰⁴⁵ they maintain control of, and have general liability for, Applicant's operations.²⁰⁴⁶

974. In contrast, Applicant's *limited partner*, EEP, holds 99.9 percent interest in Applicant's assets.²⁰⁴⁷ However, because of its *limited partner* status, **EEP's liability for Applicant's losses is limited to its capital contribution to the partnership and no**

²⁰³⁹ *Id.*

²⁰⁴⁰ Ex. DER-13 (Enbridge Corporate Org. Chart). Notably, Enbridge Energy Company, Inc., a subsidiary of Enbridge, Inc., does not have a direct ownership interest in Applicant. Evid. Hrg. Tr. Vol. 6A at 83-84 (Johnston). Enbridge Energy Company, Inc. is the "lowest" in the corporate "chain" to link Enbridge, Inc. to Applicant. Ex. DER-13 (Enbridge's U.S. Operations Corporate Structure).

²⁰⁴¹ Evid. Hrg. Tr. Vol. 6A at 73 (Johnston). See also, Evid. Hrg. Tr. Vol. 6A at 77 ("You don't get above Enbridge Energy Partners, L.P.).

²⁰⁴² Evid. Hrg. Tr. Vol. 6A at 103; Vol. 6B at 41 (Johnston).

²⁰⁴³ Evid. Hrg. Tr. Vol. 6A at 138-139; Vol. 6B at 41 (Johnston).

²⁰⁴⁴ Ex. DER-13 (Enbridge's U.S. Operations Corporate Structure); Evid. Hrg. Tr. Vol. 6A at 81-82 (Johnston).

²⁰⁴⁵ Evid. Hrg. Tr. Vol. 6A at 86 (Johnston). Lakehead and Enbridge Pipelines (Wisconsin) Inc. each have a .005 percent ownership interest. While both are general partners in terms of liability, Lakehead is the managing general partner, having control of Applicant's operations. *Id.* at Vol. 6A at 134.

²⁰⁴⁶ Evid. Hrg. Tr. Vol. 6A at 91 (Johnston).

²⁰⁴⁷ Evid. Hrg. Tr. Vol. 6A at 90, 136 (Johnston).

more.²⁰⁴⁸ Put simply, if Applicant's liabilities exceed Applicant's capital and assets, EEP would have no liability for any deficiency that may exist.

975. This means that if Applicant were responsible for a catastrophic release and became insolvent, EEP would lose its capital investment in Applicant (i.e., all money it invested in Applicant), but EEP would not be legally responsible for any debts or other obligations that Applicant could not pay through its own available funds.²⁰⁴⁹ In this way, EEP is shielded from Applicant's liability in the same way that a shareholder is shielded from personal liability for a bankrupt corporation's debts.²⁰⁵⁰ That is why it is important to understand that a limited partner's liability is limited to its capital contribution to the partnership and no more (hence the status of "limited partner").²⁰⁵¹

976. In addition, as part of a corporate restructuring that occurred in early 2017, Enbridge Energy Company, Inc. agreed to fund 99 percent and EEP just one percent of the capital costs of the Line 3 Project.²⁰⁵² If, however, the Line 3 Project is approved, EEP has the option to increase its "funding interest" to 40 percent of the Project.²⁰⁵³ This restructuring allows EEP's general partner, Enbridge Energy Company, Inc., to reduce its capital interest in EEP after the Project is approved (thereby reducing its financial exposure).²⁰⁵⁴ This also demonstrates the fluid nature of intra-corporate transfers, which can be used to reduce general partner capital interests (and thus general partner financial exposure).²⁰⁵⁵

977. Applicant, itself, has provided no evidence of its own assets or any credit available to it if a catastrophic release event occurs for which Applicant is responsible.²⁰⁵⁶ Rather, all financial security data provided by Applicant is related to EEP -- Applicant's **limited partner**.²⁰⁵⁷ When asked, "What financial resources does the Applicant have to respond to an accidental release or other emergency on the Project," Applicant's witness responded, "the Applicant has the full support of its parent entity²⁰⁵⁸ EEP, and its [EEP's] substantial financial resources."²⁰⁵⁹ The witness later clarified, "[t]he liquidity and the committed credit facilities exist at the [EEP] level."²⁰⁶⁰ Applicant's witness ultimately

²⁰⁴⁸ Evid. Hrg. Tr. Vol. 6B at 40-41; Evid. Hrg. Tr. Vol. 6A at 138-139 (Johnston).

²⁰⁴⁹ Absent a guaranty or indemnity agreement entered into directly with EEP. See Evid. Hrg. Tr. Vol. 6B at 40-41 (Johnston).

²⁰⁵⁰ Evid. Hrg. Tr. Vol. 6B at 40-41 (Johnston).

²⁰⁵¹ *Id.*

²⁰⁵² Evid. Hrg. Tr. Vol. 6B at 46 (Johnston).

²⁰⁵³ Evid. Hrg. Tr. Vol. 6B at 46 (Johnston).

²⁰⁵⁴ See, Evid. Hrg. Tr. Vol. 6A at 101-103 (Johnston); Evid. Hrg. Tr. Vol. 6B at 41-44; 52-56 (Johnston).

²⁰⁵⁵ See, Evid. Hrg. Tr. Vol. 6A at 101-103 (Johnston); Evid. Hrg. Tr. Vol. 6B at 41-44; 52-56 (Johnston).

²⁰⁵⁶ In fact, Chris Johnston testified that Applicant has no credit lines at all. Evid. Hrg. Tr. Vol. 6A at 114; Vol. 6B at 37 (Johnston). The only cash flow accessible to Applicant is through Lakehead. *Id.* at 107. However, no financials were provided for Applicant or Lakehead, Applicant's general partner. The only "financial assurances" provided by Applicant relates to its limited partner, EEP -- a partner that has no liability for Applicant beyond its capital investment.

²⁰⁵⁷ Evid. Hrg. Tr. Vol. 6A at 91 (Johnston).

²⁰⁵⁸ The representation that EEP is a "parent" company of Applicant is leading. EEP is a limited liability partner. It has no obligation to cover the debts of Applicant beyond its capital contribution.

²⁰⁵⁹ Ex. EN-42 at 5 (Johnston Rebuttal).

²⁰⁶⁰ Evid. Hrg. Tr. Vol. 6A at 91 (Johnston).

conceded that Applicant has no credit lines of its own;²⁰⁶¹ and no financial wherewithal has been demonstrated by Applicant itself. Again, EEP's liability is limited only to its capital investment in Applicant,²⁰⁶² and the record is silent as to the capital investment EEP has made in Applicant.

978. Because EEP is not legally responsible for Applicant's debts beyond EEP's capital contribution to Applicant's operations, EEP's financial wherewithal is only relevant to the extent that EEP agrees, *by a separate contract*, to fully guarantee all of Applicant's liabilities, including those resulting from Applicant's insolvency.²⁰⁶³ Without such legal agreement, EEP, as a limited partner, has no legal obligation to cover the costs of a release by Applicant in the case of Applicant's insolvency.²⁰⁶⁴

979. To address this issue, Applicant generally asserts that EEP is willing to provide a yet-to-be defined or drafted "guaranty" as a condition of a CN and RP.²⁰⁶⁵ However, Applicant's witness was less certain about such an offer. When asked if EEP had actually proposed terms for a written guaranty in this case, Mr. Johnson stated:

Well, I think we're willing to offer it. You know, again, the details of that, how that guarantee [sic] or indemnification would be hasn't been determined yet, it was just offered in our testimony as something we would offer.²⁰⁶⁶

980. As Mr. Johnson acknowledges, the facts in the record establish that **no written guaranty or indemnification agreement has been presented by Applicant specific to Line 3; and no specific terms have been offered.**²⁰⁶⁷ Applicant has merely promised in testimony that its limited partner, EEP, may be willing to agree to some type of guaranty if requested by the Commission, despite EEP having no current legal responsibility for losses exceeding its capital contribution.²⁰⁶⁸ A mere promise to offer something in the future, without more, does not equate to a firm financial assurance. Such a guaranty would require careful legal drafting by the Commission and Applicant to ensure that the state and its residents have sufficient financial security in the case of an accidental release or other catastrophe related to Line 3. No such work has been

²⁰⁶¹ Evid. Hrg. Tr. Vol. 6A at 114 (Johnston); Evid. Hrg. Tr. Vol. 6B at 37 (Johnston).

²⁰⁶² Evid. Hrg. Tr. Vol. 6B at 40-41; Vol. 6A at 138-139 (Johnston).

²⁰⁶³ Evid. Hrg. Tr. Vol. 6B at 41 (Johnston).

²⁰⁶⁴ Ex. EN-42 at 5 (Johnston Rebuttal); Evid. Hrg. Tr. Vol. 6B at 41 (Johnston).

²⁰⁶⁵ Evid. Hrg. Tr. Vol. 6A at 139-140; Vol. 6B at 34 (Johnston).

²⁰⁶⁶ Evid. Hrg. Tr. Vol. 6B at 34 (Johnston). See also Evid. Hrg. Tr. Vol. 6B at 58 (Johnston) ("...we haven't negotiated or discussed the exact nature of that guarantee [sic]"); Evid. Hrg. Tr. Vol. 6B at 59 (Johnston) (Q: "Okay. But there's no written document documenting that?" A: "Not yet. No."); Evid. Hrg. Tr. Vol. 6B at 62 (Johnston) (Q: "There isn't a form of a guarantee that – maybe a starting point at least?" A: "Not that I am aware of, no.")

²⁰⁶⁷ Evid. Hrg. Tr. Vol. 6B at 34 (Johnston). See also, Evid. Hrg. Tr. Vol. 6B at 49-51, 58-59, 62 (Johnston). At hearing, Enbridge offered Exhibit EN-98, a copy of an unexecuted Guaranty agreement apparently prepared by EEP in the Sandpiper matter. However, no similar written guaranty has been prepared or offered by Applicant in this action.

²⁰⁶⁸ Evid. Hrg. Tr. Vol. 6B at 34-35 (Johnston); Ex. 42 at 5 (Johnston Rebuttal).

undertaken at this time. Therefore, the ALJ cannot evaluate the sufficiency of the indefinite, “potential” guaranty.

981. Applicant has offered into the hearing record a copy of a guaranty negotiated in the Sandpiper matter.²⁰⁶⁹ That guaranty was presented by EEP to cover North Dakota Pipeline Company LLC’s obligations for the Sandpiper line, and is wholly inapplicable to this case.²⁰⁷⁰ First, EEP was not a limited partner in the North Dakota Pipeline Company. Sandpiper was a *joint venture* between EEP and the North Dakota Pipeline Company.²⁰⁷¹ Therefore, EEP would have had its own financial exposure. Second, EEP has not presented any actual guaranty or indemnification in this case related to Line 3.

982. As of June 30, 2017, EEP had total assets valued at \$15 billion, which includes the book value of its crude oil and petroleum transportation and storage facilities,²⁰⁷² net assets of \$7 billion, and available credit totaling \$1.5 billion.²⁰⁷³ According to EEP’s financial officer, as of year-end 2016, EEP’s assets “generate cash flow” of \$700 million a year.²⁰⁷⁴ While these financials are certainly substantial, they do not assure that *Applicant* has the financial liquidity to cover losses in the case of catastrophic release. This is especially true, given EEP’s position as a *limited partner* of Applicant and EEP’s failure to provide an actual, written guaranty to the State of Minnesota in this action.²⁰⁷⁵

983. An expectation that Enbridge, Inc., would cover Applicant’s losses if Applicant were to become insolvent, simply because Applicant is in the “family” of Enbridge, Inc. entities, is misguided and fanciful. Applicant’s witness clearly admitted that Enbridge, Inc. will not be liable for spills or cost of cleanup for Line 3.²⁰⁷⁶ This is because Enbridge, Inc. remains insulated from Applicant’s liabilities through a complicated corporate structure of limited partnerships, limited liability companies, and subsidiaries.²⁰⁷⁷

²⁰⁶⁹ Ex. EN-98 (EEP Guaranty for Sandpiper).

²⁰⁷⁰ *Id.*

²⁰⁷¹ *In the Matter of the Application of North Dakota Pipeline Company, LLC for a Certificate of Need for the Sandpiper Pipeline Project in Minnesota*, MPUC Docket No. PL-6668/CN-13-473, Findings of Fact, Summary of Public Testimony, Conclusions of Law, and Recommendation at 3 (April 15, 2015).

²⁰⁷² Notably, the book value of pipelines (cost less depreciation) is significantly different than the actual “value” of in-ground pipeline facilities, which are actually liabilities, not assets, once decommissioned. Evid. Hrg. Tr. Vol. 6B at 30-31 (Johnston). Thus, the “book value” of in-ground pipelines must be looked at with skepticism, as they are liabilities once oil stops flowing through them.

²⁰⁷³ Evid. Hrg. Tr. Vol. 6A at 105, 117 (Johnston); Ex. 42 at 4 (Johnston Rebuttal).

²⁰⁷⁴ Evid. Hrg. Tr. Vol. 6A at 54, 117; Vol. 6B at 8-9, 15, 38-39 (Johnston). Notably, EEP’s assets are pipeline assets, including in-ground pipe and the pipe purchased for the Proposed Line 3 Project. Evid. Hrg. Tr. Vol. 6B at 38. While operating, a pipeline has a “book value” equal to the cost less depreciation. Evid. Hrg. Tr. Vol. 6B at 11 (Johnston). Once idled, the in-ground pipe no longer has an asset value. It becomes a liability. Evid. Hrg. Tr. Vol. 6B at 30-31 (Johnston).

²⁰⁷⁵ Evid. Hrg. Tr. Vol. 6B at 50 (Johnston).

²⁰⁷⁶ Evid. Hrg. Tr. Vol. 6A at 103 (Johnston).

²⁰⁷⁷ Evid. Hrg. Tr. Vol. 6A at 73 (Johnston). See also, Evid. Hrg. Tr. Vol. 6A at 77 (Johnston) (“You don’t get above Enbridge Energy Partners, L.P.”).

984. As it currently stands, if a catastrophic event were to occur that Applicant could not pay for from its own assets and cash flow,²⁰⁷⁸ Minnesota would have to look to Applicant's general partners -- Lakehead and Enbridge-WI -- for recovery.²⁰⁷⁹ The financials of those two entities (like Applicant's) have not been disclosed as part of the record in this case and remain unknown.

985. In addition, Lakehead is a limited liability company.²⁰⁸⁰ Thus, its liability is limited to its owner's (EEP's) capital investment in that organization.²⁰⁸¹ Although Lakehead and Enbridge-WI are apparently "wholly owned" by EEP,²⁰⁸² absent a guaranty by EEP, Minnesota would have to attempt to "pierce a corporate veil" to reach EEP (Applicant's limited partner) in order to hold EEP liable for Lakehead and Enbridge-WI's obligations.

986. Moreover, in the event that EEP does not have the financial ability to pay for losses beyond its capital contribution to Applicant (for example, due to restructuring, an economic downturn, etc.), Minnesota would need to attempt to seek recovery from EEP's general partner, Enbridge Energy Company, Inc.²⁰⁸³ Even then, there are still two more subsidiaries between Enbridge Energy Company and Enbridge, Inc. to "pierce" before getting to Enbridge, Inc. (Enbridge (U.S) Inc. and Enbridge US Holdings, Inc.).²⁰⁸⁴ Thus, to reach Enbridge, Inc. as a responsible party for Applicant's financial obligations, absent a guaranty and indemnity agreement *from Enbridge, Inc.*, would be a nearly impossible task.

987. But such a complicated analysis of corporate responsibility is not required here because Applicant has confirmed, through its own witness, Mr. Johnson, that neither EEP nor Enbridge, Inc. are legally responsible for the obligations of Applicant absent a separate written guaranty (which has not been provided in this case).²⁰⁸⁵ As it stands, if there were a catastrophic event involving Line 3 or any of the Mainline pipelines owned and operated by Applicant, Applicant could exhaust its insurance and corporate assets, declare bankruptcy, and Enbridge, Inc. would be insulated from responsibility for that loss.

988. In the event of a catastrophic release, Applicant will need to have access to a substantial amount of liquid funds upon which to draw on to commence emergency response and cleanup.²⁰⁸⁶ While insurance proceeds are certainly helpful in the long run for recovery, a pipeline company must be able to act immediately in response to a release and cannot wait on the receipt of insurance proceeds before commencing cleanup.²⁰⁸⁷

²⁰⁷⁸ Applicant has established no credit lines or sources of its own.

²⁰⁷⁹ Evid. Hrg. Tr. Vol. 6B at 40-41 (Johnston) (explaining the difference between a limited and general partner).

²⁰⁸⁰ Ex. DER-13 (Enbridge's U.S. Operations Corporate Structure).

²⁰⁸¹ See Evid. Hrg. Tr. Vol. 6B at 40-41; Vol. 6A at 138-139 (Johnston) (explaining the limited liability of a limited partner).

²⁰⁸² Evid. Hrg. Tr. Vol. 6A at 86, 90 (Johnston).

²⁰⁸³ See, Ex. DER-13 (Enbridge's U.S. Operations Corporate Structure).

²⁰⁸⁴ *Id.*

²⁰⁸⁵ Evid. Hrg. Tr. Vol. 6A at 73, 103; Evid. Hrg. Tr. Vol. 6B at 41 (Johnston).

²⁰⁸⁶ Ex. EN-93 (Lim Summary).

²⁰⁸⁷ Ex. EN-93 (Lim Summary).

Access to credit, while helpful in a cleanup situation, is not assured.²⁰⁸⁸ Today's available credit is not necessarily available tomorrow, especially in the case of a catastrophic event where the ability to borrow could be impaired by the crisis.²⁰⁸⁹

989. Given the potential for catastrophic loss related to oil pipelines, Applicant must be able to demonstrate financial security to the state. Because Applicant, itself, has not provided any evidence of its own financial security, DOC-DER's witness, David Dybdahl, has made certain recommendations for financial assurances from Enbridge.

990. Mr. Dybdahl is the president of American Risk Management Resources Network, LLC, and was retained by the DOC-DER to provide an expert analysis of the sufficiency of Applicant's financial resources in the event of a catastrophic event that results in a "crash-the-company scenario" (i.e., an event that might result in the insolvency of Applicant, EEP, or Enbridge, Inc.).²⁰⁹⁰

991. Mr. Dybdahl recommended that, as a condition to any permit granted in this case, that the Commission require Enbridge, Inc. (not EEP) execute a document guarantying the payment of Applicant's liabilities, and indemnifying and holding harmless the State of Minnesota from any of Applicant's liabilities.²⁰⁹¹

992. Applicant asserts that it has no authority to bind Enbridge, Inc.;²⁰⁹² and, at this time, Enbridge, Inc. has not offered up a guaranty.²⁰⁹³ But such possibility was not foreclosed by Applicant's witness who indicated that Enbridge, Inc. may be willing to consider such agreement if made a condition to a CN or RP.²⁰⁹⁴

993. It is undisputed that Enbridge, Inc. has significantly more financial wherewithal than Applicant or EEP.²⁰⁹⁵ It is entirely possible that, due to a restructure or transfer event, EEP's asset base could be reduced in the future or its general partner changed.²⁰⁹⁶ Indeed, Mr. Johnson confirmed that Enbridge, Inc. could transfer (and has transferred in the past) ownership of assets from one Enbridge entity to another or could even create a new operating company to avoid liability.²⁰⁹⁷ A review of Enbridge's corporate structure make it apparent that Applicant and EEP are both limited partnerships which exist, in part, to insulate Enbridge, Inc. (and its wholly-owned subsidiaries) from liabilities arising out of the Mainline System.²⁰⁹⁸

²⁰⁸⁸ Ex. DER-5, DD-1 at 7-8 (Dybdahl Direct); Evid. Hrg. Tr. Vol. 8B at 107-108 (Dybdahl).

²⁰⁸⁹ Ex. DER-5, DD-1 at 20 (Dybdahl Direct).

²⁰⁹⁰ Ex. DER-5 at 1 (Dybdahl Direct); Evid. Hrg. Tr. Vol. 8B at 110 (Dybdahl).

²⁰⁹¹ Ex. DER-5, DD-1 at 4, 30 (Dybdahl Direct).

²⁰⁹² Ex. EN-42 at 8 (Johnston Rebuttal).

²⁰⁹³ Evid. Hrg. Tr. Vol. 6A at 88-89 (Johnston); Evid. Hrg. Tr. Vol. 6B at 35 (Johnston).

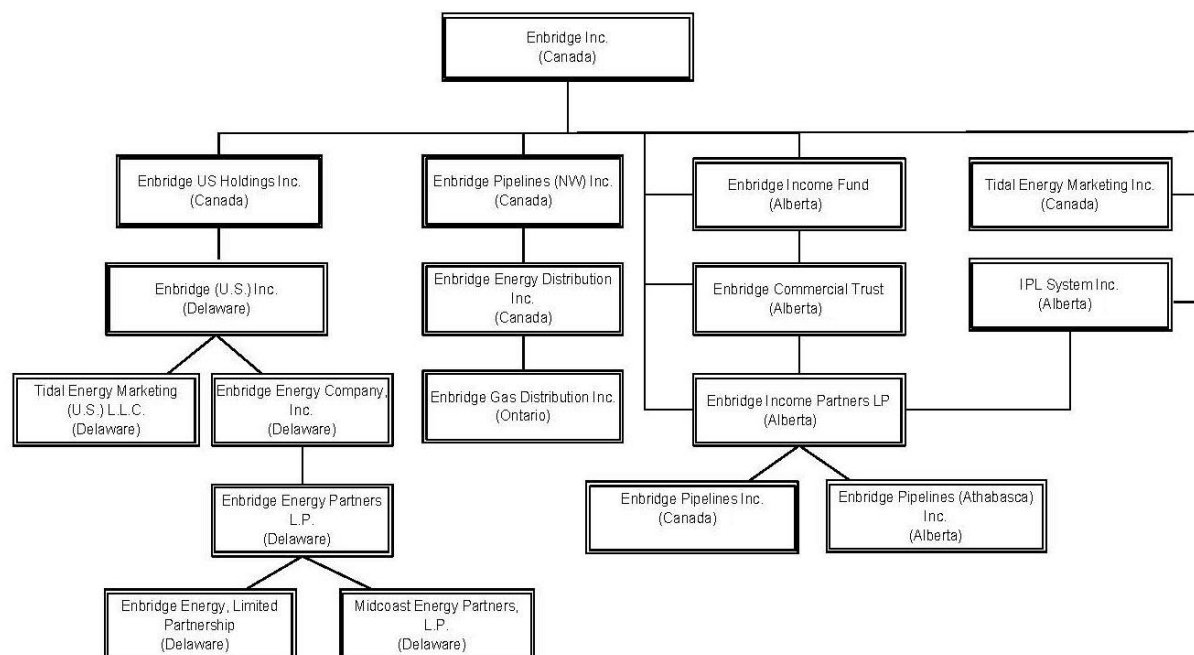
²⁰⁹⁴ Evid. Hrg. Tr. Vol. 6B at 36 (Johnston).

²⁰⁹⁵ Evid. Hrg. Tr. Vol. 6A at 130-131 (Johnston).

²⁰⁹⁶ See e.g., Evid. Hrg. Tr. Vol. 6B at 54 (Johnston).

²⁰⁹⁷ Evid. Hrg. Tr. Vol. 6A at 101-103 (Johnston); Evid. Hrg. Tr. Vol. 6B at 52-56 (Johnston). See also, Evid. Hrg. Tr. Vol. 6B at 41-44 (discussing restructured joint funding arrangements).

²⁰⁹⁸ Ex. DER-14 (Partial Corporate Organization Chart). Note that this is just a partial organization chart of Enbridge, Inc.'s U.S. and Canadian companies.



994. Unlike a limited partnership, which can dissolve, transfer assets, and change general partners, Enbridge, Inc. is less agile because it is the umbrella corporation for all of these related entities.²⁰⁹⁹ Given the complicated corporate structure that insulates Enbridge, Inc. from Applicant's (and even EEP's) liability, the DOC-DER has recommended (if a permit is granted) that the Commission require a guaranty/indemnification/hold harmless agreement from Enbridge, Inc., not one of its limited partnerships.²¹⁰⁰ After all, in Canada, Enbridge, Inc. remains responsible for cleanup costs and abandonment costs of its Canadian pipelines.²¹⁰¹ The same should be true for Enbridge's American pipelines.²¹⁰²

995. In sum, the ALJ finds that Applicant has provided no evidence of its own financial viability or creditworthiness. The only financial data Applicant has provided is for EEP – a limited partner that currently has no legal liability for Applicant's debts in case of insolvency. In addition, Applicant has provided no more than a general promise of a future guaranty from EEP. EEP's guaranty, though better than nothing at all, still does not provide the kind of financial assurances that a major corporation, like Enbridge, Inc., can provide to Minnesota. This is particularly important in light of the significant liability that could result from the operation of a crude oil pipeline and the possibility of corporate transfers which could render EEP less secure than its umbrella corporation.

²⁰⁹⁹ *Id.*

²¹⁰⁰ Ex. DER-5, DD-1 at 30 (Dybdahl Direct).

²¹⁰¹ Evid. Hrg. Tr. Vol. 6A at 113 (Johnston).

²¹⁰² Evid. Hrg. Tr. Vol. 8B at 101-102.

996. The ALJ, therefore, adopts and accepts as reasonable Mr. Dybdahl's testimony with respect to the need for a guaranty and indemnification/hold harmless agreement from Enbridge, Inc. should any permits be granted in this case.

997. Moreover, the ALJ specifically finds that Applicant has been less than transparent about the Applicant and the complicated corporate structure which ultimately insulates Enbridge, Inc. from liabilities related to the Line 3 and the Mainline System.²¹⁰³ The ALJ, therefore, recommends that the Commission exercise significant caution when relying upon Applicant's assurances of financial responsibility.

998. Given that EEP is a limited partnership in the long and complicated Enbridge chain, it is respectfully recommended that a guaranty and indemnification/hold harmless agreement from *Enbridge, Inc.* be made a condition of any CN or RP issued in this case.

ii. Insurance Recommendations

999. Based upon the lack of financial security presented by Applicant, the high risks associated with an oil pipeline, the magnitude of potential loss from unexpected releases, the number of corporate entities pooled in Enbridge's insurance policy, and the potential for future downturns in the tar sands industry, the DOC-DER witness Mr. Dybdahl also has made several recommendations for insurance coverage to be included as conditions to any permit the Commission may grant in this case.²¹⁰⁴

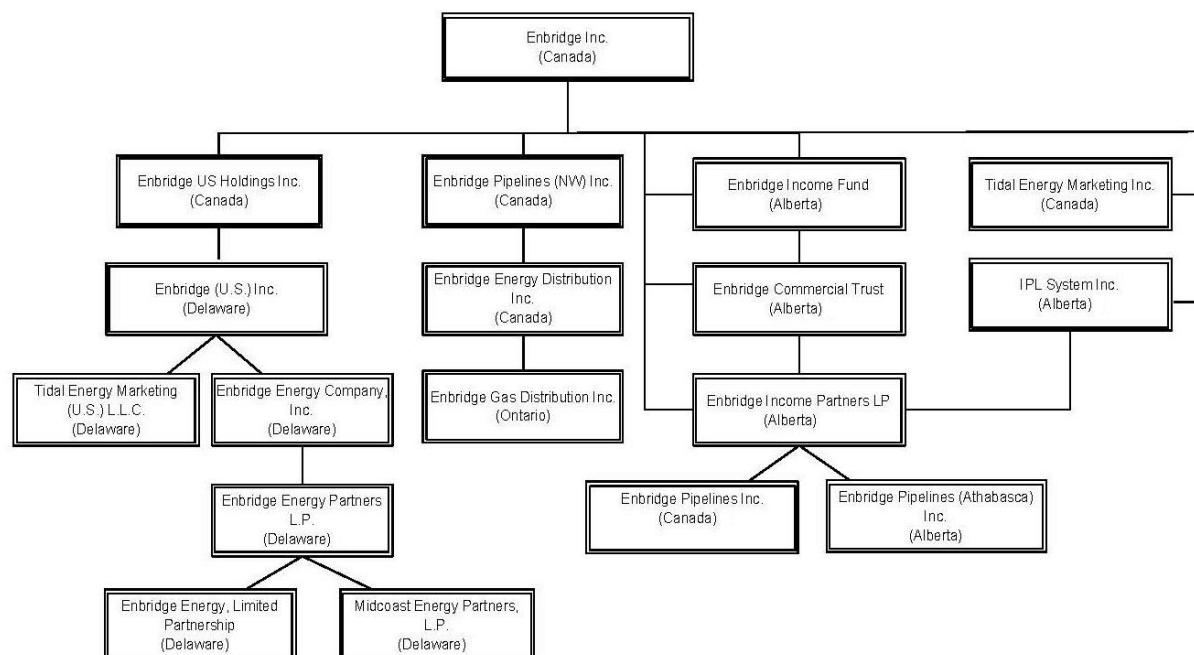
1000. Enbridge, Inc. currently maintains a General Liability (GL) insurance program with a coverage limit of \$940 million per occurrence, subject to an annual aggregate of \$940 million.²¹⁰⁵ This coverage applies to **all** of Enbridge, Inc.'s U.S. and Canadian companies, limited liability entities, subsidiaries, related companies, including Applicant.²¹⁰⁶ In other words, Enbridge, Inc.'s insurance program and its \$940 million aggregate limit covers all of the operations of all of Enbridge's related entities, including but not limited to the following (as well as numerous other related entities, such as Lakehead and Enbridge-WI, not appearing in this diagram):

²¹⁰³ See Evid. Hrg. Tr. Vol. 6A at 45-143 (Johnston); Evid. Hrg. Tr. Vol. 6B at 8-64 (Johnston).

²¹⁰⁴ See Exs. DER-5 (Dybdahl Direct); DER-8 (Dybdahl Surrebuttal).

²¹⁰⁵ Ex. EN-43 at Sched. 2 (Lim Rebuttal).

²¹⁰⁶ Evid. Hrg. Tr. Vol. 6B at 138-139 (Lim).



1001. Enbridge’s GL insurance program is comprised of 23 layers of coverage, representing 40 insurers that have differing areas of coverage based upon pricing.²¹⁰⁷ Included in the type of claims covered by the GL policy are personal injury, damage to property, “time element reporting” pollution liability, firefighting expenses, etc.²¹⁰⁸

1002. The pollution liability, however, is limited in nature. Under the “time element reporting” provisions of the pollution liability, Applicant has coverage so long as accidental releases are discovered within 30 days of the occurrence and reported to the insurance companies within 90 days.²¹⁰⁹ However, if an accidental leak was not discovered within 30 days, or reported within 90 days, associated costs would not be covered under the current GL policy.²¹¹⁰

1003. Enbridge, Inc. does not carry an Environmental Impairment Liability policy.²¹¹¹

1004. Enbridge’s Director of Insurance Risk Management, Selina Lim, explained that insurance coverage is not an “operational risk management tool” for Enbridge²¹¹² Instead, Enbridge relies on insurance as a financial recovery tool to lessen the impacts to Enbridge in the case of a catastrophic loss.²¹¹³ However, should a catastrophic release occur, Enbridge must be prepared with cash and credit resources to pay for the immediate

²¹⁰⁷ Evid. Hrg. Tr. Vol. 6B at 147 (Lim).

²¹⁰⁸ Ex. EN-93 at Sched. 2 (Lim Rebuttal).

²¹⁰⁹ Evid. Hrg. Tr. Vol. 6B at 124-125 (Lim).

²¹¹⁰ Evid. Hrg. Tr. Vol. 6B at 125 (Lim).

²¹¹¹ Ex. EN-93 at Sched. 2 (Lim Rebuttal).

²¹¹² Ex. EN-93 at 1 (Lim Summary).

²¹¹³ *Id.*

costs of response.²¹¹⁴ While these costs may later be recoverable from insurance, Enbridge cannot wait for insurance proceeds before responding to an emergency.²¹¹⁵ Instead, insurance coverage is used to offset and lessen the impact on Enbridge of an unexpected event, not as a means to finance response costs.²¹¹⁶ As Ms. Lim explains, “insurance is not a direct funding vehicle and coverage provided by insurance is not guaranteed.”²¹¹⁷

1005. Mr. Dybdahl acknowledges that he did not review Enbridge’s actual insurance policies.²¹¹⁸ As a result, his analysis was not based upon what Enbridge’s policies actually include, but rather, what types and amounts of insurance would be recommended to provide security to the State of Minnesota in the event of a catastrophic release from Line 3.²¹¹⁹

1006. Mr. Dybdahl explained that, while pipelines may be the safest means of transporting oil on a per-barrel basis, an oil pipeline leak has the potential to create the costliest of cleanups and other damages.²¹²⁰ According to Mr. Dybdahl, “Energy companies are unique in their ability to produce billion dollar losses.”²¹²¹ In addition, given the number of Enbridge-related companies and operations, there is a potential for more than one catastrophic loss in a short period of time, thereby potentially leaving no financial resources available for the second loss.²¹²²

1007. As a real-life example, Mr. Dybdahl points to the 2010 Marshall Spill, where Enbridge paid over \$1.2 billion in response, clean-up, and restoration costs, in addition to fines from state and federal agencies.²¹²³ According to Mr. Dybdahl, this recent Enbridge disaster demonstrates the enormity of costs that can be incurred when a catastrophic release occurs; as well as a pipeline company’s need for liquid cash reserves and available credit to fund immediate response efforts.²¹²⁴

1008. In the Marshall Spill, Applicant was able to pay the immediate response expenses through a combination of cash reserves and credit facilities provided by EEP.²¹²⁵ Thereafter, Applicant sought reimbursement of some of its costs through Enbridge’s GL insurance policy.²¹²⁶ However, due to a pollution exclusion in the GL policy, Enbridge was forced to undergo lengthy arbitration, which ultimately resulted in

²¹¹⁴ *Id.*

²¹¹⁵ *Id.*

²¹¹⁶ *Id.*

²¹¹⁷ *Id.* at 2.

²¹¹⁸ Evid. Hrg. Tr. Vol. 8B at 73 (Dybdahl). Notably, Mr. Dybdahl was not even retained by the DOC-DER until August 7, 2017, just one month prior to the date when the DOC-DER was required to file its witnesses’ direct testimony. Evid. Hrg. Tr. Vol. 8B at 70-71. As a result, Mr. Dybdahl – like the DOC-DER’s expert witness Dr. Fagan -- had very little time to fully analyze this case.

²¹¹⁹ Evid. Hrg. Tr. Vol. 8B at 124 (Dybdahl).

²¹²⁰ Ex. DER-5, DD-1 at 5 (Dybdahl Direct).

²¹²¹ Evid. Hrg. Tr. Vol. 8B at 69 (Dybdahl).

²¹²² Evid. Hrg. Tr. Vol. 8B at 55 (Dybdahl).

²¹²³ Ex. EERA-42 at 10-139 (Revised EIS).

²¹²⁴ Ex. DER-5, DD-1 at 5 (Dybdahl Direct).

²¹²⁵ Ex. EN-42 at 5 (Johnston Rebuttal).

²¹²⁶ Ex. DER-5, DD-1 at 5 (Dybdahl Direct).

\$85 million of unrecovered losses.²¹²⁷ As a result, even with GL insurance coverage limits of \$940 million, Enbridge was not able to recoup from insurance a large portion of the \$1.2 billion dollars in losses it incurred.^{2128 2129}

1009. Mr. Dybdahl uses the legal dispute that arose out of Enbridge's GL policy in 2010, to highlight the importance of an EIL policy, which is specifically designed to address the damages and cleanup costs associated with a large pollution event.²¹³⁰

1010. Mr. Dybdahl explained that the \$940 million in GL insurance coverage currently maintained by Enbridge, Inc. is not sufficient to protect Minnesota in the case of a large-scale disaster or series of disasters that are possible in operating oil pipelines.²¹³¹ This is because GL insurance policies typically only provide insurance coverage for pollution events subject to a series of pollution exclusions and exceptions.²¹³² These exclusions and exceptions make GL coverage less reliable than EIL policies, which are designed specifically for pollution events, cleanup costs, and related damages.²¹³³ As a result, unlike GL policies, EIL policies are less likely to contain exclusions that would negate coverage for the type of costs and damages likely with an oil pipeline.²¹³⁴

1011. In addition to explaining the benefits of an EIL policy, Mr. Dybdahl addressed the importance of coverage dedicated to Line 3. As Mr. Dybdahl explained, due to the inherent risk in Enbridge's collective business entities, there is a potential for more than one catastrophic loss in a short period of time, thereby potentially leaving no insurance coverage available for a second or subsequent loss.²¹³⁵ In other words, if an Enbridge entity suffers a large loss that exhausts most or all of the aggregate GL insurance coverage available to all Enbridge entities in a particular year (such as a Marshall Spill) -- and then Line 3 suffers a subsequent loss -- it would be unlikely that there would be enough insurance coverage available to pay for the Line 3 losses.²¹³⁶ Accordingly, Mr. Dybdahl recommends coverage dedicated to Line 3.

1012. Ms. Lim, however, explained the downside of dedicated coverage. Ms. Lim noted that if Enbridge Inc. is required to dedicate coverage to any one asset, it will likely reduce the total amount of insurance available in Enbridge's aggregate GL insurance program because there is only so much insurance coverage available to Enbridge in the

²¹²⁷ Ex. DER-5, DD-1 at 5 (Dybdahl Direct).

²¹²⁸ Ex. DER-5, DD-1 at 5 (Dybdahl Direct).

²¹²⁹ Ms. Lim pointed out that the GL policy exclusion language litigated in in the Marshall Spill matter is no longer present in Enbridge's current GL policy; and that the insurer involved in the dispute no longer provides Enbridge with coverage. Ex. EN-43 at 12 (Lim Rebuttal). According to Ms. Lim, Enbridge, in consultation with its new insurance broker, has specifically customized the policy wording to avoid the insurance issues presented in the Marshall Spill insurance litigation. *Id.*

²¹³⁰ Ex. DER-5, DD-1 at 9-10 (Dybdahl Direct).

²¹³¹ Evid. Hrg. Tr. Vol. 6B at 128 (Lim).

²¹³² Ex. DER-5, DD-1 at 24-31 (Dybdahl Direct).

²¹³³ Ex. DER-5, DD-1 at 24, 31 (Dybdahl Direct).

²¹³⁴ Evid. Hrg. Tr. Vol. 6B at 128 (Lim); Ex. DER-5, DD-1 at 24-31 (Dybdahl Direct).

²¹³⁵ Evid. Hrg. Tr. Vol. 8B at 55 (Dybdahl).

²¹³⁶ *Id.*

marketplace.²¹³⁷ This means that insurance coverage dedicated to Line 3 could take away from the aggregate coverage available to Enbridge's other Mainline System pipelines, including Lines 1, 2, 4, 13, and 67, which also run through Minnesota.²¹³⁸

1013. In addition to ensuring that that dedicated coverage be available for Line 3, Mr. Dybdahl's recommendations are aimed at ensuring coverage irrespective of Applicant's (or any guarantor's) solvency.²¹³⁹ Mr. Dybdahl also notes that the tar sands industry is subject to a potential downturn in today's carbon-conscious economy.²¹⁴⁰ Should such a downturn occur over the course of the Project's lifetime, Applicant and Enbridge entities may well have fewer cash resources and less credit available to them to respond to loss -- or survive such loss.²¹⁴¹ Consequently, Mr. Dybdahl's recommendations are structured to ensure that, in the case of insolvency of Applicant or its guarantor(s), the State of Minnesota would still have insurance proceeds from which to drawn on to pay for cleanup costs related to Line 3.²¹⁴²

1014. Mr. Dybdahl explained that insurance coverage is particularly important for Minnesota in the case of insolvency of Applicant or its Enbridge-related companies. As discussed above in the financial resources section, Mr. Dybdahl expresses concern about a corporate structure that insulates EEP and Enbridge, Inc. from Applicant's liabilities. Should Enbridge, Inc. be insulated from liability, and Applicant (and its guarantor) not be able to cover the costs of a release, Minnesota would be left "holding the bag" with respect to remediation costs.²¹⁴³ Insurance coverage is a tool to ensure financial responsibility in a case where Applicant or its guarantors are insolvent or are otherwise unwilling or unable to cover the costs of remediation.²¹⁴⁴ Unlike corporate guaranties, insurance coverage will normally survive the bankruptcy of the insured party.²¹⁴⁵ Thus, although insurance proceeds cannot be relied upon to cover immediate response costs, insurance is nonetheless important to protect Minnesota in the case of corporate insolvency.²¹⁴⁶

1015. For this reason, Mr. Dybdahl recommends that the State of Minnesota be named as an additional insured on all insurance policies covering Line 3.²¹⁴⁷ In addition to allowing Minnesota direct coverage, it would indemnify the state if it was named as a party in lawsuit by a third party related to the release.²¹⁴⁸ Applicant consents to Enbridge, Inc. naming the state as an additional insured on its insurance policies, so this condition should be adopted by the Commission if the CN and RP are approved.²¹⁴⁹

²¹³⁷ Ex. EN-93 at 2 (Lim Summary).

²¹³⁸ *Id.*

²¹³⁹ Evid. Hrg. Tr. Vol. 8B at 91-92 (Dybdahl).

²¹⁴⁰ Ex. DER-5, DD-1 at 22 (Dybdahl Direct).

²¹⁴¹ Ex. DER-5, DD-1 at 22-23 (Dybdahl Direct); Evid. Hrg. Tr. Vol. 8B at 107-108 (Dybdahl).

²¹⁴² Evid. Hrg. Tr. Vol. 8B at 57, 91-92 (Dybdahl).

²¹⁴³ Evid. Hrg. Tr. Vol. 8B at 57, 93 (Dybdahl).

²¹⁴⁴ Ex. DER-5, DD-1 at 20, 21 (Dybdahl Direct).

²¹⁴⁵ Evid. Hrg. Tr. Vol. 8B at 92, 114-116 (Dybdahl).

²¹⁴⁶ Evid. Hrg. Tr. Vol. 8B at 92-94. (Dybdahl).

²¹⁴⁷ Evid. Hrg. Tr. Vol. 8B at 113-114 (Dybdahl).

²¹⁴⁸ Evid. Hrg. Tr. Vol. 8B at 119-120 (Dybdahl); Ex. DER-5, DD-1 at 30 (Dybdahl Direct).

²¹⁴⁹ Ex. EN-43 at 13 (Lim Rebuttal).

1016. In addition to adding Minnesota as an additional insured on Enbridge's insurance policies, Mr. Dybdahl made the following insurance recommendations:²¹⁵⁰

- Enbridge should maintain at least \$100 million of GL insurance dedicated specifically to Line 3. This policy should include "time element" pollution or "sudden and accidental" exceptions to the pollution exclusion. This policy should also include an automatic reinstatement of limits option **or** a \$200 million policy aggregate.²¹⁵¹
- Enbridge should purchase \$100 million of EIL insurance to specifically insure Line 3 under a dedicated limit of liability. This policy should include one automatic reinstatement of limits option **or** a policy aggregate of \$200 million.
- Both policies should be increased by \$10 million every five years over the operation of the Project.
- Detailed specifications for the recommended GL and EIL insurance and are set forth in Appendix A to Mr. Dybdahl's direct testimony (Ex. DER-5).

1017. In making these recommendations, Mr. Dybdahl sought to ensure the availability of at least \$1.2 billion in funds to cover a catastrophic spill event – the cost of remediation in the 2010 Marshall Spill.²¹⁵² Consequently, Mr. Dybdahl's recommendations assume the availability of \$1 billion from the federal Oil Spill Liability Trust Fund.²¹⁵³ The U.S. Oil Spill Liability Trust Fund is a federally-operated trust that provides federal and state authorities with up to \$1 billion to pay for the costs of cleaning up an oil spill.²¹⁵⁴ However, if those funds are not available (such as between 2004 and 2006²¹⁵⁵), Mr. Dybdahl recommends that Enbridge Inc. be required to increase its insurance requirements in order to meet an enduring \$1.2 billion level of funding.²¹⁵⁶

²¹⁵⁰ Ex. DER-5, DD-1 at 4 (Dybdahl Direct).

²¹⁵¹ A reinstatement of limits provision applies in situations where an insured party has a loss that exhausts all limits. In that case, the reinstatement of limits provision allows the insured to buy additional limits at a predetermined premium. Evid. Hrg. Tr. Vol. 8B at 104 (Dybdahl). The reinstatement of limits provision would be required only as to the Project and, particularly for the future GL policy, would guarantee continuing coverage of Line 3 under Enbridge Inc.'s GL policy in the event that initial limits are exhausted during the policy period by a covered occurrence elsewhere related to one of Enbridge's various entities. *Id.* at 104-105, 168 (Dybdahl). Alternatively, Mr. Dybdahl suggested that Enbridge Inc. could pursue a GL policy with a \$200 million aggregate per loss limit. *Id.* at 159-160. However, Mr. Dybdahl estimated that this would likely be more expensive than a reinstatement of limits provision. *Id.* at 160.

²¹⁵² Evid. Hrg. Tr. Vol. 8B at 54 (Dybdahl); Ex. DER-5, DD-1 at 16 (Dybdahl Direct).

²¹⁵³ Evid. Hrg. Tr. Vol. 8B at 95 (Dybdahl); Ex. DER-5, DD-1 at 32 (Dybdahl Direct).

²¹⁵⁴ Ex. DER-5, DD-1 at 32 (Dybdahl Direct).

²¹⁵⁵ Ex. DER-5, DD-1 at 21 (Dybdahl Direct).

²¹⁵⁶ Ex. DER-5, DD-1 at 19-20 (Dybdahl Direct).

1018. Applicant's witness, Mr. Johnston, confirmed that Applicant has the financial ability to pay the premiums on the insurance recommended in this case.²¹⁵⁷

1019. With respect to the recommended \$100 million in EIL insurance, Ms. Lim notes that this is nearly half of the available EIL insurance in the global insurance marketplace.²¹⁵⁸ Mr. Dybdahl concedes that there is presently approximately \$250 million in available EIL coverage in the insurance market,²¹⁵⁹ and that his recommendations are subject to availability in the marketplace.²¹⁶⁰ Nonetheless, Mr. Dybdahl testified that it took him only 30 minutes to identify insurers willing to sell up to \$250 million in EIL coverage.²¹⁶¹ Thus, he concludes that a recommendation of \$100 million in EIL coverage for a new Line 3 and is not onerous or impossible to obtain.²¹⁶²

1020. Mr. Dybdahl also acknowledged that, due to the small number of insurers offering these types of policies, Enbridge, Inc. could run into a "stacking" problem, where the same insurers would not be willing to offer both GL and EIL insurance to Enbridge.²¹⁶³ Both Ms. Lim and Mr. Dybdahl agree that four of the five insurers who would provide EIL insurance on the Project are already in Enbridge's current group or "stack" of insurers.²¹⁶⁴ In that event, Mr. Dybdahl proposes an "anti-stacking" solution with respect to Line 3 such that, in a large-scale disaster involving Line 3, an insurer would be able to reduce Enbridge's recovery under the GL policy by the \$100 million paid on the EIL policy.²¹⁶⁵ However, Mr. Dybdahl makes no formal recommendation as to that effect.

1021. During the evidentiary hearing, Mr. Dybdahl appears to change his original recommendations in light of the stacking issue identified by Ms. Lim to recommend at least \$100 million in non-dedicated GL coverage (an amount Enbridge already exceeds); \$100 million in EIL coverage dedicated to Line 3; and one automatic reinstatement provision in the GL policy *specific to Line 3* in the amount of \$200 million.²¹⁶⁶ It is unclear in the record, however, whether or not Mr. Dybdahl was actually recommending non-dedicated GL coverage in exchange for the dedicated \$200 million automatic reinstatement provision for Line 3.

1022. Finally, Mr. Dybdahl stressed that the insurance recommendations are subject to availability in the market, as long as unavailability is not tied to Enbridge-specific risks.²¹⁶⁷ Thus, if Enbridge, Inc. can show that it cannot actually purchase the type and amounts of insurance recommended, then the Commission could allow variances to the condition on a year-to-year basis to account for insurance market availability.

²¹⁵⁷ Evid. Hrg. Tr. Vol. 6B at 36 (Johnston).

²¹⁵⁸ Ex. EN 43 at 13 (Lim Rebuttal).

²¹⁵⁹ Evid. Hrg. Tr. Vol. 8B at 82-83 (Dybdahl).

²¹⁶⁰ Evid. Hrg. Tr. Vol. 8B at 166, 170-171 (Dybdahl).

²¹⁶¹ Evid. Hrg. Tr. Vol. 8B at 171 (Dybdahl). *See also, id.* at 82-83

²¹⁶² Evid. Hrg. Tr. Vol. 8B at 173 (Dybdahl).

²¹⁶³ Evid. Hrg. Tr. Vol. 8B at 164-165 (Dybdahl).

²¹⁶⁴ Evid. Hrg. Tr. Vol. 8B at 164 (Dybdahl).

²¹⁶⁵ Evid. Hrg. Tr. Vol. 8B at 164-165 (Dybdahl).

²¹⁶⁶ Evid. Hrg. Tr. Vol. 8B at 104-105, 168 (Dybdahl).

²¹⁶⁷ Evid. Hrg. Tr. Vol. 8B at 166, 170-171 (Dybdahl).

1023. As a precaution, the DOC-DER further recommends that the Commission require Applicant and Enbridge Inc. to provide evidence each year as to the insurance coverage maintained on its operations, including the coverage dedicated to Line 3.²¹⁶⁸

1024. The Administrative Law Judge finds reasonable and accepts Mr. Dybdahl's recommendations for insurance for a new Line 3.²¹⁶⁹

VII. DECOMMISSIONING, ABANDONMENT, REMOVAL, AND IN-TRENCH REPLACEMENT

A. Decommissioning and Abandonment

1025. Once the Project is in service, Applicant states that will “permanently remove [E]xisting Line 3 from service.”²¹⁷⁰ To do so, Applicant asserts that it will purge, clean, and decommission the line (as required by the Consent Decree), and then permanently disconnect it from the rest of the pipeline system.²¹⁷¹ In addition, Applicant proposes to segment the line, cap the segments, permanently close valves, and remove the “associated facilities.”²¹⁷² As a result, Applicant asserts that Existing Line 3 will not be able to be used for crude oil transportation in the future.²¹⁷³

1026. Applicant conducted a study involving a 12-mile stretch of pipeline in Canada, in which it cleaned and deactivated a line.²¹⁷⁴ Extrapolating from this small, 12-mile study, Applicant asserts that its cleaning protocol can remove over 99.9 percent of the hydrocarbons from the line,²¹⁷⁵ and that less than one gallon of oil will be left in the 282 miles of Existing Line 3 once it is cleaned, decommissioned, and abandoned.²¹⁷⁶ The EIS notes, “It is currently unknown whether Enbridge’s [cleaning] protocol works on a longer length of the pipeline.”²¹⁷⁷

²¹⁶⁸ DOC DER Initial Br. at 181 (Jan. 23, 2018) (eDocket No. 20181-139259-03 (CN)).

²¹⁶⁹ The Commission is advised of Wis. Stat. § 59.70(25) and § 60.635 which Enbridge lobbied for in Wisconsin. See Comment by Scott Russell (Batch 9) (Oct. 31, 2017) (eDocket No. 201710-136994-01 (CN)). These statutes prohibit counties and towns from requiring pipeline operators to obtain insurance if the company “carries comprehensive general liability insurance that includes coverage for sudden and accidental pollution liability.” Wis. Stat. §§ 59.70(25), § 60.635. It is likely that, in response to any insurance conditions imposed by the Commission, Enbridge would attempt to pass a similar law in Minnesota prohibiting the Commission from imposing additional insurance requirements as part of permit conditions in this case. See also, *Enbridge Energy Company vs. Dane County*, No. 16 CV 08, slip op. (Wis. Cir. Ct., Dane Cty. Sept. 27, 2016), *appeal docketed*, 16 AP 2503 (Wis. Ct. App. Dec. 23, 2016).

²¹⁷⁰ Ex. EN-30 at 15 (Eberth Rebuttal) (emphasis added).

²¹⁷¹ Ex. EN-30 at 19 (Eberth Rebuttal); Ex. EN-22 at 22 and Sched. 6 at 6-7 (Simonson Direct).

²¹⁷² Ex. EN-30 at 19 (Eberth Rebuttal); Ex. EN-22 at 22 and Sched. 6 at 6-7 (Simonson Direct).

²¹⁷³ Evid. Hrg. Tr. Vol. 2B at 21 (Simonson).

²¹⁷⁴ Evid. Hrg. Tr. Vol. 2B at 32-33 (Simonson).

²¹⁷⁵ Ex. EERA-41 at 8-6 (Revised EIS).

²¹⁷⁶ Evid. Hrg. Tr. Vol. 2A at 127 (Simonson).

²¹⁷⁷ Ex. EERA-42 at 8-7 (Revised EIS).

1027. Applicant, however, is not proposing to remove Existing Line 3 from the ground, but rather, to simply abandon it in-place.²¹⁷⁸ Applicant estimates that the abandoned steel pipeline will remain for hundreds, if not thousands of years.²¹⁷⁹

1028. As Applicant acknowledges, under federal law, the pipeline would be deemed “abandoned.”²¹⁸⁰ Consequently, there are no legal requirements that the abandoned pipeline be monitored or maintained by the company.²¹⁸¹

1029. The abandoned Line 3 will remain in a corridor among five to seven other active Enbridge pipelines.²¹⁸² After abandonment, Applicant will no longer run internal inspections on the line.²¹⁸³ Applicant states that it will, however, continue visual (aerial) monitoring and cathodic protection of abandoned Existing Line 3, but only because it is conducting such external monitoring on its other active pipelines in the same Mainline corridor.²¹⁸⁴

1030. Because federal regulations do not require maintenance and monitoring of abandoned pipelines, continued monitoring of abandoned Line 3 will be at Applicant’s sole discretion for as long as Applicant sees fit.²¹⁸⁵ In addition, there would be no regulatory oversight to ensure that exposed or problematic abandoned pipe be removed or reburied.²¹⁸⁶ Applicant has not presented a plan for monitoring, re-burying, or repairing Line 3 should Applicant cease to exist -- a real possibility considering the hundreds and thousands of years that the pipe will remain in ground if abandoned.²¹⁸⁷

1031. Moreover, Applicant has not committed to continuing monitoring the abandoned Line 3 once the other Mainline lines are out of service. Nor has Applicant agree to re-bury, repair, or remove pipe that becomes exposed, buoyant, or problematic *after abandonment has been completed*.²¹⁸⁸ Applicant merely maintains that, as a company, Applicant will remain liable for the line within its purchased easements.²¹⁸⁹

1032. There are approximately 8,500 feet of exposed pipe along Existing Line 3.²¹⁹⁰ In addition, there are approximately 40 miles of Existing Line 3 that may become

²¹⁷⁸ Ex. EN-22 at 21 (Simonson).

²¹⁷⁹ Evid. Hrg. Tr. Vol. 2A at 63-64; Vol. 2B at 22-23 (Simonson). (Q: “So thousands of years from today, that pipe will still be there in the ground; is that what Enbridge is proposing?” A: “That’s what the study shows.”)

²¹⁸⁰ Ex. EN-22 at 21 (Simonson) (“To be clear, Enbridge intends to ‘abandon’ Line 3 as the term is used in federal regulations.”)

²¹⁸¹ Evid. Hrg. Tr. Vol. 2A at 94-95; Evid. Hrg. Tr. Vol. 2B at 21-22 (Simonson).

²¹⁸² Ex. EN-45 at 28 (Simonson Rebuttal).

²¹⁸³ Ex. EN-12 at 43, 67 (Kennett Direct).

²¹⁸⁴ Evid. Hrg. Tr. Vol. 2A at 94-95, 128; Vol. 2B at 21-22, 46 (Simonson); EN-45 at 28 (Simonson Rebuttal).

²¹⁸⁵ Evid. Hrg. Tr. Vol. 2A at 103; Vol. 2B at 21-22 (Simonson).

²¹⁸⁶ Evid. Hrg. Tr. Vol. 2B at 21-22 (Simonson).

²¹⁸⁷ Evid. Hrg. Tr. Vol. 2A at 61-64 (Simonson).

²¹⁸⁸ Evid. Hrg. Tr. Vol. 2A at 61, 64 (Simonson). (Simonson admits that Enbridge has no plans for ongoing monitoring and maintenance of the line should Enbridge cease to exist.)

²¹⁸⁹ Evid. Hrg. Tr. Vol. 2A at 96 (Simonson).

²¹⁹⁰ Evid. Hrg. Tr. Vol. 2A at 25 (Simonson); Ex. EERA-42 at 8-10 (Revised EIS).

buoyant after oil is purged from the line.²¹⁹¹ Applicant has only recently (at the evidentiary hearing) committed to removing the currently exposed portions of Existing Line 3 as part of its decommissioning of Existing Line 3.²¹⁹² However, Applicant has no stated plans to remove the potentially buoyant sections of pipe.²¹⁹³ Thus, absent a condition is placed on a CN or RP, Applicant will have no legal obligation to maintain Existing Line 3 or prevent it from becoming a public or private nuisance.

1033. The EIS notes that abandonment of Existing Line 3 will have “minimal” “near-term” impacts to human settlements, natural resources, cultural resources, and socioeconomics because the line is currently in-ground and, when left in-ground, will not present an immediate disturbance.²¹⁹⁴ The EIS cautions, however, that abandonment could have “significant” long-term impacts.²¹⁹⁵ The EIS notes that the impacts to human settlement include impacts on transportation and public services due to potential subsidence (collapse and exposure of pipe).²¹⁹⁶ The impacts to natural resources include subsidence and buoyancy/exposure of pipe.²¹⁹⁷ The impacts to socioeconomic resources include impacts on agricultural production due to subsidence and exposure.²¹⁹⁸ The EIS did not identify any impacts to cultural resources, but, as described above and below, at least two Indian Tribes (Leech Lake and Fond du Lac) are impacted by the existence, removal, and abandonment of Existing Line 3.

1034. The EIS identified three particular risks of abandonment: (1) the inability to discover unknown contamination under and around Existing Line 3; (2) the potential for the abandoned line to serve as a conduit for water and contamination; and (3) the potential for subsidence (i.e., the caving in or sinking of the ground above and around the pipeline), as well as potential buoyancy and exposure of the line.²¹⁹⁹

1035. The EIS cautioned that there are potential environmental risks and adverse impacts of unknown existing contamination surrounding Existing Line 3 that would never be discovered and remediated if the line is abandoned.²²⁰⁰ In other words, abandoning Existing Line 3 prevents Applicant and the state from discovering any leaks and contamination that may have occurred during its 50+ years of operation.²²⁰¹ It also prevents remediation of any contamination that may be present along and beneath the line.²²⁰²

²¹⁹¹ Evid. Hrg. Tr. Vol. 2A at 25 (Simonson); Ex. EN-45 at 28-29 (Simonson Rebuttal); Ex. EN-22, Sched. 6 at 7 (Table 1-1) (Simonson Direct).

²¹⁹² Evid. Hrg. Tr. Vol. 8A at 45-46 (Eberth).

²¹⁹³ Evid. Hrg. Tr. Vol. 2B at 19 (Simonson).

²¹⁹⁴ Ex. EERA-42 at 8-6 (Revised EIS).

²¹⁹⁵ *Id.*

²¹⁹⁶ *Id.*

²¹⁹⁷ *Id.*

²¹⁹⁸ *Id.*

²¹⁹⁹ Ex. EERA-42 at 8-7 (Revised EIS).

²²⁰⁰ Ex. EERA-42 at 8-1, 8-7 (Revised EIS).

²²⁰¹ *Id.*

²²⁰² *Id.*

1036. The EIS also advised that an abandoned pipeline provides a potential conduit for the migration of water or other contaminants that are present and/or associated with releases from nearby pipelines.²²⁰³ (There are several other pipelines in this same corridor.²²⁰⁴) The EIS states:

Over time, despite cathodic protection, the abandoned Line 3 would continue to corrode and lose structural integrity such that water and/or contaminants could enter the pipeline. This material could flow through the pipeline by gravity and exist the pipeline at another location. Thus, the abandoned pipeline could serve as a conduit for water and/or other contaminants to move from one water resource to another, creating hydrological connections that might not otherwise occur.²²⁰⁵

1037. Finally, the EIS noted the potential environmental risks and impacts associated with ongoing deterioration of abandoned pipelines, including subsidence, buoyancy, and exposure at the ground surface.²²⁰⁶ It is undisputed that there is a greater likelihood of subsidence (collapse of the ground) with an abandoned pipeline than one that is in operation.²²⁰⁷ Existing Line 3 crosses under 297 roads and railways.²²⁰⁸ Subsidence in these areas is of particular concern.²²⁰⁹

1038. Existing Line 3 was installed prior to the minimum depth requirement set forth in 49 C.F.R. § 195.248.²²¹⁰ The EIS states that, “given the lack of adequate soil cover and lack of transported oil in the line, it is probable that the frequency associated with the pipeline becoming buoyant and being exposed at the ground surface will increase.”²²¹¹

1039. In addition, according to the EIS, in 1996, Applicant discovered that the polyethylene tape used on Line 3 has been “wrinkling,” and that water/contaminants tend to seep under the wrinkles, increasing the deterioration of Existing Line 3.²²¹² This deterioration (in addition to serving as a reason for replacement) will serve to advance the subsidence and buoyancy problems associated with an abandoned line.²²¹³

1040. Donovan Dyrdal, a property owner in Pennington County, testified about his experience with Applicant and the seven Enbridge pipelines currently running through his family’s property.²²¹⁴ For over 40 years, the Dyrdals have dealt with Applicant and the

²²⁰³ Ex. EERA-42 at 8-1, 8-7 (Revised EIS).

²²⁰⁴ Ex. EN-22 at 27 (Simonson Direct).

²²⁰⁵ Ex. EERA-42 at 8-7 (Revised EIS).

²²⁰⁶ Ex. EERA-42 at 8-2 (Revised EIS).

²²⁰⁷ Ex. EN-12 at 44 (Kennett Direct).

²²⁰⁸ Ex. EERA-42 at 8-10 (Revised EIS).

²²⁰⁹ Ex. EERA-42 at 8-10 (Revised EIS).

²²¹⁰ Ex. EERA-42 at 8-10 (Revised EIS).

²²¹¹ *Id.*

²²¹² Ex. EERA-42 at 8-8 (Revised EIS).

²²¹³ *Id.*

²²¹⁴ Exs. DY-1 (Dyrdal Direct); DY-14 (Dyrdal Surrebuttal); DY-18 (Dyrdal Summary).

pipelines encumbering his property.²²¹⁵ The Dyrdal's predecessors were paid just a few hundred dollars in the 1950s for an easement over their property to run pipelines.²²¹⁶ Since that time, Enbridge has installed seven pipelines across his property.²²¹⁷ Mr. Dyrdal explained that his experience with Applicant "has been an extremely frustrating and expensive adversity" for he and his wife.²²¹⁸

1041. According to Mr. Dyrdal, the numerous maintenance digs have had a negative effect on his farming business due to the unproductive subsoil and weeds that Enbridge has introduced to his property.²²¹⁹ In addition, the Dyrdals experience serious drainage problems on their land due to shallow and exposed pipe, which Applicant has failed to fully remedy, despite repeated pleas by the Dyrdals.²²²⁰ Mr. Dyrdal urges the Commission to prohibit Applicant from abandoning Line 3 in place due to: (1) the infinite nuisance that abandoned the pipeline will have on his property; and (2) his lack of confidence that Applicant will respond to landowner issues related to exposed pipe, sinkholes, and structural defects on a pipeline once abandoned, based upon his personal experience.²²²¹

1042. Mr. Dyrdal's testimony is representative of the type of issues hundreds of other landowners may experience in the future if Existing Line 3 is simply abandoned in place. These landowners, many of whom were paid just a nominal amount of money for permanent easements in the 1950s and 1960s,²²²² will be forever subject to Applicant's abandoned infrastructure on their properties should the line be discarded in place.

1043. Enbridge has 425 miles of "deactivated" pipeline in the United States, a substantial portion of it is abandoned Line 6B, located in Michigan.²²²³ Recall that Line 6B was the pipeline that caused the 2010 Marshall, Michigan spill. From this figure, Applicant makes the bold assertion that it is the "industry standard" to simply abandon old pipelines.²²²⁴ In reality, this appears to be *Enbridge's* standard based upon its abandonment of Line 6B. There is no evidence in the record of any other companies within the pipeline industry simply abandoning hundreds of miles of pipeline in Minnesota or elsewhere in the United States.

1044. Notably, only 17 miles of Enbridge's deactivated pipeline is currently located in Minnesota (most of it in Grand Rapids, Minnesota); and not all of the pipeline is in one stretch.²²²⁵ Abandonment of Existing Line 3 would inevitably set a precedent of allowing companies to simply disable and abandon pipeline and infrastructure they no longer need

²²¹⁵ Ex. DY-18 (Dyrdal Summary).

²²¹⁶ Ex. DY-17 (Dyrdal Easement); Ex. DY-18 (Dyrdal Easement).

²²¹⁷ Ex. DY-18 (Dyrdal).

²²¹⁸ Ex. DY-18 (Dyrdal Summary).

²²¹⁹ *Id.*

²²²⁰ *Id.*

²²²¹ *Id.*

²²²² See e.g., Ex. DY-17 (Dyrdal Easement); Ex. DY-18 (Dyrdal Easement); Ex. P-13 (Peterson Easement).

²²²³ Evid. Hrg. Tr. Vol. 2A at 23, 42-43 (Simonson).

²²²⁴ Evid. Hrg. Tr. Vol. 2A at 23 (Simonson).

²²²⁵ Evid. Hrg. Tr. Vol. 2A at 42; Evid. Hrg. Tr. Vol. 2B at 31 (Simonson).

or which is expensive to remove. Thus, landowners who signed easement agreements which allow “idling in place” (that is, all landowners who have signed new private easements for this Project)²²²⁶ will be left with abandoned pipe forever occupying their land with no real ability to require Applicant (or its successors) to remove or remedy pipe which has become exposed or otherwise problematic. Moreover, as long as these permanent easements exist, landowners who granted easements to Applicant will be prohibited from building upon or fully utilizing their property, despite Applicant’s abandonment of the line.²²²⁷

B. Removal

1045. Four of the five route alternatives examined in the EIS (the APR, RA-03AM, RA-06, and RA-08) could be coupled with removal of Existing Line 3.²²²⁸ Whereas, RA-07 specifically contemplates removal of the Existing Line 3 with the new line placed in the existing trench; thus, abandonment is not an option for RA-07.²²²⁹ Accordingly RA-07 represents the “in-trench replacement” option – a true replacement of Line 3.

1046. As options for the disposition of Existing Line 3, abandonment and removal are not mutually exclusive – potential impacts may be avoided and mitigated by a combination of abandonment and removal along different sections of existing Line 3.²²³⁰ Thus, for the APR and the route alternatives, the Commission could require removal in some places and abandonment in others, where removal would prove too dangerous, disruptive, or otherwise undesirable.²²³¹

1047. Applicant and the EIS note that there are risks associated with removal.²²³² It is not entirely clear in the record, but it appears that Existing Line 3 is located within a corridor of least five and possibly six (in some areas), other active pipelines.²²³³

1048. The major reason articulated by Applicant that it seeks to abandon Existing Line 3 is because Existing Line 3 is located between other lines and excavation of the line within the corridor could pose risks to Enbridge’s other lines.²²³⁴ Applicant notes that Existing Line 3 is located in a “tightly-spaced multi-pipeline corridor.”²²³⁵ Thus, excavation work would need to be performed over and near operating pipelines.²²³⁶ According to Applicant, the pressure of the heavy excavation equipment could put stress on the other

²²²⁶ See Ex. EN-6 (McKay Direct) at Sched. 3 (Template Easement).

²²²⁷ See e.g., Exs. DY-16 (Dyrda Easement); DY-17 (Dyrda Easement); P-13 (Peterson Easements); Ex. EN-6 (McKay Direct) at Sched. 3 (Template Easement); Ex. HTE-5 (Easement); Ex. HTE-6 (Easement).

²²²⁸ *Id.*

²²²⁹ *Id.*

²²³⁰ Ex. EERA-42 at 8-16 (Revised EIS).

²²³¹ *Id.*

²²³² Ex. EERA-42 at 8-4 (Revised EIS); Ex. EN-22 at 27-28 (Simonson Direct).

²²³³ Ex. EN-22 at 27 (Simonson Direct).

²²³⁴ Ex. EN-22 at 27 (Simonson Direct).

²²³⁵ *Id.*

²²³⁶ *Id.*

underground pipelines and potentially cause damage to them.²²³⁷ Such damage could result in a leak or rupture.²²³⁸ Accordingly, Applicant seeks to avoid these risks by simply abandoning the line.²²³⁹

1049. The EIS notes that only approximately 104 miles of the 282-mile route of Existing Line 3 has another pipeline on each side of the line that is “within a 20-foot buffer.”²²⁴⁰ However, the remaining 178 miles of Existing Line 3 have no adjacent pipelines or have at least one side without an adjacent pipe.²²⁴¹ Accordingly, approximately two-thirds of Existing Line 3 is located such that it is not situated between other lines, thereby making removal and replacement easier and less risky in those areas.

1050. The ALJ notes that integrity digs are not infrequent, require the use of heavy equipment within the Mainline corridor, and would present similar risks and disturbances as removal and replacement.²²⁴² Indeed, Applicant has safely conducted 950 integrity digs in the last 16 years on Line 3.²²⁴³

1051. If Applicant is not permitted to build a new pipeline, Applicant has clearly articulated that it intends to continue using Existing Line 3 and will undertake an extensive integrity dig and maintenance program.²²⁴⁴ Accordingly, Applicant acknowledges that construction and excavation within the Mainline corridor is possible and manageable.²²⁴⁵ Applicant is accustomed to conducting safe excavations of its pipelines in and around the Mainline corridor. After all, Applicant added two more pipelines along the Mainline corridor in 2009 (Lines 13 and 67), contributing to the corridor’s congestion.²²⁴⁶ Apparently Applicant believed that it was safe to install and operate six pipelines in one corridor, despite the use of heavy machinery for both installation and maintenance of those lines as recently as 2009. Its recent history of engineering skill speaks louder and more persuasively than its claim that inconvenient chores are dangerous ones.

1052. In addition, with respect to the APR, from the North Dakota border to Clearbrook, the new line would be located adjacent to existing Enbridge pipelines.²²⁴⁷ And, from Clearbrook to Park Rapids, the new line would be co-located with four Minnesota Pipeline Company lines.²²⁴⁸ Accordingly, Applicant apparently believes it is safely able to perform excavations and construction along other operating pipelines in those areas.

²²³⁷ *Id.*

²²³⁸ *Id.*

²²³⁹ *Id.*

²²⁴⁰ Ex. EERA-42 at 8-13 (Revised EIS).

²²⁴¹ *Id.*

²²⁴² Evid. Hrg. Tr. Vol. 2A at 123 (Simonson); Evid. Hrg. Tr. Vol. 1A at 27, 69-70, 72 (Kennett).

²²⁴³ Ex. EN-12 at 11 (Kennett Direct).

²²⁴⁴ Ex. EN-68 at 3 (Kennett Summary).

²²⁴⁵ Evid. Hrg. Tr. Vol. 2B at 12 (Simonson).

²²⁴⁶ See Ex. LL-1 (LL Easement) and FDL-1 (FDL Easement) (documenting the addition of two more pipelines in the Mainline corridor in 2009).

²²⁴⁷ Ex. EN-24 at 23 (Eberth Direct).

²²⁴⁸ Evid. Hrg. Tr. Vol. 2A at 89 (Simonson).

1053. Applicant's witness, Barry Simonson, the Line 3 Project lead, confirms that Existing Line 3 can, in fact, be removed safely.²²⁴⁹ Mr. Simonson noted that there are inherent risks and unavoidable disturbances that will arise when removing 282 miles of continuous, co-located pipe.²²⁵⁰ Mr. Simonson explained that the risks of integrity digs are amplified when removing 282 continuous miles of pipeline.²²⁵¹ However, when asked if Applicant could manage those risks if required to remove Existing Line 3, Mr. Simonson responded, "In my professional opinion, yes, we could manage risks."²²⁵²

1054. Mr. Simonson noted that certain methods can be used to mitigate the risks of removal, such as the use of timber mats to displace the weight of the heavy machinery.²²⁵³ The EIS also identified the use of long reach boom cranes.²²⁵⁴

1055. Applicant claims that approximately 600,000 to 900,000 timber mats would be required for removal of Existing Line 3 and construction of a new line.²²⁵⁵ Mr. Simonson notes that approximately 200,000 to 300,000 timber mats, alone, will be required for construction in a new corridor.²²⁵⁶ According to Mr. Simonson, obtaining the necessary timber mats may be difficult, but it is "not prohibitive."²²⁵⁷

1056. The EIS questioned Applicant's assertion about the number of timber mats required for construction and removal. The EIS calculated the number of timber mats that would be necessary for removal, and determined that no more than 300,000 mats would be needed, if the mats were to be placed along the entire length of the corridor all at once, as Applicant contends.²²⁵⁸ However, the EIS notes that the number of timber mats can be significant reduced as follows:

...[T]he work would not require that the entire corridor have timber mats at any given time. Instead, several access points can be constructed for multiple crews at once. For each crew, approximately 500 to 1,000 feet of matting can be used and moved as work progresses. Assuming five crews work concurrently and each requires 1,000 feet of matting 16 feet wide, a total of 1,000 mats would be required.²²⁵⁹

1057. Thus, according to the EIS, only 1,000 timber mats would be necessary for removal along the entire 282 miles of Existing Line 3.²²⁶⁰ In addition, the EIS notes that

²²⁴⁹ Evid. Hrg. Tr. Vol. 2B at 12 (Simonson).

²²⁵⁰ Evid. Hrg. Tr. Vol. 2B at 12 (Simonson).

²²⁵¹ *Id.*

²²⁵² *Id.*

²²⁵³ Evid. Hrg. Tr. Vol. 2A at 60 (Simonson). This is curious considering that half of the APR would not involve construction around other pipelines (i.e., no need for timber matting).

²²⁵⁴ Ex. EERA-42 at 8-4 (Revised EIS).

²²⁵⁵ Ex. EERA-42 at 8-14 (Revised EIS).

²²⁵⁶ Evid. Hrg. Tr. Vol. 2A at 60 (Simonson).

²²⁵⁷ Evid. Hrg. Tr. Vol. 2A at 60 (Simonson).

²²⁵⁸ Ex. EERA-42 at 8-14 (Revised EIS).

²²⁵⁹ *Id.*

²²⁶⁰ *Id.*

only 104 miles of the Existing Line 3 has pipelines on both sides.²²⁶¹ Therefore, the EIS estimates that only 370 timber mats would actually be required (because timber mats are only required where Existing Line 3 is located between other lines).²²⁶²

1058. The significant discrepancy between the Applicant and the EIS estimates for timber mats highlights one of the several credibility issues the ALJ has identified in this case when it comes to Applicant. The ALJ finds the EIS is more reasonable in its calculations and estimates for the number of timber mats required for removal. Moreover, the ALJ notes that with in-trench replacement, the same timber mats would be able to be used for both removal and replacement, yielding an additional benefit of in-trench replacement.

1059. According to Laborers' District witness, Evan Whiteford, the union members who install (and remove) pipeline throughout the country (and who anticipate constructing the proposed Project) are highly skilled and trained workers.²²⁶³ Mr. Whiteford confirmed that his fellow union members have the skill and training to safely and expertly remove Existing Line 3, just as they have the skill and training to install a new Line 3.²²⁶⁴ Similarly, the Mr. Whiteford confirmed that the union workers have the skills and ability to fully remediate and restore any environmental damage from the removal of Existing Line 3.²²⁶⁵ Mr. Whiteford testified that, despite the risks of removing a line within an active pipeline corridor, due to their professional skills and training, union members could safely remove Existing Line 3, return the environment to as close to original condition as possible, and perform this work as safely and as expertly as they would the installation of a new pipeline.²²⁶⁶

1060. The EIS notes that where Existing Line 3 cannot be safely removed, appropriate mitigations measures could be used to segment and fill the line (as described above with respect to decommissioning).²²⁶⁷

1061. In addition, a benefit of removal identified by the EIS is the discovery and mitigation of latent (yet undiscovered) contamination from Existing Line 3.²²⁶⁸ Applicant has indicated that it would develop a contaminated sites management plan to identify, manage, and mitigate any contaminated areas.²²⁶⁹

²²⁶¹ *Id.*

²²⁶² *Id.*

²²⁶³ Ex. LC-4 (Whiteford Summary).

²²⁶⁴ Evid. Hrg. Tr. Vol. 5A at 62 (Whiteford).

²²⁶⁵ Evid. Hrg. Tr. Vol. 5A at 63, 67 (Whiteford).

²²⁶⁶ Evid. Hrg. Tr. Vol. 5A at 62, 63, 66, 67, 68 (Whiteford). *See specifically,*

Q: So ultimately your union members could remove the pipe, they could do so safely, and they could return the land to original, to really close to the original condition; is that correct?

A: Yes, Your Honor.

Evid. Hrg. Tr. Vol. 5A at 68 (Whiteford).

²²⁶⁷ Ex. EERA-42 at 8-14 to 8-15 (Revised EIS).

²²⁶⁸ Ex. EERA-42 at 8-15 (Revised EIS).

²²⁶⁹ *Id.*

1062. According to Applicant's land services manager, Mr. McKay, Applicant has the general right, under its Existing Line 3 private easements, to remove and replace Existing Line 3.²²⁷⁰ A review of a small sample of original easements indicates that "renewal" and "removal" of the pipeline are permitted under those original documents.²²⁷¹ These original easements do not allow abandonment of the pipeline or "idling in place."²²⁷²

1063. In its briefing, Applicant makes an assertion, unsupported by the cited case law, that a condition requiring Applicant to remove Existing Line 3 would violate its property rights with respect to private property.²²⁷³ The ALJ finds this statement is unsupported by the facts in the record or in law. Conditioning installation and operation of a new crude oil pipeline on the removal of a decaying line does not negate the easement rights that Applicant has purchased from private landowners. Applicant would retain the easement rights that it purchased from private landowners, but it would be required to remove the infrastructure located within the easements due to significant safety, contamination, and public nuisance risks that an abandoned line presents to the state and its landowners. (Notably, this issue is remedied by in-trench replacement.)

1064. In short, there is nothing in the original easements that Applicant procured for Existing Line 3 that allows Applicant to simply abandon its line (idle in place, etc.) on private property.²²⁷⁴ If Applicant has obtained newer easements for Line 3, which do not appear in the record, those easements would likely be subject to Minn. Stat. § 216G.09 (2017), which provides that the easements revert to the landowners if a pipeline "ceases operations" for more than five years.

1065. In contrast, the **new** easements that Applicant has been obtaining along the APR, allow Applicant to "remove," "replace," "relocate," and "*idle in place*" the new line.²²⁷⁵ Consequently, these new easements give Applicant the right to: (1) remove and replace a line; as well as, (2) forever abandon the new line on these landowners' properties.²²⁷⁶ It is, therefore, apparent that Applicant intends to abandon a new Line 3, just as it seeks

²²⁷⁰ Evid. Hrg. Tr. Vol. 3B at 23, 25 (McKay).

²²⁷¹ Exs. DY-16 (Dyrdal Easement); DY-17 (Dyrdal Easement); P-13 (Peterson Easements). If other forms of easements for Existing Line 3 exist, Applicant has not included them in the record.

²²⁷² Exs. DY-16 (Dyrdal Easement); DY-17 (Dyrdal Easement); P-13 (Peterson Easements).

²²⁷³ Applicant's Initial Post-Hearing Br. (Jan. 23, 2018) (eDocket No. 20181-139252-03 (CN)), - Applicant cites to *Lindberg v. Fasching*, 667 N.W.2d 481 (Minn. Ct. App. 2003) and *Richards Asphalt Co. v. Bunge Corp.*, 399 N.W.2d 188 (Minn. Ct. App. 1987) in support of its argument. The ALJ notes that both of these cases address whether an easement holder had abandoned an easement. Neither of these cases would prohibit the Commission from imposing a condition to remove Existing Line 3. As set forth above, a condition of removal would leave intact Applicant's easement rights. It would simply require removal of the infrastructure so as to prevent a public nuisance or danger. Accordingly, Applicant's property rights (i.e., the easements) would remain intact.

²²⁷⁴ See Exs. DY-16 (Dyrdal Easement); DY-17 (Dyrdal Easement); P-13 (Peterson Easements).

²²⁷⁵ Ex. HTE-5 (Easement); Ex. HTE-6 (Easement); Ex. EN-6 (McKay Direct) at Sched. 3 (Template Easement) (emphasis added).

²²⁷⁶ Ex. EN-6 (McKay Direct) at Sched. 3 (Template Easement); Ex. HTE-5 (Ladd Easement); Ex. HTE-6 (Ladd Easement).

to do with the old one.²²⁷⁷ These easements give Applicant a stronger argument in the future to prevent the Commission from taking action to require removal.

1066. The possibilities for replacement or abandonment in the tribal easements are less clear. The Fond du Lac Settlement Agreement permits “pipe replacement if required for safe and reliable operations,” but expressly prohibits construction of any new or additional pipelines without a separate agreement.²²⁷⁸ Because the Project proposes 36-inch pipe (instead of 34-inch pipe), it is likely that a replacement would be considered a “new pipeline.”

1067. In addition, the FDL Easement permits only “construction, operation, and maintenance” of Lines 13 and 67; and “continued operation and maintenance” of Lines 1, 2, and 3.²²⁷⁹ The FDL Easement, however, is silent as to replacement of one of those lines.

1068. Neither the Leech Lake Settlement Agreement nor LL Easement address replacement.²²⁸⁰ The LL Easement is identical to the FDL Easement in terms of effect.

1069. With respect to removal, the LL Easement and FDL Easement require that Applicant “restore the land to its original condition, as far as reasonably possible, upon termination or revocation of the easement for any reason” at Applicant’s sole cost.²²⁸¹ The easements further provide that if the easement is not used for the purpose specified in the easement (i.e., the construction, operation, and maintenance of the pipeline), the BIA may terminate the easements.²²⁸² The BIA may terminate the easements for three reasons: (1) failure to comply with terms or conditions of the easement; (2) non-use of the right-of-way for any consecutive two-year period (for the purpose for which the easement was granted); or (3) abandonment of the right-of-way, as determined by the BIA.²²⁸³

1070. Here, the continued external “monitoring” of Line 3 could be argued to be “continued maintenance” of the line.²²⁸⁴ In addition, Applicant could argue that because five other lines continue to operate in the same corridor, the right-of-way is not being abandoned even if one of the lines is being abandoned.²²⁸⁵ The argument follows, that right-of-way established in the easement is for all six pipelines, not each line.²²⁸⁶

1071. Regardless, the wording of the easements makes it possible that, if Existing Line 3 is abandoned, the BIA could attempt to terminate the easements with respect to

²²⁷⁷ Ex. EN-6 (McKay Direct) at Sched. 3 (Template Easement); Ex. HTE-5 (Ladd Easement); Ex. HTE-6 (Ladd Easement).

²²⁷⁸ Ex. FDL-9 (FDL Settlement Agreement).

²²⁷⁹ Ex. FDL-1 (FDL Easement).

²²⁸⁰ Ex. LL-1 (LL Easement); Ex. LL-3 (LL Settlement Agreement).

²²⁸¹ Ex. LL-1 (LL Easement); Ex. FDL-1 (FDL Easement).

²²⁸² Ex. LL-1 (LL Easement); Ex. FDL-1 (FDL Easement).

²²⁸³ Ex. LL-1 (LL Easement); Ex. FDL-1 (FDL Easement).

²²⁸⁴ This is where Applicant’s citations to *Lindberg*, 667 N.W.2d 481, and *Richards Asphalt*, 399 N.W.2d 188 would be more applicable.

²²⁸⁵ *Id.*

²²⁸⁶ See Ex. LL-1 (LL Easement); Ex. FDL-1 (FDL Easement).

Existing Line 3 prior to 2029; declare Existing Line 3 and the right-of-way for that line abandoned; and demand removal of the line and restoration of the property.²²⁸⁷ In that case, Applicant could be required to remove the abandoned line from the Reservations irrespective of any permit condition set by the Commission.

1072. While it is true that Leech Lake has expressed that it will not approve a new Line 3 through its Reservation;²²⁸⁸ and while it is also true that the Band remains a sovereign nation capable of withholding consent for a new easement,²²⁸⁹ the fact remains that **six** of Enbridge's pipelines currently pass through the Leech Lake and Fond du Lac Reservations – **and will continue to exist and operate on the Reservations until 2029.**²²⁹⁰ Thus, prior to 2029, Applicant will need to negotiate with these Tribes for new easements if it intends to keep its Mainline operational in Minnesota, in its current location. Otherwise, Applicant will need to either: (1) re-route the Mainline to avoid the two reservations; (2) relocate the lines to a new corridor in Minnesota (for example, in the new corridor Applicant seeks to open in this case); or (3) discontinue the Mainline System through Minnesota (an unlikely possibility).²²⁹¹

1073. It is, therefore, not unreasonable that Applicant should include, in its negotiations with the Tribes, the in-trench replacement of Line 3. An approval of in-trench replacement would simply accelerate the timeframe for these inevitable negotiations. In-trench replacement also forecloses the possibility of a new corridor through Minnesota in which to relocate those six lines if negotiations with the Tribes are unsuccessful.

1074. Ultimately, abandonment of Existing Line 3 is driven, in large part, by cost to Applicant. According to Applicant, the cost to remove Existing Line 3 is approximately \$855 per foot,²²⁹² totaling approximately \$1.28 billion dollars.²²⁹³ This amount does not, however, deduct the value of scrap metal recovered from the line, which would offset the costs by \$19 million.²²⁹⁴

1075. In contrast, the cost to decommission and abandon the line is \$85 million (plus \$100,000 a year for monitoring).²²⁹⁵ Thus, abandonment is substantially less expensive for Applicant and involves less effort and risk. Nonetheless, according to Mr. Johnston, Applicant has sufficient financial resources to remove Existing Line 3, if required as part of a CN or RP.²²⁹⁶

1076. As set forth in the financial assurances section, due to the cost of decommissioning or removing a pipeline, an abandoned line is considered a liability, not

²²⁸⁷ Ex. LL-1 (LL Easement); Ex. FDL-1 (FDL Easement).

²²⁸⁸ Ex. LL-4 (Official Statement); Ex. LL-10 (LL Resolution No. LD2018-073); Evid. Hrg. Tr. Vol. 10A at 84-86 (Brown).

²²⁸⁹ Ex. EERA-29 at 9-1 to 9-2 (FEIS).

²²⁹⁰ See Ex. LL-1 (LL Easement); Ex. FDL-1 (FDL Easement).

²²⁹¹ See Ex. LL-1 (LL Easement); Ex. FDL-1 (FDL Easement).

²²⁹² Evid. Hrg. Tr. Vol. 6A at 125 (Johnston).

²²⁹³ Ex. EERA-42 at 8-13 (Revised EIS).

²²⁹⁴ Ex. EERA-42 at 8-15 (Revised EIS).

²²⁹⁵ Ex. EERA-42 at 8-11 (Revised EIS).

²²⁹⁶ Evid. Hrg. Tr. Vol. 6A at 123-124 (Johnston).

an asset, to Applicant.²²⁹⁷ This is because the “salvage value” of the pipe is eclipsed by the cost of removal or decommissioning of the line.²²⁹⁸ In other words, while in-ground and operating, a pipeline has an asset “book value” for accounting purposes – it is a functioning corporate asset, generating income.²²⁹⁹ However, once the pipeline is decommissioned and taken out of service, the line becomes a liability to the company due to the cost to decommission or remove the pipe in relation to the re-sale value of the salvaged material.²³⁰⁰ (The same could be argued with respect to the liability for the state should Applicant cease to exist.) Therefore, any way that the pipeline can be disposed of without the cost of removal is a benefit for Applicant. The Commission must consider, however, the burden to Minnesota and its landowners, who will have to live with a foreign corporation’s discarded infrastructure for hundreds, if not thousands, of years into the future.²³⁰¹

1077. Removal of Existing Line 3 is generally the reverse of constructing a pipeline, and would thus have economic benefits to Minnesota similar to construction of a new line.²³⁰² According to the EIS, removal of Existing Line 3 would “create approximately half as many jobs as construction of a new line.”²³⁰³ In other words, removal of the line would create 50 percent more jobs than construction and abandonment would create.²³⁰⁴ It follows that removal or in-trench replacement would also create the corresponding indirect and induced economic benefits to the state to which Dr. Lichty testified.²³⁰⁵ It is thus curious why the intervening unions have not actively supported removal and in-trench replacement, which significantly increase the number of jobs and economic benefits for their members. The same can be said for the many communities, individuals, and, especially, politicians who tout the economic benefits of this Project for Minnesota. Perhaps a different motivation for their support exists.

1078. As Laborers’ Council own witness, Mr. Whiteford, testified, removal of Line 3 “would create lots of jobs” for his union members.²³⁰⁶ As between construction and removal of a pipeline, Mr. Whiteford testified, “...we would love to do the work either way. We would love to install the pipeline, we would love to take the old one out....”²³⁰⁷ Given Mr. Whiteford’s testimony, and the job growth and other economic benefits of removal, it is apparent that the unions should support a condition of removal. After all, it cannot be

²²⁹⁷ Evid. Hrg. Tr. Vol. 6B at 30-31 (Johnston).

²²⁹⁸ Evid. Hrg. Tr. Vol. 6B at 31 (Johnston).

²²⁹⁹ “Book value” is the amount paid, less depreciation. Evid. Hrg. Tr. Vol. 6B at 11 (Johnston).

²³⁰⁰ Evid. Hrg. Tr. Vol. 6B at 31 (Johnston).

²³⁰¹ Evid. Hrg. Tr. Vol. 2A at 63-64; Vol. 2B at 22-23 (Simonson). (Q: “So thousands of years from today, that pipe will still be there in the ground; is that what Enbridge is proposing?” A: “That’s what the study shows.”)

²³⁰² Ex. EERA-42 at 8-11 (Revised EIS).

²³⁰³ Ex. EERA-42 at 8-13 (Revised EIS).

²³⁰⁴ *Id.*

²³⁰⁵ See generally, Ex. EN-11 (Lichty Direct).

²³⁰⁶ Evid. Hrg. Tr. Vol. 5A at 66 (Whiteford).

²³⁰⁷ Evid. Hrg. Tr. Vol. 5A at 66 (Whiteford).

credibly disputed that the economic benefits of the Project are substantially greater for construction coupled with removal, such as provided by in-trench replacement.

1079. Finally, the question remains as to how many other hundreds of miles of pipeline Applicant will seek to abandon in Minnesota in the future. This is particularly true considering: (1) the advanced age of several Mainline pipelines (e.g., Lines 1, 2, and 4);²³⁰⁸ (2) the difficulty that Applicant may face in renegotiating easements across the Leech Lake and Fond du Lac Reservations in 2029;²³⁰⁹ and (3) the uncertain future of the fossil fuel industry in an increasingly carbon-conscious world.²³¹⁰

1080. Also, the Commission should carefully consider what will happen to a new Line 3 when it reaches the end of its economic utility to Applicant. According to Applicant's easements, which have been drafted to specifically allow "idling in place," it is clear that Applicant intends to abandon its new pipeline within the new corridor it seeks to create.²³¹¹ If Applicant is allowed to abandon Existing Line 3 and open a new corridor, it will likely leave, in the future, two corridors in the state with hundreds of miles of abandoned steel pipeline.

1081. In sum, as the EIS noted, the negative impacts of removal are only temporary and in the near term (such as, the risks of removal within an active corridor and the construction disturbances of the work).²³¹² Whereas, the impacts of abandonment are predominantly long-term, and include subsidence, corrosion, undiscovered contamination, buoyancy, exposure, future liability for the state should Applicant cease to exist, and permanent nuisances to landowners.²³¹³

C. In-Trench Replacement

1082. Applicant did not fully study the option of in-trench replacement of the line.²³¹⁴ Applicant dismissed this option, in part, because it would require a temporary shut-down of the line and a disruption of service.²³¹⁵ According Mr. Simonson, in-trench replacement would require a temporary shutdown of Existing Line 3 for approximately nine to 12 months.²³¹⁶ No evidence has been presented as to exactly how this temporary shut-down would impact Applicant, its customers, or the state of Minnesota and region.

1083. The oil currently transported through Existing Line 3 is predominantly light crude, which is not in apportionment.²³¹⁷ Minnesota refineries receive only a small portion

²³⁰⁸ Evid. Hrg. Tr. Vol. 2A at 106 (Simonson).

²³⁰⁹ See e.g., Ex. LL-4 (LL Official Statement); Ex. LL-10 (LL Resolution LD2018-073).

²³¹⁰ See Ex. YC-1 at 6 (Swift Direct).

²³¹¹ Ex. EN-6 (McKay Direct) at Sched. 3 (Template Easement).

²³¹² Ex. EERA-42 at 8-15 to 8-16 (Revised EIS).

²³¹³ *Id.*

²³¹⁴ Evid. Hrg. Tr. Vol. 1A at 74 (Kennett).

²³¹⁵ Evid. Hrg. Tr. Vol. 1A at 71, 73-74 (Kennett).

²³¹⁶ Evid. Hrg. Vol. 2B at 27 (Simonson).

²³¹⁷ Ex. EN-19 at 5, 8, 10 (Glanzer Direct).

of the total crude transported on the Mainline System.²³¹⁸ In addition, most of what is delivered to Minnesota refineries is heavy crude.²³¹⁹ As the DOC-DER noted, because Existing Line 3 only transports light crude, it does not significantly contribute to the Minnesota refineries' demands for crude oil.²³²⁰ Thus, the claim that Minnesota refineries will suffer harm if Existing Line 3²³²¹ is *temporarily* removed from service *temporarily* while a replacement line is being constructed, is without merit.

1084. Moreover, Applicant's expert witness testified that the Mainline System currently has 180 kbpd of unused capacity for light crude.²³²² Therefore, that extra capacity could presumably be used to transport the light crude currently transported by Existing Line 3 during the short period of time (less than one year) that the new line is under construction.

1085. In addition, evidence has been presented that Enbridge may have the ability to access some additional capacity (at least temporarily) through certain system changes and upgrades, as described to investors in 2017.²³²³ Considering these options were articulated to investors, they are considered reliable. These upgrades and changes include the reversal of Line 13, restoration of Line 4 capacity, system station upgrades, and system DRA optimization.²³²⁴ While Applicant contends that these options are not viable replacements for a new Line 3, perhaps one or a combination of them could be used temporarily to redistribute the 390 kbpd of light crude currently transported on Existing Line 3 until a replacement line is completed. For example, Applicant claims that reversal of Line 13 (the diluent line) is not possible because of existing third-party contracts for that line through 2040.²³²⁵ However, Applicant's easements through the Leech Lake and Fond du Lac Reservations expire in 2029. Therefore, contracts for Line 13 extending to 2040 presumably contain provisions for early termination based upon the possibility that tribal easements would not be renewed. Also, Applicant states that Line 13 could only be used for light crude, which is what Existing Line 13 is currently transporting.²³²⁶

1086. Applicant's second biggest argument against removal is the environmental disturbances of removal coupled with new construction. Applicant states that removal will have construction impacts on 282 miles of land, in addition to the construction impacts of a new line in a separate corridor.²³²⁷ The APR contemplates 340 miles of new

²³¹⁸ Ex. EN-19 at Sched. 6 (TRADE SECRET). See also, Ex. EN-1 at 8-13 (CN Application) (showing the capacity of Minnesota refineries); Ex. EN-24 at 15 (Eberth Direct); Evid. Hrg. Tr. 9A at 100 (Shahady). (testifying to the amount of oil transported on the Mainline System each day).

²³¹⁹ Ex. DER-1 at 75 (McConnell Direct).

²³²⁰ Ex. DER-1 at 75 (McConnell Direct); Ex. DER-3 at 75 (McConnell Direct) – HSTS.

²³²¹ Ex. EN-24 at 24-25 (Eberth Direct).

²³²² Ex. EN-15, Sched. 2 at 88 (Earnest Direct); EN-86 (Earnest's Crude Oil Supply Scenarios). Mr. Earnest's utilization analysis assumes 180 kbpd of unused capacity on the Mainline for light crude.

²³²³ Ex. HTE-2 at 32-46 (Stockman Direct).

²³²⁴ *Id.*

²³²⁵ Ex. EN-39 at 7-8 (Fleeton Rebuttal); Ex. EN-38 at 16-17 (Earnest Rebuttal).

²³²⁶ Ex. EN-39 at 7-8 (Fleeton Rebuttal).

²³²⁷ Ex. EN-46 at 23 (Bergland Rebuttal).

construction impacts.²³²⁸ These additional construction impacts are negated by in-trench replacement. With in-trench replacement, the same areas impacted by removal would be impacted by construction. There would be no double impacts.

1087. Moreover, other than temporary construction impacts of removal and construction, in-trench replacement would involve no new impacts to the environment, like a new corridor would impose. There are currently at least six Enbridge pipelines running through the Mainline corridor.²³²⁹ Five of these will continue to exist regardless of where a new Line 3 is located.²³³⁰

1088. The waterbodies and land currently crossed by Existing Line 3 will continue to be crossed by at least five other oil pipelines in the Mainline corridor regardless of whether Existing Line 3 is abandoned or removed.²³³¹ Accordingly, the impacts and risks to this area already exist as a result of the continued operation of the other Mainline pipelines.²³³² In-trench replacement assures that the risks and impacts of Line 3 remain in the same, existing corridor as the other Enbridge pipelines. In turn, it prevents the opening of a new corridor and the new construction impacts and environmental risks associated with a new corridor.

1089. In sum, the ALJ finds that the benefits of in-trench replacement are set forth above and include:

- the prevention of creating a new pipeline corridor through Minnesota and the accompanying new impacts and risks of such a new corridor;²³³³
- the avoidance of creating a new pipeline corridor that can later be used to relocate or install new pipelines before or after 2029, especially if negotiations with the two Indian Tribes become too expensive or burdensome;²³³⁴
- the prevention of 282 miles of steel infrastructure being forever abandoned in-ground, and the associated risks and issues associated with such abandonment for Minnesota and landowners (i.e., subsidence, buoyancy, exposure, contamination risks, etc.);²³³⁵
- the anticipation of Applicant seeking abandonment of its other pipelines in Minnesota when those lines exhaust their economic utility to Applicant;

²³²⁸ *Id.*

²³²⁹ Ex. LL-1 (LL Easement); Ex. FDL-1 (FDL Easement).

²³³⁰ Ex. LL-1 (LL Easement); Ex. FDL-1 (FDL Easement).

²³³¹ Evid. Hrg. Tr. Vol. 2A at 79-80 (Simonson).

²³³² *Id.* at 80.

²³³³ Ex. EERA-42 at 12-39 (Revised EIS)

²³³⁴ See Ex. LL-1 (LL Easement); Ex. LL-3 (LL Settlement Agreement); Ex. FDL-1 (FDL Easement); and Ex. FDL 9 (FDL Settlement Agreement).

²³³⁵ See Ex. EERA-42 at 8-3 to 8-11 (Revised EIS).

- the avoidance of setting a precedent in Minnesota of allowing pipeline abandonment (when only 17 non-continuous miles of deactivated line currently exist in the state);²³³⁶
- the efficient use of an existing pipeline corridor that has at least five other Enbridge pipelines, and containment of the environmental risks within one existing corridor (as opposed to opening a new corridor);²³³⁷ and
- the 50 percent increase in economic benefits to Minnesota that removal would offer over construction alone.²³³⁸

VIII. ROUTE PERMIT

A. Rule Criteria

1090. A pipeline used to transport crude oil with a pipe diameter of six inches or more cannot be constructed in Minnesota without a pipeline routing permit issued by the Commission.²³³⁹ Moreover, a pipeline requiring a permit may only be constructed on a route designated by the Commission.²³⁴⁰

1091. Minnesota Statutes chapter 216G governs the routing of crude oil pipelines. Under this statute, the Commission is required to adopt rules governing the routing of pipelines.²³⁴¹ The routing rules do not apply to a replacement of an existing pipeline within the existing right-of-way.²³⁴² Nor do the rules apply to the construction of a new pipeline in a right-of-way in which the pipeline has been constructed before July 1, 1988, unless the Commission determines that there is a significant chance of an adverse effect on the environment or that there has been a significant change in land use or population density in or near the right-of-way since the first construction of pipeline in the right-of-way, or since the Commission first approved the right-of-way.²³⁴³

1092. In compliance with Minn. Stat. § 216G.02, subd. 3(a), the Commission promulgated Minnesota Rules chapter 7852, which establishes the detailed requirements that an applicant must meet to receive a Pipeline Routing Permit.²³⁴⁴ These rules include the criteria that the Commission must apply when considering the issuance of a route permit to a pipeline.

1093. In determining the route for a proposed pipeline, the Commission must consider the characteristics, the potential impacts, and methods to minimize or mitigate

²³³⁶ Evid. Hrg. Tr. Vol. 2A at 42; Vol. 2B at 31 (Simonson).

²³³⁷ Evid. Hrg. Tr. Vol. 2A at 79-80 (Simonson).

²³³⁸ Ex. EERA-42 at 8-13 (Revised EIS).

²³³⁹ Minn. Stat. § 216G.01, subd. 3; 216G.02, subd. 1, 2 (2017).

²³⁴⁰ Minn. Stat. § 216G.02, subd. 2.

²³⁴¹ Minn. Stat. § 216G.02, subd. 3(a).

²³⁴² Minn. Stat. § 216G.02, subd. 3(c).

²³⁴³ *Id.*

²³⁴⁴ Minn. R. ch. 7852 (2017).

the potential impacts of all proposed routes so that it may select a route that minimizes human and environmental impacts.²³⁴⁵

1094. In selecting a route for designation and issuance of a permit, the Commission shall consider the impact that the pipeline will have on the following:

- human settlement, existence and density of populated areas, existing and planned future use, and management areas;
- the natural environment, public and designated lands, including, but not limited to, natural areas, wildlife habitat, water and recreational lands;
- lands of historical, archeological, and culture significance;
- economies within the route, including agricultural, commercial or industrial, forestry, recreational and mining operations;
- pipeline cost and accessibility;
- use of existing rights-of-way and right-of-way sharing or paralleling;
- natural resources and features;
- the extent to which human or environmental effects are subject to mitigation by regulatory control and by application of the permit conditions contained in Part 7852.3400 for pipeline right-of-way preparation, construction, clean up, and restoration practices;
- cumulative potential effects of related or anticipated future pipeline construction; and
- the relevant applicable policies, rules, and regulations of other state and federal agencies, and local government land use laws including ordinances adopted under Minn. Stat. § 299J.05, relating to the location, design, construction, or operation of the proposed pipeline and associated facilities.²³⁴⁶

Each criterion is addressed in the sections that follow below. (Where applicable, the extent to which impacts are subject to mitigation by regulatory controls or application of permit conditions, is noted herein and will not be addressed as a separate factor.)

B. Description of APR and Route Alternatives

1095. In this case, the DOC-EERA identified the Applicant's Preferred Route (APR) and four route alternatives for examination and study in an Environmental Impact

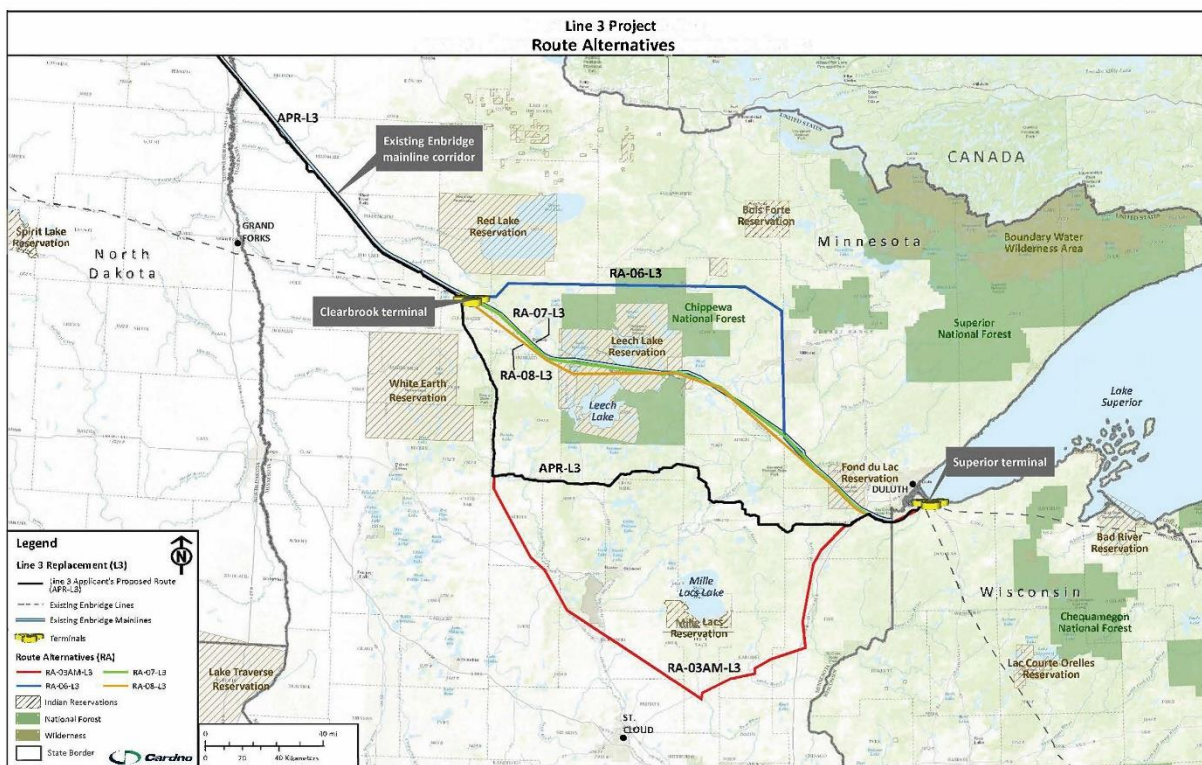
²³⁴⁵ Minn. R. 7852.1900, subp. 2 (2017).

²³⁴⁶ Minn. R. 7852.1900, subps. 3 (A) – (J) (2017).

Statement (EIS).²³⁴⁷ As set forth above, the route alternatives included: RA-03AM, RA-06, RA-07, and RA-08.

1096. The DOC-EERA and Commission also identified 24 route segment alternatives (RSAs).²³⁴⁸ However, due to the ALJ's recommendation in this case, the ALJ does not provide any recommendations with respect to RSAs.

1097. The APR and all route alternatives share the existing Mainline System corridor between Neche, North Dakota, and Clearbrook, Minnesota. However, from Clearbrook to the Wisconsin border, the route alternatives diverge from the APR.²³⁴⁹ The APR and the four route alternatives are illustrated in the map below:²³⁵⁰



1098. The APR is approximately 340 miles long.²³⁵¹ The APR, like all route alternatives, follows the existing Enbridge Mainline corridor from the North Dakota border to Clearbrook, Minnesota (approximately 109 miles).²³⁵² From Clearbrook, the APR follows the Minnesota Pipeline (MinnCan) corridor to Park Rapids (approximately 65.5

²³⁴⁷ Ex. EERA-13 (Proposed Final Scoping Decision Document); Ex. EERA-14 (Scoping Summary Report); Ex. EERA-15 (Alternatives Screening Report); Ex. EERA-16 (Final Scoping Decision Document).

²³⁴⁸ Ex EERA-42 at 4-29 (Revised EIS).

²³⁴⁹ Ex. EERA-42 at ES-9, Figure ES-3 (Revised EIS)

²³⁵⁰ EX. EERA-42 at ES-9, Figure ES-3 (Revised EIS).

²³⁵¹ Ex EERA-42 at 6-2 (Revised EIS).

²³⁵² *Id.*

miles).²³⁵³ At Park Rapids, the APR follows a High Voltage Transmission Line (HTVL) corridor for approximately 73 miles to eastern Carlton County,²³⁵⁴ where it rejoins the Enbridge Mainline corridor (for approximately 10 miles),²³⁵⁵ and exits into Wisconsin, terminating in Superior.²³⁵⁶ Based upon this mileage, the APR creates a new *pipeline* corridor for 46 percent of its length.²³⁵⁷

1099. RA-03AM was proposed by the MPCA to modify a route alternative proposed by the MPCA in the Sandpiper matter.²³⁵⁸ RA-03AM follows the existing Mainline corridor from the North Dakota border to Clearbrook (110 miles).²³⁵⁹ From Clearbrook, the route follows the APR through Park Rapids, and then deviates from the APR in the southwest corner of Hubbard County.²³⁶⁰ At the southwest corner of Hubbard County, RA-03AM travels south for 112 miles, following the existing Viking Natural Gas Pipeline to Chisago County.²³⁶¹ It then turns northeast for 39 miles, paralleling Highway 23.²³⁶² Near Hinckley, RA-03AM turns north and follows an existing utility corridor for 48 miles until it reconnects with the Mainline corridor west of Interstate 35 in Carlton County.²³⁶³ Like the APR, RA-03AM travels 10 miles along the Mainline corridor through Carlton County, where it exits into Wisconsin.²³⁶⁴ RA-03AM is the longest alternative at approximately 395 miles, making it longer than the APR by about 55 miles.²³⁶⁵

1100. RA-06 was proposed by a private party during the scoping process.²³⁶⁶ RA-06 follows the existing Mainline corridor from the North Dakota border to Clearbrook (110 miles).²³⁶⁷ From Clearbrook, RA-06 travels north and east across Beltrami and Itasca Counties.²³⁶⁸ At the eastern border of Itasca County, the route turns south, running along the eastern border of Itasca County, where it rejoins the Mainline corridor in eastern Carlton County.²³⁶⁹ Like the APR and RA-03AM, RA-06 travels 10 miles along the

²³⁵³ Ex. EN-22 at 9 (Simonson Direct).

²³⁵⁴ *Id.*

²³⁵⁵ Ex. EERA-42 at 6-2 (Revised EIS).

²³⁵⁶ Ex. EN-22 at 9 (Simonson Direct).

²³⁵⁷ Based upon the mileage set forth above, the APR follows existing pipeline corridors for approximately 184.5 miles of its 340-mile length, but opens a new pipeline corridor for the remainder of its length (approximately 46 percent of the route).

²³⁵⁸ Ex. EN-22 (Simonson Direct) Sched. 7 at 24 (Applicant's Alternatives Analysis).

²³⁵⁹ Ex. EERA-42 at 6-2 (Revised EIS).

²³⁶⁰ Ex. EN-22, Sched. 7 at 18 (Simonson Direct).

²³⁶¹ Ex. EN-22, Sched. 7 at 18 (Simonson Direct).

²³⁶² Ex. EN-22, Sched. 7 at 18 (Simonson Direct).

²³⁶³ Ex. EN-22, Sched. 7 at 18 (Simonson Direct).

²³⁶⁴ Ex. EERA-42 at 6-2 (Revised EIS).

²³⁶⁵ Ex. EERA-42 at 6-2 (Revised EIS).

²³⁶⁶ Ex. EN-22, Sched. 7 at 18 (Simonson Direct).

²³⁶⁷ Ex. EERA-42 at 6-2 (Revised EIS).

²³⁶⁸ Ex. EN-22, Sched. 7 at 24 (Simonson Direct); Ex. EERA-15 at A-5 (Alternatives Screening Report).

²³⁶⁹ Ex. EN-22, Sched. 7 at 24 (Simonson Direct); Ex. EERA-15 at A-5 (Alternatives Screening Report).

Mainline corridor through Carlton County until it exits Minnesota at the Wisconsin border.²³⁷⁰ RA-06 is approximately 317 miles long, slightly shorter than the APR.²³⁷¹

1101. RA-07 was proposed by a private commenter during the scoping process.²³⁷² RA-07 represents the “in-trench replacement” option in which Existing Line 3 would be removed and the new pipeline installed in the same trench, for most of the route.²³⁷³ RA-07 follows the same path as the Existing Line 3 from the North Dakota border to the Clearbrook terminal.²³⁷⁴ From there, the route would follow the route of Existing Line 3 in the Mainline corridor and end in Superior, Wisconsin.²³⁷⁵ The length of RA-07 is about the same as the Existing Line 3 (approximately 287 miles),²³⁷⁶ making it shorter than the APR.²³⁷⁷ In addition, RA-07 would require no new pipeline corridor in Minnesota. The entire length of RA-07 follows the existing Mainline corridor in Minnesota.²³⁷⁸

1102. RA-08 was proposed by the MDNR to follow a Great Lakes Gas Transmission Company pipeline corridor.²³⁷⁹ RA-08 follows the same path as the APR and other alternatives from North Dakota to the Clearbrook terminal.²³⁸⁰ At Clearbrook, the route deviates such that it is located south and parallel to Highway 2 along the Great Lakes Gas Transmission Company pipeline corridor.²³⁸¹ While RA-08 runs along and close to RA-7, it was repositioned to avoid certain impacts in the area of the Chippewa National Forest and the Leech Lake Reservation.²³⁸² RA-08 exits Minnesota in Carlton County at the same location as APR.²³⁸³ RA-08 is 285 miles long, making it the shortest of the route options, just slightly (2 miles) shorter than RA-07.²³⁸⁴

1103. Both the Applicant and the DOC-EERA undertook a review of the APR and the route alternatives. The DOC-EERA’s analysis is set forth in the Revised EIS in this case (Ex. EERA-42). Applicant’s analysis is set forth in the “Enbridge Alternatives Analysis” report (Ex. EN-22, Sched. 7).

1104. As set forth above, Minn. R. 7852.1900 identifies 10 categories of impacts to be considered. The APR and the four route alternatives are evaluated, based upon the rule criteria, below.

²³⁷⁰ Ex. EERA-42 at 6-2 (Revised EIS).

²³⁷¹ Ex. EERA-15 at 14 (Final Scoping Decision Document).

²³⁷² Ex. EERA-15 at A-5 (Alternatives Screening Report).

²³⁷³ Ex. EERA-42 at 6-16 (Revised EIS).

²³⁷⁴ Ex. EN-22, Sched. 7 at 30 (Simonson Direct); Ex. EERA-15 at A-5 (Alternatives Screening Report).

²³⁷⁵ Ex. EN-22, Sched. 7 at 30 (Simonson Direct).

²³⁷⁶ Ex. EERA-42 at 6-2 (Revised EIS).

²³⁷⁷ Ex. EN-22, Sched. 7 at 30 (Simonson Direct).

²³⁷⁸ Ex. EERA-42 at 6-16 to 6-17 (Revised EIS).

²³⁷⁹ Ex. EN-22, Sched. 7 at 38 (Simonson Direct).

²³⁸⁰ Ex. EN-22, Sched. 7 at 38 (Simonson Direct); Ex. EERA-15 at A-5 (Alternatives Screening Report).

²³⁸¹ Ex. EN-22, Sched. 7 at 38 (Simonson Direct).

²³⁸² Ex. EERA-15 at A-5 (Alternatives Screening Report).

²³⁸³ Ex. EN-22, Sched. 7 at 38 (Simonson Direct).

²³⁸⁴ Ex. EERA-42 at 6-2 (Revised EIS).

C. Impacts to Human Settlement

1105. With respect to the impacts to human settlement, the EIS evaluated planning and zoning issues; noise and vibration; aesthetics and visual resources; housing; and transportation and public services.²³⁸⁵

i. Planning and Zoning.

1106. The first consideration with respect to human settlement is planning and zoning considerations.

1107. Operating a pipeline is not a use that is permitted as a matter of right in any of zones that would be crossed by a pipeline.²³⁸⁶ That being said, according to Minn. Stat. § 216G.02, subd. 4, “[t]he pipeline routing permit supersedes and preempts all zoning, building, or land use rules, regulations, or ordinances promulgated by regional, county, local, and special purpose governments.” Nonetheless, the EIS evaluated how the Project would comply with local laws, plans, and ordinances with respect to the various route options. The EIS focused on the various routing options’ impacts on shoreland, floodplain, and watershed districts; as well as the predominant land use currently permitted along the various routes.

1108. With respect to shoreland, floodplain, and watershed districts, the EIS found that the impacts for all routes in shoreland areas would be minor because of the small amount of land along waterbodies that would be affected; and vegetation would be planted over the pipeline route. The modest impacts would, however, be permanent because trees and woody vegetation would not be allowed to regrow in the right-of-way. Because the pipeline would be buried underground and the ground cover conditions would be restored, the Project would be compatible with floodplain overlay requirements. Moreover, the buried pipeline would not be an obstruction in the floodplain and would not affect the water channel or flood levels.²³⁸⁷

1109. That being said, the APR crosses the most miles of shoreland (7 miles), and RA-08 crosses the least (0.6 miles). RA-06 crosses the most miles of watershed districts (approximately 52 miles), and RA-08 crosses the least (approximately 13 miles). The APR, however, crosses 25 miles of watershed districts, more than RA-07 and RA-08.²³⁸⁸

1110. With respect to construction of the pipeline, the APR would have the most impact on forested land (1,447 acres), significantly more than RA-08 (773 acres). RA-03 would have the most impact on agricultural land (1,611 acres) and developed land (386 acres). RA-07 has the most open land (692 acres), but, during construction, would impact

²³⁸⁵ Ex. EERA-42 at 6-1 to 6-168 (Revised EIS).

²³⁸⁶ Ex. EERA-42 at 6-53 (Revised EIS).

²³⁸⁷ Ex. EERA-42 at 6-53 (Revised EIS).

²³⁸⁸ Ex. EERA-42 at 6-53 (Revised EIS).

the most wetlands (1,592 acres). After construction, the impact to wetlands by RA-07 is significantly smaller (390 acres).²³⁸⁹

1111. With respect to operation of the pipeline, APR crosses the largest amount of forested land, a total of 631 acres.²³⁹⁰ The least amount of forested land that would be crossed by a permanent right-of-way occurs with RA-07, a total of 242 acres.²³⁹¹ The remaining three route alternatives (RA-03AM, RA-06, and RA-08) range between approximately 320 to 471 acres of forested land crossed, and would involve new oil pipeline corridors along some portions of their routes.²³⁹² RA-03AM impacts mostly agricultural land (677 acres); and RA-07 would operate in the most open land (194 acres).²³⁹³

1112. According to the EIS:

While agricultural use is typically compatible with the presence of a pipeline, forestry use is not. Forestry would be the most affected of any of the land use designations because some portion of the forested land would be removed for construction and remain cleared along the permanent right-of-way during operations.²³⁹⁴

1113. Construction and operation of the APR would impact the most amount of forested land.²³⁹⁵

ii. Noise and Vibration

1114. The EIS next evaluated the impact of noise and vibration presented by each route option.

1115. The EIS found that construction noise would be temporary and intermittent along all routes. The fewest sensitive receptors for typical construction equipment noise are located within 1,250 feet of the construction work area for RA-06, followed closely by the APR and RA-08. There is a greater number of sensitive receptors potentially affected by construction equipment noise from RA-03AM and RA-07.²³⁹⁶

1116. With implementation of the mitigation methods identified in the EIS, typical construction-related vibration would be minor to negligible for sensitive receptors along any route.²³⁹⁷

²³⁸⁹ Ex. EERA-42 at Table 6.2.1-11 (Revised EIS).

²³⁹⁰ *Id.*

²³⁹¹ *Id.*

²³⁹² *Id.*

²³⁹³ *Id.* at 6-53, Table 6.2.1-11.

²³⁹⁴ Ex. EERA-42 at 6-53.

²³⁹⁵ *Id.* at Table 6.2.1-11.

²³⁹⁶ *Id.* at 6-78; Table 6.2.2-10.

²³⁹⁷ *Id.*

1117. Horizontal Directional Drilling (HDD) and blasting locations have not yet been identified for the route alternatives; thus, their associated noise impacts on noise-sensitive receptors cannot be compared with those for APR.²³⁹⁸

1118. Even with implementation of the mitigation measures described in the EIS, it is possible that, for short periods of time, construction noise could exceed Minnesota Noise Standards for some sensitive receptors along all route.²³⁹⁹

1119. Noise from construction for any route would depend on the number, type, and usage of the equipment and its distance to noise-sensitive receptors. The resulting impact would be negligible for those sensitive receptors located far from the noise source; and significant (although intermittent and temporary) for nearby sensitive receptors.²⁴⁰⁰

1120. Because the location of potential new and upgraded pump stations have not been determined for the route alternatives, the impacts on the nearest sensitive receptors cannot be assessed and compared with those of the APR. Nonetheless, the Applicant-proposed measures for the APR could also be implemented for the route alternatives. Consequently, noise from pump station operations, although permanent, is expected to be negligible for all routes. Operation of the pipeline along any route is not expected to result in noise levels above the Minnesota Noise Standards or to affect any noise-sensitive receptor along any route.²⁴⁰¹

1121. In sum, construction noise would be expected along each of the route options but could be mitigated by Applicant. In addition, operation of a pipeline along any of the route options would cause only negligible impacts, and that no route option would be able to avoid these negligible impacts.²⁴⁰²

iii. Aesthetics and Visual Resources

1122. Impacts on aesthetic resources would vary among the routes, both in their magnitude and the duration of the impacts.²⁴⁰³

1123. The EIS concluded that impacts on visual resources along each route option would be minor and short-term, because the regrowth of vegetation would remediate the visual impacts of clearing and grading the pipeline route. Yet, certain areas have more important scenic value and importance. These areas include local residences, scenic byways, and special management areas.²⁴⁰⁴

1124. All of the routes would cross scenic byways multiple times. RA-03AM would cross the most. It would cross three scenic byways and would cross all three of them

²³⁹⁸ *Id.* at 6-78.

²³⁹⁹ *Id.*

²⁴⁰⁰ *Id.*

²⁴⁰¹ *Id.*

²⁴⁰² *Id.* at Table 6.2.2-10.

²⁴⁰³ *Id.* at 6-102; Table 6.2.3-10.

²⁴⁰⁴ *Id.* at 6-102.

twice. RA-03AM would also cross the highest number of features in areas of high visual sensitivity.²⁴⁰⁵

1125. RA-06, although affecting the least amount of forested land compared to the other routes, would still result in comparatively larger impacts to aesthetic resources than the APR. This is because RA-06 is not often co-located with existing rights-of-way and crosses a number of visually sensitive resources. RA-06, however, crosses the fewest number of travel routes, areas with a high visual sensitivity classification, and special management areas.²⁴⁰⁶

1126. RA-03AM would cross more travel routes and areas with a high visual sensitivity classification and scenic byways. Additionally, more residences are located within the construction work area and the permanent right-of-way for RA-03AM.²⁴⁰⁷

1127. Among the alternatives, the APR would cross the highest number of special management areas.²⁴⁰⁸

1128. The impact on residences within the immediate foreground of the construction work area would be similar across the various route alternatives, although the number of residences that would be affected varies. The fewest residences are located within 300 feet of the construction work area along the APR and RA-06, while RA-03AM would run closely to the most residences.²⁴⁰⁹

1129. Generally, construction impacts on visual resources would be temporary to short-term and minor, as impacts would begin during the period of construction and continue until vegetation had regrown. However, because of the proximity of some receptors — especially residences — to active construction in the immediate foreground, impacts during construction could be significant for some observers.²⁴¹⁰

1130. Construction of RA-03AM would affect the greatest amount of agricultural land and open land. In these areas, views of construction equipment and personnel would be visible from longer distances.²⁴¹¹

1131. During operation of the proposed pipeline, above-ground facilities would represent the greatest visual impact on residences. Several residences near the Cromwell and Two Inlets pump stations would have direct views of the pump station sites. Based on the assumptions described in Section 4.3 of the EIS, two more pump stations would be needed for RA-03AM than the APR or other route alternatives. This could result

²⁴⁰⁵ *Id.* at 6-102.

²⁴⁰⁶ *Id.*

²⁴⁰⁷ *Id.*

²⁴⁰⁸ *Id.*

²⁴⁰⁹ *Id.* at Table 6.2.3-10.

²⁴¹⁰ *Id.* at 6-102.

²⁴¹¹ *Id.* at 6-102.

in more residences within view of a pump station along RA-03AM, resulting in permanent impacts to those views.²⁴¹²

1132. In sum, with respect to aesthetics and visual resources, during construction, RA-03AM would have the most impacts. During operation, the APR would have the most impacts due to the high number of acres cleared in forested areas; but RA-03AM would likely have more pump stations, resulting in more permanent visual and aesthetic impacts.²⁴¹³

iv. Housing

1133. The EIS next evaluated the potential impacts of construction and operations on housing availability, residential access and safety, and property values along the routes.

1134. The affected counties along all routes contain sufficient available housing to absorb the non-local, temporary workforce needed for construction of the pipeline. Thus, no route is significantly more advantageous over the others in terms of available housing. For all routes, impacts on housing availability during construction would be minor and temporary. During pipeline operations, there would be no to negligible impact on housing availability for any route option, due to the very small number of jobs created by operation of the pipeline.²⁴¹⁴

1135. Residents within or adjacent to the construction work areas for each route would experience temporary impacts from restricted access and construction safety hazards.²⁴¹⁵

1136. RA-07 would affect the most residences within the construction work area – a total of 40 – while the APR would affect the fewest residences within the construction work area – a total of six.²⁴¹⁶ The APR would also affect also the fewest residences within 50 feet of the construction work area – a total of seven – and, therefore, would result in the fewest impacts to residential access and safety. RA-03AM would affect the most residences within 50 feet of the construction work area – a total of 39.²⁴¹⁷

1137. For homeowners who experience construction-related damages, property values could be affected unless and until repairs return the property to its previous condition. Impacts on property values during construction would be temporary but could be significant for homeowners who are attempting to sell their home during a period of pipeline construction.²⁴¹⁸

²⁴¹² *Id.* at 6-102 to 6-103.

²⁴¹³ *Id.* at Table 6.2.3-10.

²⁴¹⁴ *Id.* at 6-126.

²⁴¹⁵ *Id.*

²⁴¹⁶ *Id.* at Table 6.2.4-6.

²⁴¹⁷ *Id.*

²⁴¹⁸ *Id.* at 6-126 to 6-127.

1138. Operation of the pipeline could result in displacement of residents with homes located within the permanent right-of-way. Homes and associated structures located within the permanent right-of-way would be removed or re-located, or the route centerline would need to be adjusted within broader the 750-foot route width, because no structures are permitted within the permanent pipeline right-of-way.²⁴¹⁹ These impacts would be compensable through eminent domain.

1139. RA-06 represents the largest potential permanent impact on residences, with seven residential structures located within the permanent right-of-way.²⁴²⁰

1140. RA-07 would represent the least impact, as no residences are located within the existing Mainline corridor where RA-07 would run.²⁴²¹

1141. As set forth in Section IV., F. (Easements), Applicant has reached easement agreements with approximately 94 percent of the homeowners along the APR between Clearbrook and Carlton County.²⁴²² While Applicant may have already purchased these easements (notably, a business risk Applicant has taken prior to approval of its APR), no new permanent easements should be required for RA-07, as Applicant already owns easements for the operation a pipeline within this route. According to Applicant, the private easements owned by Applicant for Existing Line 3 allow for the removal and replacement of the pipeline.²⁴²³ Therefore, Applicant should be able to replace Line 3 within RA-07 without the purchase of new permanent easements, making RA-07 significantly less expensive in terms of land acquisition than any other route option.

1142. The EIS asserts that it was unable to conclude whether oil pipelines have negative impacts on adjacent property values.²⁴²⁴ Thus, the hearing record does not permit sturdy estimates of the impacts of pipeline installation and operation on the value of adjacent properties.²⁴²⁵ If some relationship is presumed by the Commission, it follows that the routes closest to the existing Mainline corridor, which was earlier-cleared of such structures, would have the fewest impacts. It is unlikely, therefore, that RA-07 and RA-08 would have significant impacts on existing property values.²⁴²⁶

1143. As set forth in Section VII above, abandonment of Existing Line 3 will have impacts on the landowners who granted easements to Applicant or its predecessor for the construction of that line decades ago. RA-07 contemplates in-trench replacement, thereby avoiding abandonment impacts to landowners (and the state). All other route options would contemplate the possible abandonment of Existing Line 3 and the opening of a new corridor for the new line. This would result in two different Line 3s existing in

²⁴¹⁹ *Id.*

²⁴²⁰ *Id.* at 6-127.

²⁴²¹ *Id.*

²⁴²² Evid. Hrg. Tr. Vol. 3A at 106, 133, Vol. 3B at 66 (McKay).

²⁴²³ Evid. Hrg. Tr. Vol. 3B at 23, 25 (McKay).

²⁴²⁴ Ex. EERA-42 at 6-127 (Revised EIS).

²⁴²⁵ *Id.*

²⁴²⁶ *Id.* at 6-124.

Minnesota – one abandoned underground and one operating in a new location. In this way, RA-07 is superior to all other route options.

1144. In sum, all of the routes provide sufficient housing for workers during construction or operation. With respect to the impacts on landowners along the routes, RA-07 would have the least impacts. There are no residences located within the Mainline corridor where RA-07 would run. In addition, Applicant already owns easements along RA-07 allowing it to remove and replace the existing line. Because RA-07 contemplates in-trench replacement, RA-07 would also avoid the impacts to landowners resulting from abandonment of 282 miles of steel pipeline that will encumber their properties for hundreds, possibly thousands, of years into the future. (See Section VII above).

v. Transportation and Public Services

1145. The EIS concluded that the types of impacts on transportation would be comparable across route options. The primary differences between the route options, however, would be the number of transportation crossings (i.e., of roads, railroads, and utilities) required for each route option.²⁴²⁷

1146. Although impacts on individual unpaved roads are expected to be temporary and minor, the number of roads that are affected varies among the route options. RA-03AM would affect the most roads (a total of 329, with some of those paved); followed by RA-07 (185 total road crossings), the APR (164 total road crossings), RA-08 (162 total crossings), and RA-06 (112 total crossings).²⁴²⁸ Further, traffic impacts would occur along an additional area for RA-03AM because it would require one additional construction work spread between Clearbrook and Carlton County, compared to the four such spreads that are required for each of the other alternatives.²⁴²⁹

1147. All railroads would be crossed using either the guided bore or the HDD method. The use of either method would result in no impacts to the railroad bed or to rail traffic.²⁴³⁰

1148. Although impacts to utilities are not expected, it follows that the greater the number of utilities that are crossed, the greater the potential for accidental damage. RA-03AM would cross the most utilities (106), followed by RA-07 (85), RA-08 (77), APR (67), and RA-06 (51).²⁴³¹

1149. Emergency services would not be affected, regardless of route.²⁴³²

²⁴²⁷ *Id.* at 6-164.

²⁴²⁸ *Id.* at Table 6.2.5-12.

²⁴²⁹ *Id.* at 6-164.

²⁴³⁰ *Id.*

²⁴³¹ *Id.*

²⁴³² *Id.*

1150. No impacts on railroads, utilities, or airports would be expected during operation and maintenance, regardless of route.²⁴³³

1151. In sum, RA-03AM, due to its longer length, involves the most road crossings for construction, the most pipeline crossings, and the most transmission line crossings of all route options.²⁴³⁴

D. Natural Resources and Features

1152. The EIS analyzed the impact of the APR and the route alternatives with respect to their potential impacts on: groundwater; geology and soils; vegetation; fish and wildlife; unique natural resources; public lands; and air quality.²⁴³⁵

i. Water Resources

1153. Water resources were split into four categories in the EIS: ground water; surface water; wetlands; and floodplains.

1154. Each of these water resources is evaluated below.

a. Ground Water

1155. According to the EIS, all routes would result in minor and temporary impacts to groundwater during construction, and “negligible impacts” during operation.²⁴³⁶ The EIS apparently does not consider the risk of an oil leak to be a major potential impact to groundwater when evaluating route alternatives. The ALJ disagrees.

1156. According to the DOC-DER, the primary concern with any crude oil pipeline is the risk of accidental release.²⁴³⁷ The EIS states that: “Although the probability of a large or major oil release at any specific location is extremely low, the probability of a release of some kind along the entire pipeline during its lifetime is not low.”²⁴³⁸

1157. Length of a pipeline is a key component in calculating the probability of pipeline failure because a longer pipeline has a greater area that could be exposed to threats, such as third-party damage, construction defects, corrosion, and equipment failure.²⁴³⁹ The longest pipeline options in this case are RA-03AM, APR, and RA-06, in that order. The shortest are RA-08 and RA-07, but the difference between them is only a couple of miles.²⁴⁴⁰

²⁴³³ *Id.*

²⁴³⁴ *Id.* at Table 6.2.5-12.

²⁴³⁵ Ex. EERA-42 at 6-169 to 6-662.

²⁴³⁶ *Id.* at 6-199.

²⁴³⁷ Ex. DER-1 at 80 (O’Connell Direct).

²⁴³⁸ Ex. EERA-42 at 10-1 (Revised EIS).

²⁴³⁹ Ex. EERA-42 at ES-14 (Revised EIS).

²⁴⁴⁰ Ex. EERA-42 at 6-2 (Revised EIS).

1158. The number of water crossings along a route also heightens the impact that a spill could have on the environment.²⁴⁴¹ The northcentral and northeastern portions of Minnesota where the APR would run contain some of the highest quality water resources in the state.²⁴⁴² The APR would impact 18,215 acres of high vulnerability water table aquifers; 26,382 acres of high groundwater contamination susceptibility; and 15,475 acres of high pollution sensitivity areas.²⁴⁴³ In addition, the APR would expose 12,318 acres of unusually sensitive ecological (high consequence) areas and 2,444 acres of high consequence drinking water sources to the risks of accidental release.²⁴⁴⁴ And the APR would place over 83,000 acres of drinking water areas of interest at risk of potential releases.²⁴⁴⁵ Moreover, the APR is located within 2,500 feet of over 28,000 acres of Minnesota Biological Survey (MBS) sites of biodiversity significance, which would be placed at risk in an event of release.²⁴⁴⁶

1159. RA-03AM is the longest route and would cross the greatest acreage of high vulnerability water table aquifers, high pollution sensitivity areas, very high and high sensitivity Precambrian shallow fractured bedrock aquifers and drinking water supply management areas (DWSMAs). It would also cross the most number of “What’s In My Neighborhood” (WIMN) sites and the most domestic wells. WIMN sites include both potentially contaminated properties and parcels with uses that have environmental permits and registrations issued by the MPCA.²⁴⁴⁷

1160. In contrast, RA-06 would cross the least acreage of high vulnerability water table aquifers, high contamination susceptibility areas, high pollution sensitivity areas, and DWSMAs. It would also cross the fewest number of domestic and public wells.²⁴⁴⁸

1161. RA-07 and RA-08 have similar impacts to water resources, but RA-08 would cross the greatest acreage of wellhead protection areas, and RA-07 would cross the greatest number of EPA-listed contaminated sites and public wells.²⁴⁴⁹

1162. Impacts between routes differ based upon the acres of various groundwater sensitivity areas, DWSMAs, domestic and public wells, and contaminated sites that are crossed. Construction of RA-06 would appear to have the least impact on groundwater sources in the EIS analysis.²⁴⁵⁰

²⁴⁴¹ Ex. DER-1 at 81 (O’Connell Direct).

²⁴⁴² Ex. EERA-42 at ES-16 (Revised EIS).

²⁴⁴³ Ex. EERA-42 at Table 6.3.1.1-13 (Revised EIS).

²⁴⁴⁴ *Id.* at 10-147.

²⁴⁴⁵ *Id.* at 10-153.

²⁴⁴⁶ *Id.* at 10-149.

²⁴⁴⁷ *Id.* at 6-199.

²⁴⁴⁸ *Id.*

²⁴⁴⁹ *Id.*

²⁴⁵⁰ *Id.*

1163. With strict adherence to permit conditions and familiar mitigation measures, the impacts on groundwater from construction of any of the route options would be temporary and minor during construction.²⁴⁵¹

1164. The biggest risk posed by an oil pipeline is the possibility of leaks, spills, or ruptures. These impacts were discussed, at length, throughout this Report. RA-07 would keep Line 3 within the existing Mainline corridor, among five other operating crude oil pipelines. Therefore, the risk of contamination to water resources by the pipelines in the Mainline System would be consolidated to the Mainline corridor, not spread to a new corridor. As the EIS noted "...where pipeline corridors are shared, spill risks are incrementally increased as the addition of a new pipeline in an existing corridor adds to the overall probability of an incident, but does not change the type or distribution of resources exposed if an accidental release does occur."²⁴⁵²

1165. APR, RA-03AM, and RA-6 would open a new crude oil corridor for at least a portion of their distance. The APR, in particular, would open a new oil pipeline corridor for nearly 50 percent of its distance.

1166. In sum, the ALJ finds that although RA-06 appears to present the lowest overall risk to Minnesota's water resources, RA-07 is a better option because it does not open a new oil pipeline corridor outside the Mainline corridor. Instead, it contains the risks of Enbridge's oil pipelines in Minnesota to one, existing corridor.

b. Surface Waters

1167. With one exception, the impacts to surface waters from pipeline construction are projected to be temporary and minor for all routes. These impacts include the impacts to streams, rivers, lakes, wild rice waterbodies, watersheds, sensitive or specially designated surface waters, National Rivers Inventory (NRI) rivers, impaired surface waters, and navigable waterways, from surface water. There are more impacts that would occur from any "frac out" during HDD boring.²⁴⁵³

1168. Construction of all route options would cause temporary to short-term changes to runoff and flows that would result in minor impacts.²⁴⁵⁴ Similarly, with one exception, pipeline construction would result in changes to surface water quality that would be temporary to short-term, and negligible to minor in its intensity. The one exception would be if drilling fluids were released during HDD crossings and these fluids were either uncontained or undetected. In this event, the impact could be long-term and major for all route options.²⁴⁵⁵

²⁴⁵¹ *Id.*

²⁴⁵² Ex. EERA-42 at ES-23-24 (Revised EIS).

²⁴⁵³ *Id.* at 6-288, 6-291 to 6-295.

²⁴⁵⁴ *Id.* at 6-288.

²⁴⁵⁵ *Id.*

1169. During pipeline construction, Enbridge, in accordance with Minnesota PCA requirements, has pledged to designate at least one Environmental Inspector for every 14,000-foot spread of pipeline.²⁴⁵⁶

1170. Construction of RA-06 would affect the least number of impaired water crossings (1) and TMDL study areas (1), followed by RA-07, RA-08, APR, and RA-03AM with 14 crossings of impaired waters and crossings of 6 TMDL study areas.²⁴⁵⁷

1171. Significant impacts on impaired or low-quality waterbodies may cause further degradation of the waterbody, exacerbate an existing impairment, cause additional impairments, interfere with restoration activities, and delay attainment of water quality standards. Like impacts on high-quality waterbodies (e.g., trout streams, NRI-listed rivers and wild rice waterbodies) may decrease the suitability of surface water as a habitat for sensitive species or degrade the existing beneficial use of the waterbody.²⁴⁵⁸

1172. For channel morphology and stability, the construction impacts would be short-term to long-term and minor, except where the HDD or guided bore crossing method is used. At those locations, there is no projected impact on channel morphology and stability.²⁴⁵⁹

1173. According to the EIS, the construction impact on wild rice waterbodies for each location affected for each route option would be short-term and minor. Construction along APR would affect the least number of acres of wild rice waterbodies (4.9 acres), followed by RA-07 (6.1 acres), RA-03AM, RA-08, and RA-06 with 10.6 acres.²⁴⁶⁰

1174. As detailed in Section V., C., ii., the impact of an oil spill to surface waters could be significant. The number of water crossings along a route exacerbates the impact of an accidental release.²⁴⁶¹ The number of surface waters affected by crossings would differ among the alternatives: RA-07 would cross the fewest number of surface waters (81 crossings), followed by RA-08, APR, RA-06, and RA-03AM (with 167 crossings).²⁴⁶²

1175. In addition, Pipeline operation would cause changes to runoff and flows from the presence of aboveground facilities, including permanent access roads; potential impacts would be temporary to permanent and minor in their intensity. The increase in impervious surfaces that would cause these changes would range from 1.4 acres along RA-07 to between 30 and 50 acres for the other route options.²⁴⁶³

1176. If integrity digs are required in, or immediately adjacent to, surface waters, changes in water quality from those activities would result in temporary to short-term

²⁴⁵⁶ *Id.*

²⁴⁵⁷ *Id.*

²⁴⁵⁸ *Id.* at 6-288.

²⁴⁵⁹ *Id.*

²⁴⁶⁰ Ex. 42 at Table 6.3.1.2-28.

²⁴⁶¹ Ex. DER-1 at 81 (O'Connell Direct).

²⁴⁶² Ex. EERA-42 at Table 6.3.1.2-28.

²⁴⁶³ *Id.*

impacts to surface water, that would be negligible to minor in their intensity. These impacts would be the same for all route options.²⁴⁶⁴

1177. Permanent and minor increases in water temperature could occur from clearing vegetation around waterbodies.²⁴⁶⁵

1178. Operation of all route options would result in impacts on channel morphology and stability, and to wild rice waterbodies; but these impacts are projected to be temporary to short-term, and negligible to minor in their intensity if they occur. These impacts are most likely to follow from integrity digs.²⁴⁶⁶

1179. The area of wild rice waterbodies potentially affected by operation of the pipeline is the least for RA-07 (2.5 acres of wild rice waterbodies).²⁴⁶⁷ The most wild rice waterbodies disturbed would be associated with RA-03AM (six water bodies), followed by APR and RA-06 (five water bodies each).²⁴⁶⁸ Only one wild rice water body was identified with respect to RA-07.²⁴⁶⁹

1180. As set forth above, the biggest risk posed by an oil pipeline is the possibility of leaks, spills, or ruptures. These impacts were discussed, at length, throughout this Report. RA-07 would keep Line 3 within the existing Mainline corridor, among five other operating crude oil pipelines. Therefore, the risk of contamination to water resources by the pipelines in the Mainline System would be consolidated to the Mainline corridor, not spread to a new corridor. As the EIS noted "...where pipeline corridors are shared, spill risks are incrementally increased as the addition of a new pipeline in an existing corridor adds to the overall probability of an incident, but does not change the type or distribution of resources exposed if an accidental release does occur."²⁴⁷⁰

1181. In sum, the ALJ finds that between the APR and the route alternatives, RA-07 presents the least new impacts to surface waters due to its location among five other operating oil pipelines. In addition, RA-07 presents the least impacts to wild rice waterbodies.

c. Wetlands

1182. Construction and operation of the APR and any route alternative would result in permanent, major impacts on forested and scrub/shrub wetlands.²⁴⁷¹ By contrast, potential impacts on emergent wetlands and specially designated wetlands

²⁴⁶⁴ *Id.* at 6-289.

²⁴⁶⁵ *Id.* at 6-289.

²⁴⁶⁶ *Id.*

²⁴⁶⁷ Ex. 42 at Table 6.3.1.2-27.

²⁴⁶⁸ *Id.*

²⁴⁶⁹ *Id.*

²⁴⁷⁰ Ex. EERA-42 at ES-23-24 (Revised EIS).

²⁴⁷¹ Ex. 42 at 6-327.

ranged from no impact to short-term minor impacts for the APR and all of the route alternatives.²⁴⁷²

1183. All wetland changes would be reviewed and approved by the appropriate authorizing agency prior to the start of pipeline construction. Applicant has committed to provide compensatory wetland mitigation for any permanent impacts on forested, scrub/shrub, and emergent wetlands as required in the federal and state-specific permits.²⁴⁷³ The avoidance and minimization measures, and standard BMPs, described for APR, could be applied with like effect to any of the route alternatives.²⁴⁷⁴

1184. Following the clearing trees and shrubs from forested and scrub/shrub wetlands, reestablishment of wetlands that are similar in structure and function to the original, would require several years of growth.²⁴⁷⁵

1185. The smallest area of clearing of forested and scrub/shrub wetlands would occur for the APR and RA-03AM.²⁴⁷⁶ Among the route alternatives, the largest area of clearing of forested and scrub/shrub wetlands would occur along RA-07, RA-06, and RA-08. Importantly, however, construction of RA-07 and RA-08 would represent an expansion along the edges of existing pipeline corridors; whereas, construction of RA-06 would represent construction through a new corridor, where it is likely that wetlands have not been exposed to ground disturbance.²⁴⁷⁷

1186. Emergent wetlands are reestablished more quickly than forested lands after pipeline construction. The key impacts of placing fill is a permanent loss of emergent wetlands, however, vegetation cover and wetland functions would likely be restored within several years after construction. RA-03AM contains the largest area of emergent wetlands within the construction work area, while the APR route contains the smallest area within the construction work area.²⁴⁷⁸

1187. All of the routes, *except RA-07*, would affect Public Waters Wetlands between Clearbrook and Carlton County during construction. RA-03AM and RA-08 would affect the largest areas of Public Waters Wetlands. Like effects carry forward during any later period of pipeline operation along these routes.²⁴⁷⁹

1188. Minnesota's calcareous fens represent a rare habitat that supports several plants that are protected as threatened or endangered. No calcareous fen wetlands, nor

²⁴⁷² *Id.*

²⁴⁷³ Ex. 29 at 6-327.

²⁴⁷⁴ *Id.*

²⁴⁷⁵ *Id.* at 6-328.

²⁴⁷⁶ Ex. 42 at Table 6.3.1.3-15.

²⁴⁷⁷ *Id.* at 6-328.

²⁴⁷⁸ *Id.* at Table 6.3.1.3-15.

²⁴⁷⁹ *Id.*

any wetlands enrolled in either federal or state Wetland Reserve Programs, would be crossed by any route between Clearbrook and Carlton County.²⁴⁸⁰

1189. Because the locations for above-ground facilities have not been developed for the route alternatives, a quantified comparison is not possible. However, it is possible to detail features that such facilities share regardless of placement. New above-ground facilities are generally sited to avoid wetlands, although some impacts may be unavoidable. Pipeline operation would continue to disturb wetlands through vegetation management that prevents trees and large shrubs from returning to the right-of-way and impeding visual inspection of the pipeline corridor. In addition, the Applicant's Integrity Management Program may require excavation to repair or replace sections of pipe that could occur within wetlands.²⁴⁸¹

1190. The largest areas of previously forested and scrub/shrub wetlands that would be permanently maintained as emergent wetland are associated with RA-06, RA-07, and RA-08. Pipeline operation of RA-07 would occur within a currently maintained right-of-way; RA-08 would represent an expansion along the edges of existing pipeline corridors; and construction of RA-06 would involve construction through an entirely new corridor where many wetlands may not have been previously exposed to ground disturbance.²⁴⁸²

1191. The smallest area of previously forested and scrub/shrub wetlands would be associated with APR and RA-03AM. Portions of both of these routes would create new rights-of-way; and other portions would be co-located with existing pipelines, transmission lines, and roads. However, the APR would have a greater length of new pipeline corridor than RA-03AM.²⁴⁸³

1192. All of the routes between Clearbrook and Carlton County, except RA-07, would continue to affect Public Waters Wetlands during operations. RA-03AM and RA-08 would affect the largest areas of Public Waters Wetlands, while RA-06 and APR would affect the smallest areas.²⁴⁸⁴

1193. No calcareous fens or wetlands enrolled in either federal or state Wetland Reserve Programs would be affected by any of the route alternatives between Clearbrook and Carlton County during operation.²⁴⁸⁵

d. Floodplains

1194. Floodplain impacts for the various routes would range from temporary to short-term during periods of construction, and be negligible to minor in their intensity.

²⁴⁸⁰ *Id.* at 6-328.

²⁴⁸¹ *Id.* at 6-328 to 6-329.

²⁴⁸² Ex. 29 at Table 6.3.1.3-15; 6-329.

²⁴⁸³ *Id.* at 6-329.

²⁴⁸⁴ *Id.*

²⁴⁸⁵ *Id.*

During later pipeline operation, the floodplain impacts would be temporary in duration and minor in their intensity for all routes.²⁴⁸⁶

1195. Construction activities also could be affected by flood events, including disruption of construction activities and damage to equipment and structures from inundation by floodwaters. Flood events could range from smaller, more frequent events with negligible to minor impacts to larger, less frequent events causing major disruption to equipment and activities within the floodplain.²⁴⁸⁷

1196. The APR in Minnesota includes less than one acre of permanent facilities that would be located within a FEMA-designated 100-year floodplain; and these facilities would be authorized under state and local floodplain regulations only if the appropriate permits are obtained.²⁴⁸⁸

1197. The length of pipeline route that crosses Special Flood Hazard Areas (SFHAs) is much lower for RA-06, reducing the potential effects of interruptions to service during periods of flooding. By comparison, the length of pipeline route through flood-prone areas, and the corresponding risk of interruptions due to flooding, are significantly greater for route alternatives RA-03AM, RA-07 and RA-08.²⁴⁸⁹

1198. Construction-related impacts on floodplains, including temporary alterations of topography that could change flow patterns of flood waters and increase flooding, would be temporary and minor. The impacts would last until the disturbed areas are re-contoured and vegetation is reestablished.²⁴⁹⁰

1199. Temporary impacts on floodplains would be greatest for routes with the greatest amount of disturbance from construction in floodplains and those with the most waterbody crossings. RA-03AM would require the most waterbody crossings (167), and RA-07 would require the fewest (81). In this respect, APR is in the middle of the range of route alternatives, with 111 waterbody crossings between Clearbrook and Carlton County.²⁴⁹¹

1200. The location, number, and type of permanent above-ground facilities and the number and location of access roads have not been determined for the route alternatives. For this reason, a comparison of impacts on floodplains from permanent facilities between those alternatives was not possible.²⁴⁹²

²⁴⁸⁶ *Id.* at 6-343; Table 6.3.1.4-3.

²⁴⁸⁷ *Id.* at 6-343.

²⁴⁸⁸ *Id.* at 6-344.

²⁴⁸⁹ *Id.* at 6-343.

²⁴⁹⁰ *Id.* at 6-344.

²⁴⁹¹ *Id.*

²⁴⁹² *Id.* at 6-344.

1201. In sum, RA-03AM would have the most impacts to SFHAs and the most number of waterbody crossings.²⁴⁹³ Therefore, with respect to floodplains, it would potentially be the most impactful.

ii. Geology and Soil

1202. Construction and operation of the APR and all route alternatives would affect geologic and soil resources. However, if the measures outlined in the Applicant's Environmental Protection Plan are implemented, most construction impacts on geology and soils would be negligible to minor and temporary to short-term.²⁴⁹⁴

1203. In general, the key differences in the geologic and soil impacts follow from pipeline length and the width of the construction work area — in terms of both general surface disturbance and sensitive geologic and soils characteristics. The length of the various routes between Clearbrook and Carlton County ranges from 165 miles (RA-08) to 275 miles (RA-03AM); this represents a 40 percent difference in the extent of surface disturbance based on pipeline length.²⁴⁹⁵ RA-07, however, would involve in-trench replacement, so the geological and soil impacts of removal and construction would be the same, and within a trench already disturbed by a pipeline.

1204. Similarly, the width of the construction work area varies among the routes from a standard width of 120 feet to an estimated width of 205 feet. This represents nearly a 60 percent difference in surface disturbance based on the width of the construction work area. Notwithstanding these differences, overall, both temporary and long-term effects on geology and soils are expected to be minor.²⁴⁹⁶

1205. All routes cross through rich agricultural areas, with soils that are designated as prime farmland. The types of soil impacts along all routes would be similar, as all routes share similar overall soil conditions.²⁴⁹⁷

1206. Soils prone to erosion by water are rare across all route options, while soils prone to erosion by wind are present to similar extents across the routes. The susceptibility to soil compaction is similar for all route options, as the occurrence of hydric soils is somewhat similar among all routes. The presence of other compaction-prone soils is not common. The potential for soil mixing from soil removal and soil contamination from minor spills during construction would be the same for all route options.²⁴⁹⁸

1207. The need for bedrock removal from blasting is likely similar across all routes. One minor segment of shallow bedrock along APR has been documented to require blasting. Shallow bedrock likely would require blasting in some isolated eastern

²⁴⁹³ *Id.* at Table 6.3.1.4-3.

²⁴⁹⁴ Ex. EERA-42 at 6-365; Table 6.3.2-3. *See also*, Ex. 43 at App.x E (Enbridge Environmental Protection Plan).

²⁴⁹⁵ Ex. EERA-42 at 6-365; Table 6.3.2-3.

²⁴⁹⁶ Ex. EERA-42 at 6-365.

²⁴⁹⁷ *Id.*

²⁴⁹⁸ *Id.*; Table 6.3.2-3.

segments of all route alternatives, but the specific need for blasting along the route alternatives cannot be determined without field-specific geotechnical studies.²⁴⁹⁹

1208. There is a low potential for encountering scientifically significant fossil-bearing layers on any of the routes. For the most part, the terrain is flat through all route options, and any impacts on topography would be negligible to minor for all route options.²⁵⁰⁰

1209. Landslide potential is similarly low for all the route options. There is an elevated hazard in only isolated areas for all route options.²⁵⁰¹

1210. Known karst conditions are present along approximately 12 miles of RA-03AM where the pipeline would cross through Pine County, with a potential for subsidence and sinkhole formation. No known karst features are present along the APR or the other three route alternatives.²⁵⁰²

1211. The greatest impact on soils during operations would be the loss of soil cover associated with above-ground facilities. These losses would be permanent and minor for all routes. The extent of permanent soil conversion to an impervious surface for all route alternatives would be expected to be comparable to APR (64.8 acres), although the permanent conversion of soil to an impervious surface would be slightly higher for RA-03AM because it would require additional pump stations.²⁵⁰³

iii. Vegetation Impacts

1212. The potential impacts on vegetation includes both construction-related and operations-related impacts on existing land cover, Minnesota Biological Survey (MBS) sites and native plant communities, as well as potential impact from the spread of noxious weeds and invasive plants. Only the area from Clearbrook to Carlton County was evaluated in the EIS because all route options follow the same route from Neche, North Dakota, to Clearbrook; and from Carlton County to Superior, Wisconsin.²⁵⁰⁴

1213. In the revegetation and monitoring guidance portion of the Applicant's Environmental Protection Plan, Applicant pledges a series of Best Management Practices (BMPs) including: specific compaction prevention measures, seeding, plantings, application of soil amendments, and a period of monitoring to document stabilization of the right-of-way. In areas where soil quality is a concern for revegetation, the appropriate agencies would be consulted to develop seed mixes and seeding dates adapted to the immediate areas of concern.²⁵⁰⁵

²⁴⁹⁹ *Id.* at 6-365.

²⁵⁰⁰ *Id.*

²⁵⁰¹ *Id.*

²⁵⁰² *Id.*

²⁵⁰³ *Id.* at 6-366.

²⁵⁰⁴ *Id.* at 6-422.

²⁵⁰⁵ *Id.* at 6-422.

1214. Impacts on rare plant communities that cannot be avoided would be addressed through implementation of the Project's approved revegetation and monitoring measures; and invasive and noxious weed control measures outlined in the Environmental Protection Plan. Measures that would be implemented to prevent the spread of noxious and invasive weeds during construction include minimizing the time between ground-disturbing work and site reclamation and reseeding, staking avoidance areas at known weed locations, and implementing other BMPs.²⁵⁰⁶

1215. Prior to construction, the lead and assisting agencies would be consulted on identification of any additional avoidance and mitigation measures for rare plant communities, old-growth forests, and high conservation value forests (HCVFs) that are within the selected route. Avoidance measures could include minor pipeline route adjustments, use of directional drilling, or adherence to an agency-approved and site-specific crossing plan.²⁵⁰⁷

1216. General types of construction impacts would be the same for all route options. Many impacts on vegetation would be short term and minor, while other impacts would be permanent and major within the footprint of the above-ground facilities and the permanent right-of-way. Impacts at specific locations along all of the alternative routes where the existing vegetation can recover are anticipated to be minor, with appropriate use of BMP construction and operation practices. However, other areas will need to be maintained in a way that prohibits return to its existing state, and will be permanently altered or removed.²⁵⁰⁸

1217. Due to the lengths of all alternatives, the total impact would be additive and distributed along the routes.²⁵⁰⁹ The importance of these impacts is determined by the distance of the alternative, number of vegetation communities affected, and the quality of vegetation resources affected.²⁵¹⁰

1218. The longest route option is RA-03AM, which is 395 miles long.²⁵¹¹ The shortest are RA-07 and RA-08 (288 and 285 miles, respectively).²⁵¹² APR is 340 miles long.²⁵¹³ The total acreage of vegetation affected during construction would range from 5,082 acres for the APR, to 2,287 acres for RA-08, in the portions of the routes from Clearbrook to Carlton County.²⁵¹⁴

1219. The potential impacts on forested land, including woody wetlands, would be long term to permanent and major for all route options due to the long period of time

²⁵⁰⁶ *Id.* at 6-423.

²⁵⁰⁷ *Id.*

²⁵⁰⁸ *Id.*

²⁵⁰⁹ *Id.*

²⁵¹⁰ *Id.*

²⁵¹¹ Ex. EERA-42 at 6-2.

²⁵¹² *Id.*

²⁵¹³ *Id.*

²⁵¹⁴ *Id.* at 6-423.

required for forest regeneration. The APR would affect the most forest land, and RA-03AM would affect the least.²⁵¹⁵

1220. Areas cleared of other vegetation types during pipeline construction – including grassland/herbaceous, hay/pasture, cultivated crops, and emergent wetlands vegetation cover class types – would be reclaimed after construction to the specifications or conditions of the permitting agency. The recovery period for these areas would range from a single growing season to several years. As a result, the impacts would be short term and minor. RA-07 would affect more grasslands, and APR would affect more croplands and pasture, than the other route alternatives.²⁵¹⁶

1221. All of the route options, except RA-06, would be co-located, to some extent, with existing pipelines, electrical transmission lines, or roads. This co-location reduces the effects of clearing and grading, because some of those areas were previously disturbed.²⁵¹⁷ Of course the route option with the highest amount of lo-location is RA-07, as it represents the in-trench replacement and would be co-located along with five to six other Enbridge pipeline. The least amount of co-location would occur with RA-06. It would be constructed within a new pipeline corridor, in many areas across previously undisturbed vegetation communities.²⁵¹⁸

1222. Rare native plant communities would be affected due to construction of each route option. These impacts typically would be long-term to permanent and major because these communities generally would be lost or degraded. The APR would affect the largest area of rare native plant communities during construction. On this record, it does not appear that RA-06 would cross such communities; but its impacts may be underestimated because of less complete surveying and mapping along this route.²⁵¹⁹

1223. Only RA-07 and RA-08 would affect old-growth forest, with RA-08 affecting the most such areas, along with one high conservation value forest (HCVF). These impacts would be long term to permanent and major.²⁵²⁰

1224. The APR would result in the complete destruction of 656 acres of vegetation without replacement due to above-ground facilities. The APR also has the most impact to rare native plant communities (45.5 acres), as compared to, for example, RA-06 (no impacts) and RA-07 (2.7 acres).²⁵²¹

1225. Noxious weed and invasive plant controls would be implemented during construction to minimize the effect of noxious weeds. The potential for impacts due to the spread of noxious weeds and invasive plants during construction would be roughly the same for all route options. For all route options, the impact of noxious weeds and

²⁵¹⁵ *Id.* at 6-424.

²⁵¹⁶ *Id.*

²⁵¹⁷ *Id.*

²⁵¹⁸ *Id.*

²⁵¹⁹ *Id.*

²⁵²⁰ *Id.*

²⁵²¹ Ex. EERA-42 at Table 6.3.3-31.

invasive species during construction would be short term and minor, with implementation of weed control BMPs and other actions included in the Applicant's Environmental Protection Plan.²⁵²²

1226. Vegetation management activities during pipeline operations would prevent trees and large shrubs from reestablishing within the pipeline permanent right-of-way. The greatest effect would be on 951 acres of previously forested areas within the permanent right-of-way for APR. The least effect on previously forested area would result with RA-07. The impact for all route options would be permanent and major. The forested and scrub/shrub areas cleared from the construction work area and outside of the permanent right-of-way would be allowed to regenerate, but the process would take decades to reach full recovery.²⁵²³

1227. The Applicant's Integrity Management Program would require periodic excavation to repair or replace sections of pipe segments, which would affect the vegetative cover of the permanent right-of-way. Because all routes include new pipelines, there would be no difference in the anticipated future integrity digs. However, given that RA-07 and RA-08 are shorter, it is possible they would have fewer integrity digs over the course of time. Overall, there should not be a substantial difference in the impacts on vegetation due to future integrity digs.²⁵²⁴ Applicant's stated purpose for this Project is to avoid the number of near-future integrity digs needed for the pipeline. Hopefully, this impact will be minor in the near future.

1228. Potential operations impacts on rare native plant communities would be expected to be minor because these communities are unlikely to persist within the permanent right-of-way after construction activities. Vegetation management and integrity digs could result in recurring impacts on previously disturbed rare native plant communities if these communities continued to persist within the permanent right-of-way, but there likely would not be a difference in impacts among the route options due to these activities.²⁵²⁵ The APR impacts the most acres of rare native plant communities (17.9 acres), followed by RA-03AM.²⁵²⁶

1229. Maintenance activities along the other route alternatives would not affect rare native plant communities. RA-08 is the only route alternative for which maintenance activities during operation would affect areas of HCVF and previous old-growth forest, should they persist following construction activities.²⁵²⁷

1230. As a result of implementation of a Noxious Weed and Invasive Plant Management and Control Plan in the Applicant's Environmental Protection Plan, the risk of spreading infestations of noxious weeds and invasive plants during operations would be similar for all the pipeline routes. The impacts would be permanent and minor for all

²⁵²² *Id.* at 6-424.

²⁵²³ *Id.*

²⁵²⁴ *Id.* at 6-424 to 6-425.

²⁵²⁵ *Id.* at 6-425.

²⁵²⁶ *Id.* at Table 6.3.3-31.

²⁵²⁷ *Id.* at 6-425.

routes, although RA-03AM would have a slightly greater area potentially affected than the other routes due to its greater distance.²⁵²⁸

1231. In sum, construction of the pipeline would result in the permanent impacts to forests and woody wetlands in all route options, but the most would occur with respect to RA-07, followed very closely by the APR. With respect to operation of the line, however, the APR would result in the most permanent impacts to forests and woody wetlands than any other alternative. In addition, construction and operation of the APR would result in the most impact to native plant communities than any other route options. Accordingly, with respect to vegetation, the APR would have the most long-term impacts of the route options.

iv. Fish and Wildlife Impacts

1232. When analyzing impacts to fish and wildlife, the EIS looked to impacts on waterbodies and wildlife habitats.

1233. The APR would cross 192 surface waters along its total length and 111 waterbodies between Clearbrook and Carlton County.²⁵²⁹ For two route alternatives, the number of surface water crossings between Clearbrook and Carlton County is greater (167 crossings for RA-03AM and 137 crossings for RA-06); and for two route alternatives, the number is significantly less (81 crossings for RA-07 and 106 crossings for RA-08).²⁵³⁰ Overall, however, RA-07 has significantly fewer water crossings of any other route option.

1234. All of the potential routes would cross Aquatic Management Areas (AMAs) and sensitive aquatic resources within the Regions of Interest of the pipeline routes between Clearbrook and Carlton County, including Fish Index of Biological Integrity Lakes, Lakes of Biological Significance, one Sentinel Lake (along RA-03M), seven trout streams, one trout lake, and lakes managed for muskellunge.²⁵³¹

1235. A total of 35 Lakes of Biological Significance, including 25 lakes rated “outstanding,” four lakes rated “high,” and six lakes rated “moderate,” on the five-tiered Index of Biological Integrity, occur within 0.5 mile of the various routes. Six of these lakes would be crossed by APR, including Portage Lake, which is a Sentinel Lake.²⁵³²

1236. No hatcheries are within the Regions of Interest of the potential routes. Although there are hatcheries farther downstream, construction is not expected to affect those hatcheries.²⁵³³

1237. All routes pass through forested areas and would involve the removal of woody vegetation that provides shade and stability along some streams. This could result

²⁵²⁸ *Id.*

²⁵²⁹ *Id.* at 6-511.

²⁵³⁰ *Id.* at 6-511.

²⁵³¹ *Id.*

²⁵³² *Id.* at 6-441; Table 6.3.4-1; Ex. 42, App. L, Table L-2.

²⁵³³ *Id.* at 6-511.

in long-term major impacts on trout streams due to the potential for thermal changes. However, impacts on aquatic habitat, including trout streams and other sensitive aquatic resources, could be temporary to long-term and minor if the crossing method with least disturbance is used and BMPs are in place to reduce impacts. Proper restoration of streambanks after construction of stream crossings would prevent additional sedimentation as well as changes to the width, depth, and temperature of all streams, including trout streams.²⁵³⁴

1238. The largest potential impacts on aquatic habitat due to construction would result from: clearing vegetation along streambanks; in-water disturbance from pipeline construction across surface water where the wet or dry open-cut crossing methods are used; and if a frac-out occurred during use of the HDD method in a sensitive or impaired waterbody.²⁵³⁵

1239. The waters within the Regions of Interest for all the routes provide habitat for similar species of fish, including important managed recreational species such as muskellunge and trout. Fish in the vicinity of surface water crossings along all routes likely would respond to the increased instream activities by leaving the construction area and avoiding direct impacts; however, injuries or mortality could occur resulting in temporary and minor impacts for common species in the area.²⁵³⁶

1240. Aquatic habitat connectivity and species richness of macroinvertebrates, mussels, and fish are not significantly different among pipeline routes.²⁵³⁷

1241. With adherence to water appropriation and National Pollution Discharge Elimination System (NPDES) permit conditions, and implementation of Applicant-proposed measures, impacts on fisheries and aquatic habitats from water appropriation and discharge during pipeline construction would be temporary and minor for all routes.²⁵³⁸

1242. Vegetation maintenance during operations would require the removal of riparian vegetation from the permanent right-of-way of each of the pipeline alternatives, including areas adjacent to waterbody crossings. The resulting impacts on aquatic habitat would be similar for all routes, with RA-03AM and RA-06 requiring the greatest number of stream crossings. The impacts for the new pipeline would be long-term and minor to major at heavily wooded crossing locations; and short term to long term and minor to major at crossings within grasslands or croplands.²⁵³⁹

²⁵³⁴ *Id.*

²⁵³⁵ *Id.* at 6-510 to 6-511.

²⁵³⁶ *Id.*

²⁵³⁷ *Id.*

²⁵³⁸ *Id.* at 6-511.

²⁵³⁹ *Id.*

1243. All routes would cross trout streams where the impact during operation would be permanent and major due to possible increases in temperature.²⁵⁴⁰

1244. According to the EIS, if minor leaks or spills occurred during normal operations, “there would be negligible to minor changes to surface water quality”; and the resultant impacts on fisheries and aquatic habitats would be temporary and negligible to minor.²⁵⁴¹

1245. For all routes, the Applicant asserts that it would implement its noxious weed plans that include methods to prevent and reduce the introduction and spread of noxious weeds and invasive species. In addition, Applicant agrees to implement BMPs for herbicide applications to minimize impacts on aquatic and terrestrial resources. As a result, the use of herbicides would result in temporary negligible impacts on fisheries and aquatic habitats.²⁵⁴²

1246. During operation of the pipeline, Applicant agrees to implement its Integrity Management Program, which could require excavation and repair or replacement of sections of the pipeline at surface water crossings using the wet or dry open-cut method to access the pipe. For each integrity dig, impacts would be short term and minor; and would occur periodically over the life of the Project. Impacts from integrity digs would be similar for all routes.²⁵⁴³

1247. Impacts on wildlife habitat would vary slightly among the routes. The acreage of wildlife habitat affected by construction of the pipeline route options ranges from 2,286 acres (RA-08) to 3,578 acres (RA-03AM).²⁵⁴⁴

1248. All of the routes would cross Wildlife Management Areas (WMAs) and Audubon Important Bird Areas (IBAs).²⁵⁴⁵

1249. Overall, wildlife habitat quality is similar for all routes based upon vegetation cover class. Some routes would have greater impacts on high-value habitat such as wetlands (i.e., RA-07) or deciduous forest (i.e., APR) than others. RA-03AM would mostly affect hay and pasture land.²⁵⁴⁶

1250. RA-07 and RA-08 would be co-located with existing pipelines for their entire lengths. RA-03AM would be co-located with existing pipelines, electrical transmission lines, and roads. RA-06 would not be co-located with other pipelines, utilities, or roads across much of its length. Alternatives co-located would occupy areas that are already somewhat degraded, resulting in less impact on wildlife and habitat than routes or portions of routes that are not within or adjacent to utility corridors. Route alternatives

²⁵⁴⁰ *Id.*

²⁵⁴¹ *Id.*

²⁵⁴² *Id.* at 6-512.

²⁵⁴³ *Id.*

²⁵⁴⁴ *Id.*

²⁵⁴⁵ *Id.*

²⁵⁴⁶ *Id.*

RA-03AM, RA-07, and RA-08 would be co-located with existing pipelines, transmission lines, and roads across most of their lengths such that these route alternatives would not contribute to wildlife habitat fragmentation.²⁵⁴⁷

1251. Habitat fragmentation due to construction would be greatest for APR (36.7 miles and 27,101 acres) and RA-06 (114.3 miles 83,996 acres).²⁵⁴⁸ There would be no loss of habitat or reduction of wildlife habitat quality from fragmentation for RA-07 as it is co-located in an existing corridor, among five other pipelines.²⁵⁴⁹ In addition, loss of habitat or reduction in habitat quality during operations would be more significant for APR than RA-07 and RA-08.²⁵⁵⁰ The APR would result in the permanent fragmentation in 21 large-block habitats (greater than 100 acres) with over 27,101 acres fragmented.²⁵⁵¹

1252. For all routes, clearing, grading, trenching, and the use of construction vehicles and equipment would result in direct impacts on some animals, particularly small and mid-sized mammals, reptiles, amphibians and invertebrates. Members of these species would be affected more than large wildlife because of their relative lack of mobility compared to that of larger animals (e.g., deer and coyotes). The impact of these activities on wildlife would be temporary to short term and minor for all route options. Both RA-06 and RA-08 could result in permanent removal of heron nesting trees.²⁵⁵²

1253. Many animals would be temporarily displaced from the active construction areas and adjacent areas. Nearby habitat could provide cover and suitable escape habitat for many of the displaced species, and the more mobile animals could return to the area after completion of construction and restoration activities, if appropriate habitats are available. As a result, the impact of these displacements during construction would be temporary to short term and minor.²⁵⁵³

1254. The types of impacts associated with operations would be similar for all routes, and would occur over the life of the Project. The general impacts of right-of-way maintenance would be temporary to short term and minor for each occurrence for all routes. Impacts of right-of-way maintenance within general wildlife habitat, conservation lands, and Audubon Important Bird areas (IBAs) would be short term to permanent and minor to major, depending on the type of habitat present. Maintenance activities could reduce populations of species sensitive to habitat disturbance and could result in permanent minor effects on breeding birds. Maintenance of the right-of-way would also include mowing of vegetation, which could disturb wildlife or result in mortality of common small species. These impacts would be short term and minor.²⁵⁵⁴

²⁵⁴⁷ *Id.*

²⁵⁴⁸ *Id.*

²⁵⁴⁹ *Id.* at Table 6.3.4-24

²⁵⁵⁰ *Id.*

²⁵⁵¹ *Id.*

²⁵⁵² *Id.* at 6-513.

²⁵⁵³ *Id.* at 6-512 to 6-513.

²⁵⁵⁴ *Id.* at 6-513.

1255. The maintained permanent rights-of-way may be used as travel corridors by some big game animals and humans and may become attractive to some small species. This could result in permanent and minor effects on common wildlife.²⁵⁵⁵

1256. Implementation of BMPs to prevent the spread of noxious species would minimize impacts from herbicide applications and from colonization of the rights-of-way with invasive plants.²⁵⁵⁶

1257. Applicant's Integrity Management Program requires periodic excavation, repair or replacement of sections of the pipeline. The impacts would be similar to those occurring during construction of the pipeline; but they would occur over a substantially smaller area. For all routes, these impacts would be short term and negligible to minor for each occurrence.²⁵⁵⁷

1258. In sum, construction of the pipeline would have the greatest impacts to aquatic habitats along RA-03AM, RA-06, and the APR. The greatest loss of land habitat related to construction and operation would result from RA-03AM and APR, due to the significant acreage of habitat fragmentation that would occur with those routes. The least impact on habitat fragmentation would occur with RA-07.²⁵⁵⁸

v. Unique Natural Resources

1259. "Unique natural resources" include protected, rare, and sensitive plants and animals.²⁵⁵⁹ In evaluating these impacts, the EIS looked to federally and state listed endangered and threatened species; the Minnesota Species in Greatest Conservation Need (SGCN); Minnesota Biological Survey (MBS) Sites; and Minnesota Scientific National Areas (SNAs).²⁵⁶⁰

1260. The potential effects on protected and rare plant and animal species were evaluated by the EIS. These potential effects depend upon whether they occur near the route options; and whether they are present when activities are occurring that may result in injury, harm, or disturbance. Potential effects on protected species would require avoidance and conservation measures, and federal and state incidental take permits where unavoidable impacts are likely to occur.²⁵⁶¹

1261. Construction impacts could include: (1) injury or loss of aquatic and terrestrial invertebrates; amphibian reptiles, and small mammals; bird eggs and young; and plants; (2) loss or alteration of forage and cover habitats; and (3) disturbance from noise and activity. Creation of new pipeline rights-of-way may contribute to fragmentation of habitats, creating barriers to movements for amphibians, reptiles, and small mammals;

²⁵⁵⁵ *Id.*

²⁵⁵⁶ *Id.*

²⁵⁵⁷ *Id.*

²⁵⁵⁸ *Id.* at Table 6.3.4-24.

²⁵⁵⁹ *Id.* at 6-525.

²⁵⁶⁰ *Id.* at 6-525.

²⁵⁶¹ *Id.* at 6-605; Table 6.3.5-45.

facilitated movements for some predators; new edge habitats; and potential reduction in the abundance and diversity of forest-nesting birds.²⁵⁶²

1262. Potential direct injury or mortality of protected animals may be avoided through typically required conservation measures, although reduction in habitat quality resulting from facility and pipeline construction may indirectly affect protected animals because of a permanent reduction in the habitat's ability to support some protected species.²⁵⁶³

1263. Construction activities have the potential to disturb special-status animals, plants, and habitats because of increased noise and human activity, use of construction equipment, and vegetation removal. Injury, mortality, or disturbance of special-status species and alteration of habitat types also could occur as a result of these activities.²⁵⁶⁴

1264. Construction noise and increased human activity likely would cause more mobile species (e.g., larger mammals, bats, and birds) to move to other areas; they would possibly return after construction activities stop. If these disturbances occurred during sensitive reproductive periods, animals could abandon their young or nesting/denning area, resulting in a decrease in survival and possible reproductive failure of individual mating pairs. Less mobile species within the construction work area might not be able to avoid construction activities, reducing their numbers.²⁵⁶⁵

1265. Operations effects could include permanent habitat loss or alteration and continued disturbance from noise and activity at above-ground facilities and from pipeline inspection overflights, ground surveillance, and pipeline integrity excavation.²⁵⁶⁶

1266. Surface water crossings could affect aquatic species that are present, as set forth above. Disturbance to the stream bottom during the use of dry or wet open-cut crossing methods could crush or suffocate aquatic species and their nests. The temporarily increased turbidity could reduce feeding efficiency and damage these sensitive aquatic animals in the vicinity. Contaminated construction equipment and water used for hydrostatic testing could introduce invasive aquatic animals such as zebra and quagga mussels that displace and reduce habitat quality for aquatic animals. Use of HDD to cross waterbodies would avoid mortality and injury of special-status aquatic species, and impacts on their habitat.²⁵⁶⁷

1267. Vegetation removal could injure special-status species if they are present when clearing or construction activities occur. Mobile special-status animals are likely to move to other areas, while less-mobile species may not be able to avoid impacts. Protected plants may be lost during construction, and changes to soils and surrounding vegetation communities may leave habitats unsuitable after construction. Moreover, avoidance may

²⁵⁶² *Id.* at 6-606.

²⁵⁶³ *Id.*

²⁵⁶⁴ *Id.*

²⁵⁶⁵ *Id.*

²⁵⁶⁶ *Id.* at 6-606.

²⁵⁶⁷ *Id.*

be possible, once precise locations are determined through surveys like those already completed for the Applicant's preferred route. Some protected and special concern plants may be preserved within pipeline rights-of-way.²⁵⁶⁸

1268. In general, construction of above-ground facility sites and establishment of the pipeline rights-of-way would alter existing habitat types (including sites listed by the Wildlife Action Network and the Minnesota Biology Survey), and increase fragmentation.²⁵⁶⁹

1269. Construction of any of the proposed pipeline routes has the potential to affect special-status species and habitats. All route options could affect four or five federally protected species. Of the federally listed species, four occur within the construction work areas for APR and RA-03AM; and five occur within the construction work areas for RA-06, RA-07, and RA-08.²⁵⁷⁰

1270. Based upon the potential for species to occur and total known occurrences, effects on state-listed species would be the greatest for RA-03AM and APR.²⁵⁷¹

1271. Construction of RA-06, RA-07, and RA-08 would affect fewer species; and construction of RA-07 and RA-08 would affect only plants because no state-protected animals are known to occur within the Regions of Interest for these route alternatives.²⁵⁷²

1272. In general, direct impacts on federally and state-listed and special concern vertebrate and invertebrate animals would be temporary and minor with implementation permanent and minor.²⁵⁷³

1273. All routes would pass through Wildlife Action Network (WAN) areas and MBS sites. The percent of the route distance that would affect WAN habitat would be the greatest for RA-08, RA-07, and RA-06 (41 to 45 percent). However, 30 percent of the APR would affect WAN acreage; and 12 percent of RA-03AM would affect WAN habitat.²⁵⁷⁴ The majority of WAN areas crossed by the potential routes would be in existing corridors, thus limiting the impacts.²⁵⁷⁵ However, WAN acreage crossed by RA-06 would be in an entirely new pipeline corridor, resulting in habitat loss and alteration, with potential impacts to Species of Greatest Conservation Need. Further, construction of RA-06 would result in permanent major impacts on WAN habitat because a new pipeline corridor would be created.²⁵⁷⁶

²⁵⁶⁸ *Id.*

²⁵⁶⁹ *Id.*

²⁵⁷⁰ *Id.* at 6-606 to 6-607.

²⁵⁷¹ *Id.* at 6-607.

²⁵⁷² *Id.*

²⁵⁷³ *Id.*

²⁵⁷⁴ *Id.*

²⁵⁷⁵ *Id.*

²⁵⁷⁶ *Id.*

1274. With that said, there is no highly-ranked WAN habitat along the RA-06 route, indicating that the WAN habitat is unlikely to provide Species of Greatest Conservation Need (SCGN) “richness hotspots.” Likewise, the lack of high-quality WAN lands across all alternatives indicates that the habitat affected would not likely be SCGN richness hotspots.²⁵⁷⁷

1275. Impacts on WAN habitats, and the associated SGCNs they support, crossed by APR, RA-03AM, RA-07, and RA-08 would be minor and permanent based on particular WAN habitats crossed and the proximity of routes to existing pipeline and utility corridors.²⁵⁷⁸

1276. The percent of MBS Sites affected would be the greatest for RA-06 and RA-08, and lowest for RA-03AM.²⁵⁷⁹

1277. Areas where routes cross MBS Sites would experience long-term impacts. Because these areas, for all route options, represent a small proportion of available MBS Sites in Minnesota, the overall impact would be minor. Minnesota Scientific Natural Areas (SNAs) would be unaffected by all routes except RA-03AM, where less than an acre would be affected by construction. Notably, Minnesota DNR will not grant a license or easement to cross any SNA; therefore, this route would need to be altered slightly if it is selected.²⁵⁸⁰

1278. All special-status species within the ROI for the route options could be indirectly affected by habitat loss and alteration due to operation of a pipeline. The maintained permanent right-of-way of each route option could act as a barrier to travel for some animals such as amphibians, reptiles, and small mammals, and could fragment SCGN habitat. Habitat fragmentation can increase edge habitats favored by some animals and avoided by others; and can create a barrier to movements for some animals while facilitating movements of others, especially predators.²⁵⁸¹

1279. With implementation of BMPs and appropriate species-specific conservation measures for pipeline operations, most impacts during operations would be caused by temporary disturbance and permanent habitat alteration, resulting in overall minor impacts for all route options for the life of the Project.²⁵⁸²

1280. Overall, impacts to rare and unique species are most prevalent for new corridors due to fragmentation of habitat and new impacts. Because RA-07 is entirely within an existing pipeline corridor where impacts and fragmentation has already taken

²⁵⁷⁷ *Id.*

²⁵⁷⁸ *Id.*

²⁵⁷⁹ *Id.*

²⁵⁸⁰ *Id.*

²⁵⁸¹ *Id.*

²⁵⁸² *Id.* at 6-608.

place, impacts to rare and unique species in this area is far less than routes opening a new corridor, such as RA-06 and APR.²⁵⁸³

vi. Public Lands

1281. The EIS evaluated the potential compatibility impacts on public lands from construction and operation of a pipeline within the various route options.

1282. The duration and magnitude of the construction impacts related to the compatibility of the various route options with the designated uses of public land would range from negligible to minor and temporary, to long-term impacts. The low level of impact occurs for two reasons. The limitation represents a small portion of the overall land designated for public use in most affected areas, and any impacts on this land would be restored following construction. Therefore, any impacts related to the compatibility of the pipeline with the designated uses of the land would be limited to the duration of construction and site restoration.²⁵⁸⁴

1283. Construction of APR would have the largest effect in terms of total land area on county-owned land (548 acres). Whereas, RA-07 would have the largest total impact on federally and state-owned land (157 acres and 900 acres, respectively).²⁵⁸⁵

1284. During operations (with the exception of public lands that would be permanently converted to permanent access roads and valve sites), the pipeline itself would be buried so there would be limited restriction to surface use. Therefore, the public land could continue to be managed for its designated uses, and impacts associated with operation are likely to be long term, but negligible to minor.²⁵⁸⁶

1285. The exception to this general principle is with forested land within the permanent right-of-way of the pipeline corridor where there would be permanent minor impacts on forest production, recreation and habitat. Given the area of the affected land relative to the public land that remains available for timber production, it is likely that continued operation of the pipeline (for any route option) would result in permanent, albeit minor impact, to the designated use of the land.²⁵⁸⁷

1286. The impact to public lands posed by the various route options differs most in the type of land impacted. The APR permanently impacts the most state and county land; whereas RA-07 impacts the most federal land, this is because it is located within the Chippewa National Forest.²⁵⁸⁸

²⁵⁸³ *Id.* at Table 6.3.5-45.

²⁵⁸⁴ *Id.* at 6-631.

²⁵⁸⁵ *Id.*

²⁵⁸⁶ *Id.*

²⁵⁸⁷ *Id.*

²⁵⁸⁸ *Id.* at Table 6.3.6-7.

vii. Air Quality

1287. According to the EIS, construction impacts on air quality would be minor, localized, intermittent, and temporary along the construction work areas for all routes. This is primarily due to the nature of pipeline construction, where the construction activity moves along the pipeline route, thus limiting the exposure of residents and resources in any one area.²⁵⁸⁹

1288. Air quality impacts during operations for any of the route options would be minor but permanent. Because the Applicant plans to use electric power pumps for pipeline operation, no significant new point source emissions would be created. Instead, generation of electrical power to operate the pumps would be spread through the State's existing electrical generation system.²⁵⁹⁰

1289. Other emissions during operations would be limited to small, limited sources. No effects on achievement of either U.S. National Ambient Air Quality Standards or Minnesota Ambient Air Quality Standards is projected to occur from construction or operation of any of the route options. Greenhouse gas emissions (GHGs) from construction, operations, and changes in the carbon sequestration of forested lands would occur for all the route options and are discussed, at length, above.²⁵⁹¹

1290. During construction, all of the route options would require tree removal from construction work areas between Clearbrook and Carlton County. When removed, the trees would release GHGs. APR would affect more forested lands than any of the route alternatives and, thus, would release more GHGs. The RA-08 route would affect less forested lands than the other route options and, thus, would release less GHGs.²⁵⁹²

1291. Because the APR has a shorter pipeline length than RA-03AM, the resulting air emissions and associated impacts from operations would be lower. Conversely, because APR has a longer pipeline length than the RA-06, RA-07, and RA-08 routes, the resulting air emissions and associated impacts from operations of the APR would be greater.²⁵⁹³

1292. Overall, construction-related and operations-related impacts on air quality is projected to be minor and similar for all routes.²⁵⁹⁴ Nonetheless, according to the EIS, construction and operation of a pipeline along all routes "would directly contribute to global GHG emissions and associated climate change, which collectively could lead to a threat to public health and welfare."²⁵⁹⁵

²⁵⁸⁹ *Id.* at 6-657.

²⁵⁹⁰ *Id.*

²⁵⁹¹ *Id.*

²⁵⁹² *Id.* at 6-657 to 6-658.

²⁵⁹³ *Id.* 6-658.

²⁵⁹⁴ Ex. EERA-42 at Table 6.3.7-16.

²⁵⁹⁵ *Id.* at 6-658.

1293. In sum, as between the route options, RA-03AM, due to its length, results in the most direct and indirect emissions of GHGs, followed by APR. RA-07 and RA-08 would have the lowest amount of direct and indirect GHG emissions.²⁵⁹⁶

E. Lands of Historical, Archaeological, and Cultural Significance

1294. Rule 7852.1900, subpart 3(C) requires the Commission to consider the impact of the route options on “lands of historical, archaeological, and cultural significance.”

1295. The EIS evaluated the various routes’ impacts on “cultural resources.” According to the EIS:

Cultural resources include the locations of human activity, occupation, or usage that contain materials, structures, or landscapes that were used, built, or modified by people. They also include the institutions that form and maintain communities and link them to their surroundings. Cultural resources consist of archaeological resources (e.g., sites and isolated finds), historic resources (e.g., objects, buildings, structures, or districts), and sacred places (including traditional cultural properties (TCPs) and landscapes). Cultural resources also include tribal, usufractory rights resources both within reservation boundaries and ceded lands by treaty (e.g., traditional hunting and fishing areas) and treaty areas....²⁵⁹⁷

1296. In evaluating the impacts on cultural resources by the various route options, the EIS focused on archeological and historic resources that are recorded as part of resource investigations (e.g., archaeological surveys) or those recorded in data bases maintained by individual state historic preservation offices (SHPOs). Special attention was also given to historic properties (i.e., those listed or eligible for listing on the National Register of Historic Places (NRHP). Consequently, the EIS acknowledges that “cultural resources important to American Indian tribes may not be captured in their entirety.”²⁵⁹⁸ Consequently, the only “cultural resources” evaluated by the EIS with respect to the routing options were the known and documented items of archeological and historic significance along the various routes.

1297. The tribal intervenors in this action have voiced concern that the EIS does not adequately identify tribal cultural resources that could be impacted by the Project. To that end, the Fond du Lac Band has been instrumental in organizing a “Tribal Cultural Resources Survey” that seeks to identify the natural and cultural resources at risk as a result of the Project, from the Anishinaabe perspective.²⁵⁹⁹ The Tribal Cultural Resources Survey is being conducted in conjunction with the National Historic Preservation Act,

²⁵⁹⁶ *Id.* at Table 6.2.7-14; Table 6.3.7-15.

²⁵⁹⁷ *Id.* at 6-644.

²⁵⁹⁸ *Id.* at 6-686.

²⁵⁹⁹ Ex. FDL-12 (Dupuis Summary); Survey Progress Report (Feb. 1, 2018) (eDocket No. 20182-140105-03).

Section 106 survey currently being performed by the U.S. Army Corp of Engineers on this Project.²⁶⁰⁰

1298. The Tribal Cultural Resources Survey is currently underway and has not yet been completed.²⁶⁰¹ Consequently, the final results of this survey have not been included in the record of this proceeding. The Tribal Cultural Resources Survey was only conducted with respect to the APR and does not address other route alternatives. Accordingly, even if completed, this survey would not assist the ALJ at this time in comparing the impacts on resources presented by the APR and the route alternatives.

1299. Applicant conducted its own evaluation of the archaeological and historic resources located within the APR. To that end, Applicant hired Christopher Bergman, Ph.D, an archaeologist. Dr. Bergman provided “technical review of research designs, fieldwork, and technical reports” related to “cultural resources investigations” completed by Applicant and its lead environmental contractor, Merjent, Inc.²⁶⁰² Dr. Bergman testified that his work was focused only on the identification and location of archaeological resources along the APR, not traditional cultural resources within the APR.²⁶⁰³ Dr. Bergman notes that 97 percent of the APR has been surveyed for archaeological resources.²⁶⁰⁴ However, he has not undertaken any archaeological surveys for the route alternatives.²⁶⁰⁵

1300. With respect to the identification of cultural resources, however, Dr. Bergman defers to the Tribal Cultural Resources Survey that is currently underway.²⁶⁰⁶ This survey has not been completed. Dr. Bergman agrees that it is “absolutely essential” that a full traditional cultural resources survey be completed prior to construction of the pipeline.²⁶⁰⁷

1301. Because: (1) the EIS focuses only on potential impacts to documented and known archaeological and historic resource within the APR and route alternatives; (2) Applicant’s analysis was limited to archaeological impacts within just the APR; and (3) the final Tribal Cultural Resources Survey has not been completed or entered into the record, the ALJ must focus her comparative analysis on the information provided in the EIS with respect to archeological and historic resources.

1302. According to the EIS, construction and operation of a pipeline along all route options could impact archaeological and historic resources. The EIS notes, however, that, “DOC-EERA’s consultation with the SHPO is ongoing, and the results of the consultation concerning recommendations of eligibility, Project effects, and any

²⁶⁰⁰ Survey Progress Report (Feb. 1, 2018) (eDocket No. 20182-140105-03).

²⁶⁰¹ *Id.*

²⁶⁰² Ex. EN-76 (Bergman Summary).

²⁶⁰³ Evid. Hrg. Tr. Vol. 2B at 145; Vol. 3A at 15-16, 51 (Bergman).

²⁶⁰⁴ Evid. Hrg. Tr. Vol. 3A at 18 (Bergman).

²⁶⁰⁵ Evid. Hrg. Tr. Vol. 3A at 25-26 (Bergman).

²⁶⁰⁶ Evid. Hrg. Tr. Vol. 2B at 140 (Bergman).

²⁶⁰⁷ Evid. Hrg. Tr. Vol. 3A at 25-27 (Bergman).

necessary treatment for impacts, are not yet available.”²⁶⁰⁸ Therefore, the analysis of historic and archaeological resources in the EIS is incomplete.

1303. The types of archaeological resources identified by the EIS across the ROIs for the Project (including all route options) primarily consist of individual lithic artifacts or lithic scatter.²⁶⁰⁹ The types of historic resources identified by the EIS included structures, building, and bridges.²⁶¹⁰ Because the APR and route alternatives all share the same corridor from North Dakota to Clearbrook, Minnesota, the only differences between the route options with respect to archaeological and historic resources would be the number of resources present in each route’s ROI and construction footprint between Clearbrook and Carlton County.²⁶¹¹

1304. Direct impacts to archaeological and history resources could include destruction of the resource during construction or operation. Indirect impacts include dust, noise, and visibility.²⁶¹²

1305. The number of previously-recorded archaeological resources that could be directly affected by construction ranges from zero for RA-06, to up to 12 resources for RA-08. The number of previously-recorded historic resources that could be directly affected by construction ranges from zero (APR) to seven (RA-03AM).²⁶¹³

1306. The number of previously-recorded archaeological resources that could be indirectly affected by construction ranges from zero for RA-06, to up to 12 resources for RA-08. The number of previously-recorded historic resources that could be indirectly affected by construction ranges from 27 (RA-06) to 141 (RA-03AM).²⁶¹⁴

1307. The number of previously-recorded archaeological resources that could be directly affected by operation of a pipeline within the routes ranges from zero for RA-06, to up to 10 resources for RA-08. The number of previously-recorded historic resources that could be directly affected by operation of a pipeline ranges from zero (APR) to two (RA-03AM).²⁶¹⁵

1308. The number of previously-recorded archaeological resources that could be indirectly affected by operation of a pipeline with the routes ranges from zero for RA-06, to up to 10 resources for RA-08. The number of previously-recorded historic resources that could be indirectly affected by operation of a pipeline ranges from 27 (RA-06) to 141 (RA-03AM).²⁶¹⁶

²⁶⁰⁸ *Id.*

²⁶⁰⁹ *Id.* at 6-687.

²⁶¹⁰ *Id.* 6-672.

²⁶¹¹ *Id.* at 6-687

²⁶¹² *Id.* at 6-687

²⁶¹³ *Id.* at Table 6.4.4-1.

²⁶¹⁴ *Id.*

²⁶¹⁵ *Id.*

²⁶¹⁶ *Id.*

1309. Based upon the information contained in the record, the ALJ cannot adequately compare the impacts on cultural resources among the various route options. With respect to archaeological and historic resources, it appears that all the route options have some impacts, but no route alternative stands out as significantly better or worse.²⁶¹⁷

F. Impacts on Economies within the Routes

1310. The EIS evaluated the socioeconomic impacts of the APR and route alternatives. In doing so, the EIS evaluated impacts to commodity production; recreation and tourism; population; and employment, income and tax revenue. Each of these categories is discussed below.

i. Commodity Production

1311. The primary commodities produced along APR and the route alternatives that would potentially be affected by construction or operation of the Project include: agricultural products, forestry products, and mining production.²⁶¹⁸

1312. With respect to agricultural land, the EIS found that all routes would have minor and short-term impacts during construction; and no to negligible impacts during operations, except for land converted for facilities or roadways. These impacts would lead to negligible, temporary impacts on agricultural economies in the area during construction; and negligible, permanent impacts during operation.²⁶¹⁹

1313. The aggregate value of the crop production foregone during construction is relatively low when compared to the overall aggregate value of those crops produced in the counties through which the pipeline routes pass. In addition, the Applicant would compensate landowners for deferred crop production in the construction work area.²⁶²⁰

1314. The EIS further found that the aggregate value of wild rice production foregone during construction is low when compared with the overall aggregate value of wild rice produced in northern Minnesota, including the counties through which the pipeline routes pass.²⁶²¹ Impacts resulting from routes passing through the Fond du Lac and Leech Lake Reservations could have disproportionate effects on the economies of these Indian Bands, relative to the Minnesota economy. However, the anticipated magnitude would still be negligible to minor.²⁶²²

1315. The Applicant would utilize BMPs to minimize impacts on wild rice stands during construction. And impacts resulting from operations would be temporary,

²⁶¹⁷ *Id.* at Table 6.4.1-1.

²⁶¹⁸ *Id.* at 6-693.

²⁶¹⁹ *Id.* at 6-730.

²⁶²⁰ *Id.* at 6-731.

²⁶²¹ *Id.*

²⁶²² *Id.*

occurring during repair and other integrity activities; and negligible to minor in magnitude.²⁶²³

1316. When considering disturbance or loss of agricultural land from construction, APR, RA-06, RA-07, and RA-08 affect fewer acres; while RA-03AM would result in losses of land of much higher value.²⁶²⁴

1317. RA-03AM would result in more than four times the losses in agricultural yields as any of the other routes. Further, the Applicant's preferred route has a loss of yield that, while relatively small, is still greater than that which follows from RA-06, RA-07 or RA-08.²⁶²⁵

1318. When considering disturbance or loss of wild rice stands from construction, the Applicant's preferred route would affect the least amount of acreage, while RA-06 would affect the greatest amount of land. However, the impacts would be similar in magnitude, in terms of both acreage and the dollar value of the crops. RA-06, RA-07, and RA-08 would potentially impact the economies of the Fond du Lac and Leech Lake Bands. However, the magnitude of economic impact to these Bands is still projected by the EIS to be minor and temporary.²⁶²⁶

1319. Removal of timber resources from the construction work area represents a permanent impact but, as with crop production, the economic impact would be partially offset by the sale of merchantable timber.²⁶²⁷ For forested land and timber resources, the potential impact on timber production during construction of the pipelines would be long term and minor. It would take up to 50 years for the land cleared for construction to again produce harvestable timber; however, the value of the timber lost is low relative to the value of the timber that remains available for harvest in the counties that would be crossed.²⁶²⁸

1320. With respect to the disturbance and loss of forested land (and associated economic yields of timber) during construction, the APR affects the greatest amount of acreage and yields. However, all of the route alternatives have similar impacts and losses of economic yield.²⁶²⁹

1321. The comparative results for operations were similar to those for construction. For impacts upon forestry, lower effects were predicted for RA-06, RA-07, and RA-08; and APR was at the high end of the range.²⁶³⁰

²⁶²³ *Id.*

²⁶²⁴ *Id.*

²⁶²⁵ *Id.*

²⁶²⁶ *Id.*

²⁶²⁷ *Id.*

²⁶²⁸ *Id.*

²⁶²⁹ *Id.* at 6-732.

²⁶³⁰ *Id.*

1322. No land in active mining areas would be affected by construction or operations of any route option, with the exception of a temporary facility access road for APR, which would affect 0.5 acres in Carlton County, and approximately one acre of the permanent right-of-way along RA-06. Although the mineral resources beneath the surface is unknown, it is expected that construction of any of the routes would result in a temporary negligible impact on this land; while operations would result in a permanent, but negligible impact.²⁶³¹

1323. In sum, RA-03AM would have the most impact on agricultural land and commodities. RA-07 and RA-08 would have slightly more impact on wild rice production because they run through two American Indian Reservations. The APR would have the most impact on forested land and timber commodities. And, overall, there would be very little to no impact by any of the routes on mining.²⁶³²

ii. Recreation and Tourism

1324. The issues of concern related to recreation and tourism are the loss of recreation-based spending and the associated effects on the recreational economies in the counties that would be crossed.²⁶³³

1325. According to the EIS, construction impacts on access to recreational resources along all routes would range from no impact, to negligible or minor temporary impacts. There would be no impacts to any of the routes during operation of the pipeline, due to its location underground²⁶³⁴ (assuming, of course, there are no spills, leaks, or ruptures that would impact the environment used for recreation in the area).

1326. Similarly, potential effects on recreational spending and the regional economies of the counties through which the routes pass were found to be temporary and negligible or no impact during construction; and nonexistent during operations.²⁶³⁵

1327. The low level of impact occurs for two reasons. First, the routes through forests and special management areas do not intersect any developed recreational sites. Therefore, the only limited access to the forest or managed area would be at the actual construction work site. This limitation represents a small portion (less than one-half of a percent) of the overall land designated for recreational use in most affected areas. Second, for “linear” recreation resources (e.g., waterways and trails), only a short portion of the waterway or trail would be restricted from temporary use where the pipeline crosses the trail; and the restriction would be limited to the short construction period.²⁶³⁶

1328. Although all routes would experience negligible or no impacts, the geographic extent of the affected area within recreational lands differs among the route

²⁶³¹ *Id.* at 6-731.

²⁶³² *Id.* at Table 6.5.1-24.

²⁶³³ *Id.* at 6-738.

²⁶³⁴ *Id.* at 6-765.

²⁶³⁵ *Id.*

²⁶³⁶ *Id.*

options. RA-07 would affect the greatest amount of land available for recreation in forests or special management areas (1,049 acres); while RA-03AM would affect the least (57 acres). APR would affect 439 acres.²⁶³⁷

1329. Except for RA-03AM, all proposed routes each would cross three state-designated multi-use trails. However, RA-03AM would cross only one (but would do so three times).²⁶³⁸

1330. None of the route alternatives would cross hunter walking trails, but APR would cross one trail two times.²⁶³⁹

1331. RA-03AM would cross the most amount of snowmobile trails (16), whereas APR would cross the least (12 snowmobile trails). RA-03AM would cross the most amount of state-designated water trails (6). RA-06, RA-07, and RA-08 each would cross one water trail multiple times.²⁶⁴⁰

1332. RA-03AM would cross the most trout streams (9); whereas RA-08 would cross the fewest (4). The APR would cross six (6) trout streams.²⁶⁴¹

1333. Based on the crossing methods proposed by Applicant and the limited number of crossings, impacts on the recreational use of these trails and waterbodies are likely to be temporary and negligible. Although the crossing methods have not been identified for the route alternatives, construction impacts in recreation areas would be similar to those described for APR, with a corresponding negligible impact on the recreational economies of the counties crossed. Construction-related impacts are not expected to result in a measurable impact on overall visitation to trails and waterbodies at the county level, thereby resulting in a negligible impact on the amount of recreation-based spending at the county level.²⁶⁴²

1334. Construction methods proposed by the Applicant would not disrupt use of scenic byways for any route. Operation of the pipeline would not cause additional impacts on land-based trails, water trails, trout streams, or byways and consequently would not affect the recreational economies in the counties crossed.²⁶⁴³

1335. In sum, the EIS concludes that there would be no limitations to recreation access or changes to the recreational economies as a result of operation of a pipeline along any of the route options (absent an unintended release). Construction along all

²⁶³⁷ *Id.*

²⁶³⁸ *Id.* at 6-766.

²⁶³⁹ *Id.*

²⁶⁴⁰ *Id.*

²⁶⁴¹ *Id.*

²⁶⁴² *Id.*

²⁶⁴³ *Id.*

routes would have only temporary, minor impacts. All routes cross some trails, but those impacts would be temporary and negligible only during construction.²⁶⁴⁴

iii. Population Impacts

1336. The EIS evaluated the impact of construction and operation of a pipeline on populations within all routes and their vicinities. These impacts are essentially two-fold: (1) increases in the workforce from non-local, temporary workers or permanent workers moving into the area; and (2) disruptions to high-population areas, including disruptions to traffic and services, and permanent displacement of residences and structures.²⁶⁴⁵

1337. The influx of construction workers to build and operate the pipeline along all routes would result in negligible to minor impacts to population; except in those few counties with the lowest populations. The influx of non-local workers is not expected to affect the local populations unless two construction spreads are working in proximity to each other within a single low-population county.²⁶⁴⁶ The nature of the pipeline construction work requires the workers to move through each area after a short time; and the existing services and housing in the areas on a county-wide basis are adequate to support the influx of workers. In the circumstance where two construction spreads are active in the same low-population county, temporary but major impacts could occur.²⁶⁴⁷

1338. Potential impacts from operations would be permanent but negligible for all routes. Pipeline operations would require relatively few additional employees and thus would not affect the local workforce, need for housing, or local services.²⁶⁴⁸ See *also*, Section V., C., ii., b., above.

1339. When comparing the APR and the route alternatives to each other, the APR would be expected to have the lowest impact on populated areas. It has the lowest number of populated areas within the ROI and the lowest total population within those populated areas. It also has the least acreage along of permanent right-of-way that crosses populated areas and would restrict surface land use within populated areas.²⁶⁴⁹

1340. The next highest population exposure would occur from RA-03AM, where approximately 10 times as many people are in populated areas along the pipeline route. The permanent right-of-way acreage that would need to remain cleared in the populated areas would be five times greater for RA-03AM than for APR.²⁶⁵⁰

²⁶⁴⁴ *Id.* at Table 6.5.2-6.

²⁶⁴⁵ Ex. EERA-42 at 6-770.

²⁶⁴⁶ *Id.* at 6-785.

²⁶⁴⁷ *Id.*

²⁶⁴⁸ *Id.*

²⁶⁴⁹ *Id.*

²⁶⁵⁰ *Id.*

1341. RA-06, RA-08, and RA-07, in that order, would increase the exposed population within populated areas. However, at all levels of population exposure, impacts are expected to be negligible to minor.²⁶⁵¹

1342. In sum, construction would have temporary, minor impacts to population increase across all routes. No route indicates an inability to house the temporary workers anticipated to be employed in the construction of the pipeline. While RA-07 crosses the most populated areas of the route alternatives, operations of a pipeline across all routes is anticipated to result in just nominal permanent impacts to the populations.²⁶⁵²

iv. Employment, Income, and Tax Revenues

1343. To evaluate the economic impacts of the APR and route alternatives, the EIS looked to: (1) construction-related employment, payroll spending, and expenditures on materials, supplies, and equipment; (2) operation-related employment and payroll spending; (3) income tax revenue from workers during construction and operation; (4) property taxes paid by the Applicant during operation; and (5) impacts on property taxes, if any, of appraised property value changes due to construction and operations.²⁶⁵³

1344. Pipeline construction would require a substantial workforce. Based upon the assumption that Applicant would draw at least 50 percent of its workers from local union halls, regardless of the route alternative selected, it is likely that direct construction-related employment would have a minor positive impact on county-level unemployment, per capita and median household income levels.²⁶⁵⁴

1345. During construction, there is likely to be an increase in hiring in the secondary industries that support the construction industry. The impact of that increase in employment would have temporary, negligible impacts on employment and income at the county level.²⁶⁵⁵

1346. Construction-related tax revenues would be largely due to income taxes paid at the state level and apportioned to the counties crossed by the pipeline, as well as sales and use taxes on construction-related goods and services. Tax revenues generated during construction are likely to be temporary and minor to major for all alternatives.²⁶⁵⁶

1347. Employment and income effects as well as the impacts on tax revenues during construction would be substantially the same for all of the routes. Differences in impacts would be due to the differences in length of the route options. RA-03AM would have the largest positive impact on the tax revenues during construction, with an

²⁶⁵¹ *Id.* at Table 6.5.3-6.

²⁶⁵² *Id.* at Table 6.5.3-6.

²⁶⁵³ *Id.* at 6-791.

²⁶⁵⁴ *Id.* at 6-814.

²⁶⁵⁵ *Id.*

²⁶⁵⁶ *Id.*

estimated \$73 million in income tax revenue, because it has the longest route. The APR and RA-06 are the next longest, followed by RA-07 and RA-08.²⁶⁵⁷

1348. Operation of the pipeline along all routes would require a very small number of new hires because the new pipeline would be operated primarily by the Applicant's existing operations staff. Therefore, pipeline operation would not result in a measureable effect on county-level income, tax revenues, or employment levels.²⁶⁵⁸

1349. The impact upon property taxes, however, would be substantial and would result in a permanent, major impact on county-level tax revenues for all routes. As noted above, the impact on property taxes would differ slightly, with the longest route (RA-03AM) generating more tax revenues than the shorter routes.²⁶⁵⁹ See *also* Section V., C., ii., b., above, for analysis of the property tax revenue of the Project generally.

1350. In sum, all routes would have similar benefits with respect to employment and income tax revenue. All routes would result in property taxes being collected by the affected counties. Because RA-03AM is longer, it would result in more property taxes. Overall, however, this factor does not differentiate the route options.²⁶⁶⁰

G. Pipeline Cost and Accessibility

1351. Two key components of pipeline project costs are construction costs and operations costs.²⁶⁶¹

1352. Construction costs include the costs for acquiring right-of-way easements or land purchase, construction equipment, pipe and associated equipment, pump station equipment, expendable supplies, and labor. Applicant has reported that construction of the APR across Minnesota would cost approximately \$2.1 billion, or an average of \$6.2 million per mile.²⁶⁶²

1353. After subtracting the cost of pump stations, the cost of a pipeline project of a given pipe diameter is highly correlated to the length of the project. However, site-specific conditions – such as acquisition of easements, obtaining access and special construction methods – can influence actual costs.²⁶⁶³

1354. When the average cost per mile for the APR is applied to the length of each route alternative, an approximate cost comparison can be made. Total costs were calculated for each route alternative over the entire route in Minnesota and for the portion of the route between Clearbrook and Carlton County that varied from the APR. Overall

²⁶⁵⁷ *Id.*

²⁶⁵⁸ *Id.* at 6-813.

²⁶⁵⁹ *Id.* at 6-815.

²⁶⁶⁰ *Id.* at Table 6.5.4-16.

²⁶⁶¹ *Id.* at 6-820.

²⁶⁶² *Id.*

²⁶⁶³ *Id.*

construction costs across Minnesota ranged from \$1.8 billion dollars (RA-07 and RA-08) to \$2.4 billion dollars (RA-03AM).²⁶⁶⁴

1355. Below are the cost comparisons of the various route options, as estimated by the EIS:²⁶⁶⁵

Route	Minnesota Total		Clearbrook-to-Carlton Segment	
	Miles	Cost (\$ billions)	Miles	Cost (\$ billions)
APR	339.7	\$2.1	220.9	\$1.4
RA-03AM	394.9	\$2.4	275.1	\$1.7
RA-06	316.6	\$2.0	196.7	\$1.2
RA-07	287.5	\$1.8	167.7	\$1.0
RA-08	284.6	\$1.8	164.8	\$1.0

1356. It is unclear if these amounts include the costs of easements and acquisition of land rights. As set forth above, RA-07 should not require the purchase of new easements from private landowners (other than the Tribes), because it entails in-trench replacement, which Applicant asserts is permissible under its easement agreements for Existing Line 3.²⁶⁶⁶ Therefore, there would be very little, if any, land acquisition costs, as with respect to private parties (other than the Tribes).

1357. Based upon the DOC-EERA's analysis, it appears that RA-07 and RA-08 would be significantly less costly to construct than the other route options, including APR.²⁶⁶⁷ Note that RA-07 requires the additional cost of removal of Existing Line 3, which may or may not be added to the other options.

1358. An estimate of operations costs was not available for the Minnesota portion of the proposed Project, as Applicant will operate the Line 3 Project as part of its proprietary Mainline system.²⁶⁶⁸

1359. However, pumping costs (energy) is a major factor in the cost of operating the proposed Project in Minnesota. Like construction costs, pumping costs are related to

²⁶⁶⁴ *Id.*

²⁶⁶⁵ *Id.* at Table 6.6.1.

²⁶⁶⁶ Evid. Hrg. Tr. Vol. 3B at 23, 68 (McKay).

²⁶⁶⁷ *Id.* at Table 6.6-1.

²⁶⁶⁸ *Id.* at 6-821.

pipeline length. Applicant has indicated that energy use for the APR would total over 533 million kilowatt-hours per year.²⁶⁶⁹ Based upon the average energy use per mile and the estimated cost of energy per kilowatt, the energy cost of operation was estimated for each route alternative, below:²⁶⁷⁰

1360. Table 6.6-2. Estimated Annual Energy Costs during Operation for the Applicant's Preferred Route and Route Alternatives

Route	Minnesota Total		Clearbrook-to-Carlton Segment	
	Miles	Cost (\$ millions)	Miles	Cost (\$ millions)
Applicant's preferred route	339.7	\$47.1	220.9	\$30.7
Route alternative RA-03AM	394.9	\$54.8	275.1	\$38.2
Route alternative RA-06	316.6	\$43.9	196.7	\$27.3
Route alternative RA-07	287.5	\$39.9	167.7	\$23.3
Route alternative RA-08	284.6	\$39.5	164.8	\$22.9

Sources: Average cost per mile for Applicant's preferred route based on energy use provided by Enbridge (2016) and the average commercial energy cost in Minnesota in 2016 of 8.84 cents per kilowatt-hour (Electricity Local 2016).

1360. As detailed above, the annual energy costs for RA-03AM would be approximately 116 percent higher than for the APR in Minnesota.²⁶⁷¹

1361. Energy costs for RA-06, RA-07, and RA-08 would be still lower – from 84 to 93 percent of the energy costs for the APR in Minnesota.²⁶⁷²

1362. For the portion of the route that lies between Clearbrook and Carlton County (and contains route alternatives), energy costs for RA-03AM would be approximately 124 percent of the costs for the APR. Energy costs for RA-06, RA-07, and RA-08 would range from 75 to 88 percent of the costs for the APR.²⁶⁷³

1363. Other length-related costs include surveillance and maintenance of the permanent right-of-way.²⁶⁷⁴

Overall, the cost of RA-07 and RA-08 is substantially lower for both construction and operation than the APR.

²⁶⁶⁹ *Id.*

²⁶⁷⁰ *Id.* at Table 6.6-2.

²⁶⁷¹ *Id.* at 6-821.

²⁶⁷² *Id.*

²⁶⁷³ *Id.*

²⁶⁷⁴ *Id.*

H. Use of Existing Rights-of-Way Sharing or Paralleling

1364. As required by Minn. R. 7850.1900, subp. 3(l), in selecting a route for a pipeline project, the Commission shall consider the use of existing rights-of-way, as well as the extent of right-of-way sharing or paralleling offered by each route option.²⁶⁷⁵

1365. Right-of-way sharing and right-of-way paralleling concentrates the effects of linear infrastructure within particular corridors. Both right-of-way sharing and right-of-way paralleling can reduce the number of new pipeline corridors, fragmentation of habitats, and disturbances to vegetation and surface soils during construction.²⁶⁷⁶

1366. The types of existing linear infrastructure in the shared or paralleled corridor also can influence the types of infrastructure that may be placed in adjacent spaces. For example, new oil pipelines may be co-located closer to an existing crude oil or refined products pipeline than to a highway or high-voltage transmission line. This is often the case when the pipelines are owned by the same company.²⁶⁷⁷

1367. Between Clearbrook and Carlton County, the APR and most of the route alternatives would share, or parallel, existing rights-of-way for the majority of their pipeline route.²⁶⁷⁸ The utilities paralleled, however, are different for most routes. As set forth above, the use of existing oil pipeline corridors consolidates the environmental risks of release into one corridor. Accordingly, paralleling existing oil pipelines is preferable to paralleling other utilities, such as transmission lines. This is particularly true because the environmental impacts of a transmission line and an oil pipeline are different.

²⁶⁷⁵ Minn. R. 7852.1900, subp. 3 (F) (2017).

²⁶⁷⁶ Ex. EERA-42 at 6-822.

²⁶⁷⁷ *Id.*

²⁶⁷⁸ Ex. EERA-42 at Table 6.7-1.

1368. Below is a chart prepared by the DOC-EERA comparing the corridor sharing and paralleling of the various route options:

Table 6.7-1. Extent of Co-Location for the Applicant's Preferred Route and Route Alternatives

Segment	Total Length (miles)	New Right-of-Way (miles)	Type of Existing Infrastructure (miles) ^a			Percent of Co-Location
			Oil and gas pipeline	Transmission/utility lines	Road	
North Dakota Border to Clearbrook						
Applicant's preferred route	109.3	0	109.3	0	0	100
Clearbrook to Carlton						
Applicant's preferred route	220.9	59.8	66.2	92.0	2.9	73
Route alternative RA-03AM	275.1	12.9	223.6	13.8	24.8	95
Route alternative RA-06	196.7	156.5	40.3	0	0	20
Route alternative RA-07	167.7	0	167.7	0	0	100
Route alternative RA-08	164.8	0	164.8	0	0	100
Carlton to Wisconsin Border						
Applicant's preferred route	9.6	0	9.6	0	0	100

^a Total miles co-located may be greater than total length due to areas where segment is shared with multiple types of existing infrastructure.

1369. As detailed above, RA-07 would share the right-of-way of the Enbridge Mainline System from the North Dakota border to the Wisconsin border.²⁶⁷⁹ In other words, it would be located within the existing Mainline corridor for 100 percent of its length. This is important considering that five other pipelines owned by Applicant will be operating in that same corridor, isolating the environmental risks of those oil pipelines to one shared corridor, instead of opening up a new corridor. This is especially true in light of Applicant's intent to simply abandon its Existing Line 3 in place and Applicant's tribal easements, which expire in 2029.

1370. Like RA-07, RA-08 would also share or parallel rights-of-way with existing pipelines for its entire length.²⁶⁸⁰ Therefore, RA-08 is a second-choice option to RA-07.

²⁶⁷⁹ *Id.*

²⁶⁸⁰ *Id.*

1371. Applicant touts that the APR would share or parallel existing utility rights-of-way for 73 percent of its length between Clearbrook and Carlton County.²⁶⁸¹ However, a majority of that corridor would be shared with transmission lines, not an oil pipeline. Specifically, from Park Rapids to Carlton County, APR would create an entirely new oil pipeline corridor.²⁶⁸² This new pipeline corridor is nearly 50 percent of its entire length - a significant drawback of APR.

1372. RA-06 has the lowest proportion of its route co-located with existing rights-of-way between Clearbrook and Carlton County (20 percent).²⁶⁸³ This is a significant drawback of this particular route alternative.

1373. While RA-03AM is co-located with other utility corridors (primarily oil and gas pipelines) for 95 percent of its length from Clearbrook to Carlton County, it is significantly longer than any other route alternative, including APR.²⁶⁸⁴

I. Cumulative Potential Effects of Related or Future Pipeline Construction

1374. Rule 7852.1900, subpart 3(l) requires the Commission to consider the “cumulative potential effects of related or anticipated future pipeline construction.”

1375. Applicant asserts that the Project is a “stand-alone” Project and that there are “no planned expansions of the Project.”²⁶⁸⁵ Accordingly, Applicant essentially asserts that this factor is inapplicable to this proceeding. The ALJ disagrees.

1376. As set forth in detail throughout these Findings, the opening of a new oil pipeline corridor leaves open the possibility that the new corridor could be used, in the future, to relocate Applicant’s other oil pipelines within the Mainline corridor. This is particularly true in 2029 when Applicant’s current BIA easements for six Enbridge pipelines running through two American Indian Reservations will expire.²⁶⁸⁶

1377. As set forth in Section IV., G. above, there are six Enbridge pipelines (including Existing Line 3) within the Mainline corridor that extend through the Leech Lake and Fond du Lac Reservations.²⁶⁸⁷ In 2029, Enbridge will need to either negotiate new leases or be prepared to remove those lines from the Reservations.²⁶⁸⁸ One of the driving reasons that Applicant is seeking to open a new corridor, rather than replace the line in

²⁶⁸¹ Ex. EN-22 at 9 (Simonson Direct).

²⁶⁸² Ex. EN-22 at 8-9 (Simonson Direct).

²⁶⁸³ Ex. EERA-42 at Table 6.7-1.

²⁶⁸⁴ *Id.*

²⁶⁸⁵ Ex. EN-2 at 4-19 (RP Application).

²⁶⁸⁶ See Ex. LL-1 (LL Easement); Ex. FDL-1 (FDL Easement).

²⁶⁸⁷ Ex. LL-1 (LL Easement); Ex. FDL-1 (FDL Easement).

²⁶⁸⁸ Ex. LL-1 (LL Easement); Ex. FDL-1 (FDL Easement); Ex. LL-3 (LL Settlement Agreement); Ex. FDL-9 (FDL Settlement Agreement).

its current location, is due to the fact that negotiations with the Tribes are “too uncertain.”²⁶⁸⁹

1378. The EIS addresses the possible cumulative effects of a new pipeline corridor in Chapter 12, where it notes that:

If a new pipeline corridor outside of the existing Enbridge Mainline (such as the Applicant’s preferred route, RA-03AM, or RA06) were to be permitted for the proposed Project, the new corridor would create an opportunity for future corridor sharing that could ultimately result in accumulation of multiple pipelines within the corridor chosen for the Line 3 Project....

The addition of another pipeline within a new pipeline corridor would require the widening of the right-of-way and would introduce additional spill risk. In general, the widening of the corridor would incrementally increase the effects on the resources described for each of the routes in Chapter 6 of this EIS....

In addition, adding an additional pipeline in any of these new corridors would increase the accidental release risk exposure of the same resources described along each of the routes in Chapter 10.²⁶⁹⁰

1379. In addition, the EIS identifies the general impacts of an additional new corridor to include effects on planning and zoning laws; aesthetics, vegetation, wildlife, agriculture and timber production, cumulative spill risk, and contribution to climate change.²⁶⁹¹

1380. As the EIS identifies, opening a new corridor through Minnesota would open up the possibility of Enbridge’s existing lines (especially those five other lines currently running through the Reservations) being relocated to the new corridor -- or other new lines being proposed in the new corridor.

1381. This is a distinct possibility that the Commission should consider in this case, especially considering that Applicant has not (and does not intend to) release the easements that it obtained in the Sandpiper case. Those easements which allow for at least two (if not four) pipelines in APR.²⁶⁹² See Section IV., F. for a full discussion of the easements Applicant has obtained for the APR in this case.

1382. If Applicant is unable to negotiate new easements through the Reservations, Applicant could well petition the Commission in the future to allow it to abandon the other five lines located through the Reservations, and install new pipelines

²⁶⁸⁹ Ex. EERA-42 at ES-8 (Revised EIS).

²⁶⁹⁰ Ex. EERA-42 at 12-39

²⁶⁹¹ Ex. EERA-42 at 12-39 to 12-12-48 (Revised EIS).

²⁶⁹² Evid. Hrg. Tr. Vol. 3B at 33-37 (McKay).

in the new corridor that Applicant seeks to create in this case. For Minnesota, that would mean thousands of miles of abandoned pipeline in the Mainline corridor – and a new pipeline corridor where the private easements Applicant has been procuring allow for Applicant to “idle in place” those lines when they are no longer needed by Applicant.²⁶⁹³

1383. In this way, opening a new corridor would open the possibility of abandoned lines within the current Mainline corridor through Minnesota and a second corridor where legal agreements essentially allow Enbridge to abandon them in place once Enbridge no longer has the need to operate the lines. This is particularly true if the Commission sets a precedent of allowing abandonment in this case.

1384. If there is a significant reduction in need or demand for fossil fuels, like Canadian tar sands crude oil, Minnesota would be the eternal resting place for Enbridge’s by-gone infrastructure. Section VII above discusses the risks and problems associated with abandoned pipelines, which are expected to remain for hundreds, if not thousands, of years into the future²⁶⁹⁴ – certainly beyond the life expectancy of today’s decision-makers and, likely, Enbridge itself.

J. Relevant Policies, Rules, and Regulations of Other Bodies

1385. Rule 7852.1900, subpart 3(J) addresses “the relevant applicable policies, rules, and regulations of other state and federal agencies, and local government land use laws including ordinances adopted under Minnesota Statutes, section 299J.05, relating the location, design, construction, or operation of the proposed pipeline and associated facilities.”

1386. The EIS identifies the various laws, rules, and regulations that Applicant will need to comply with should a RP be issued in this case.²⁶⁹⁵

1387. Of particular interest are the laws, rules, and regulations related to replacing Existing Line 3 in its current location (RA-07).

1388. While the issuance of a RP by the Commission supersedes local zoning and land use laws and regulations, a RP would not exempt the Project or Applicant from the laws, rules, and regulations of the federal government, or any sovereign nation, including American Indian Tribes within Reservation land.

²⁶⁹³ See *e.g.*, HTE-5 (Easement); HTE-6 (Easement).

²⁶⁹⁴ Evid. Hrg. Tr. Vol. 2A at 63-64; Vol. 2Bat 22-23 (Simonson). (Q: “So thousands of years from today, that pipe will still be there in the ground; is that what Enbridge is proposing?” A: “That’s what the study shows.”)

²⁶⁹⁵ See Ex. EERA-42 at Table 6.8-1 (Revised EIS).

1389. Both RA-07 and RA-08 cross two American Indian Reservations: the Leech Lake and the Fond du Lac Reservations.²⁶⁹⁶ RA-06 crosses only the Fond du Lac Reservation.²⁶⁹⁷ The APR and RA-03AM do not cross any Indian Reservations.²⁶⁹⁸

1390. As set forth in considerable detail in Section IV., G. above, the construction of a pipeline through an Indian Reservation would require approval from the applicable Indian Tribes, as well as a right-of-way easement grant from the BIA, which can only be granted for a limited duration (no more than 20 years).²⁶⁹⁹ Applicant asserts that obtaining limited-term easements and permits from the BIA and Tribes (Leech Lake, in particular), would be “too uncertain in this case.”²⁷⁰⁰ Therefore, it seeks to create a new pipeline corridor to avoid the Leech Lake and Fond du Lac Reservations.

1391. As explained in detail above, whether or not this Project is approved, Applicant will continue to have **five** other Enbridge pipelines running through these two Reservations at least until 2029.²⁷⁰¹ In order to continue operation of these five lines in their current locations, Applicant will need to renew and renegotiate those easements before 2029.²⁷⁰² Otherwise, Applicant will have to relocate or remove those lines from the Reservations.²⁷⁰³

1392. Applicant has been operating oil pipelines through these two Reservations since the 1950s, and most recently installed two more pipelines in 2009 (Lines 13 and 67).²⁷⁰⁴ Therefore, Applicant made the affirmative decision to continue to operate its Mainline System through the Reservations as recently as 2009. Applicant is approximately half-way through that easement term.

1393. Applicant’s business decision to locate pipelines within these Reservations decades ago – and its decision to “double-down” by constructing two more pipelines in the same corridor through the Reservations as recently as 2009 – was a business decision made by Applicant from which Applicant has, no doubt, profited. Given the number of lines located within the same corridor through the Reservations, Applicant’s claims that negotiations with the Tribes may be “too uncertain” should be viewed with skepticism.

1394. A true replacement of Line 3 would require Applicant to negotiate with the Tribes, obtain their approvals, and receive a renewal or extension of the BIA easements. But this is a complicated situation that Applicant has caused on its own by locating the

²⁶⁹⁶ Ex. EERA-42 at ES-9, Figure ES-3 (Revised EIS).

²⁶⁹⁷ *Id.*

²⁶⁹⁸ *Id.*

²⁶⁹⁹ Ex. EERA-42 at 3-14 (Revised EIS).

²⁷⁰⁰ Ex. EERA-42 at ES-8 (Revised EIS).

²⁷⁰¹ Ex. LL-1 (LL Easement); Ex. FDL-1 (FDL Easement).

²⁷⁰² Ex. LL-3 (LL Settlement Agreement); Ex. LL-1 (LL Easement); Ex. FDL-1 (FDL Easement); Ex. FDL-3 (FDL Settlement Agreement).

²⁷⁰³ Ex. LL-3 (LL Settlement Agreement); Ex. LL-1 (LL Easement); Ex. FDL-1 (FDL Easement); Ex. FDL-3 (FDL Settlement Agreement).

²⁷⁰⁴ Ex. LL-3 (LL Settlement Agreement); Ex. LL-1 (LL Easement); Ex. FDL-1 (FDL Easement); Ex. FDL-3 (FDL Settlement Agreement).

lines through the Reservations in first place. Expense and difficulty in negotiating with the Tribes is a reality that Applicant has created for itself. Applicant's business decisions are not the responsibility of the Commission to fix by opening a new corridor for Applicant for the relocation of Existing Line 3 (and potentially future lines running through these Reservations), simply because negotiations with the Tribes may be protracted and difficult.

1395. Therefore, while approvals from the Tribes and the BIA may be difficult to obtain for RA-06, RA-07, RA-08, the ALJ does not find this to be a basis to exclude these routing options from consideration.

1396. It should be noted that an approval of RA-07 does not, in any way, infringe on the sovereignty of the various Indian tribes to disapprove permits or other approvals required for construction of the Project through land over which it has legal control. Just like the Commission cannot bind the BIA or require the BIA to grant easements for a route, the Commission does not have the authority to require either Leech Lake or Fond du Lac to permit the replacement of Existing Line 3. It would, however, likely encourage the Tribes and Applicant to accelerate discussions that are inevitable prior to 2029 regarding the renewal of easements through Reservation lands. Unless and until necessary tribal permits and BIA easements are actually denied, RA-07 continues to be a reasonable and viable route option for a true replacement of Line 3.

K. Comments from MPCA and MDNR on Route Selection

1397. In addition to the analyses of the various route options presented in this case by the DOC-EERA, Applicant, and the parties, two other state agencies have provided comment and recommendations: the Minnesota Pollution Control Agency (MPCA) and the Minnesota Department of Natural Resources (MDNR).²⁷⁰⁵ Both of these state agencies have jurisdiction over the lands through which the routes would travel, and, thus, provided some expertise in this case.

1398. Following a close review of the various route and system alternatives evaluated in this proceeding, and after months of providing technical assistance to the EERA on the EIS, the MPCA concluded that RA-07 "represents the lowest overall potential environmental impact to surface water and groundwater resources."²⁷⁰⁶

1399. The MPCA's analysis of route alternatives focused on impacts caused by: (1) creation of new corridor rights-of-way; and (2) construction in sensitive areas or areas of known high surface or groundwater quality.²⁷⁰⁷ The MPCA explained, "[i]n general, because of impacts due to ROW clearing, the use of existing and/or common or shared infrastructure corridors for pipeline projects will have fewer environmental impacts than a

²⁷⁰⁵ Comments by MPCA (November 22, 2017) (Batch 25) (eDocket No. 201711-137629-02 (CN)); Comments by MDNR (November 22, 2017) (Batch 18A) (eDocket No. 01711-137640-01 (CN)).

²⁷⁰⁶ Comments by MPCA, at 7 (November 22, 2017) (Batch 25) (eDocket No. 201711-137629-02 (CN)). *See also*, Memorandum of Understanding in MPUC 14-916 at 1 (Mar. 7, 2016) (eDocket No. 20163-118961-01).

²⁷⁰⁷ *Id.* at 4.

new corridor.”²⁷⁰⁸ Consequently, the MPCA concluded that RA-07 “offers the greatest potential to minimize potential adverse effects to surface water and groundwater resources.”²⁷⁰⁹

1400. In addition, the MPCA noted that the RA-07 “occupies areas of lesser groundwater vulnerability, while the APR crosses (from Clearbrook eastward), a relatively high percentage of high or highest groundwater vulnerability.” The MPCA determined that “the APR offers a less environmentally protective alternative” because it would “require more crossings of the Mississippi River and several of its tributaries, which are primary source of drinking water for the downstream communities of St. Cloud, Minneapolis, and St. Paul.”²⁷¹⁰

1401. As the MPCA concluded:

A review of the Final EIS and summary review of key GIS sensitivity layers above indicates that locating the Project in or as close to the RA-07/Existing Corridor as possible represents the lowest overall potential environmental impact to surface water and ground water resources. The existing Line 3 corridor has already experienced natural resource impacts, such as crossing of water bodies, alternation and loss of habitat, forest fragmentation and similar effects. RA-07 is either located in or closely follows the existing corridor.

1402. Similarly, following a close review of the various route and system alternatives evaluated in this proceeding, and after months of providing technical assistance to the EERA on the EIS, the DNR likewise “determined that RA-07 does the best job of minimizing potential impacts to state managed natural resources.”²⁷¹¹

1403. The MDNR noted that the APR “does a poor job of following existing rights-of-way in comparison to RA-07 and RA-08.”²⁷¹² And that RA-07 would require the fewest public water crossings compared to the other alternatives.²⁷¹³

L. Summary of ALJ Findings and Conclusions on Route Selection

1404. The ALJ concludes that, among the various routing options, in-trench replacement of a new pipeline along RA-07 is the superior alternative.

1405. RA-07 is the best option because it would:

²⁷⁰⁸ *Id.*

²⁷⁰⁹ *Id.*

²⁷¹⁰ *Id.* at 7.

²⁷¹¹ Comment by MDNR at 6 (November 22, 2017) (Batch 18A) (eDocket No. 01711-137640-01 CN)). *See also*, Memorandum of Understanding in MPUC 14-916 at 1, *supra*.

²⁷¹² Comment by MDNR at 6 (November 22, 2017) (Batch 18A) (eDocket No. 01711-137640-01 (CN)).

²⁷¹³ *Id.*

- avoid the detrimental and cumulative impacts of opening a new oil pipeline corridor through Minnesota;
- be co-located with existing Enbridge pipelines for 100 percent of its length;
- be shorter than all other route options, except for RA-08;
- minimize potential impacts to state-managed natural resources;
- have the lowest overall potential environmental impact to surface water and groundwater resources;
- not contribute to further fragmentation of wildlife habitat;
- have the least impact to homes and residences in the right-of-way;
- have the least impacts upon adjacent property values;
- require the least amount of acquisition of private property;
- require the fewest number of surface waters crossings;
- require the fewest additional acres of impervious surface;
- impact fewer acres and numbers of wild rice waterbodies than the APR;
- not affect Public Waters Wetlands between Clearbrook and Carlton County during construction;
- not cross any Public Water Wetland, calcareous fen or wetland enrolled in the Natural Resources Conservation Service program;
- avoid impacts to state-protected animals; and,
- limit the impacts to WAN areas to parcels that are already crossed by existing corridors.²⁷¹⁴

²⁷¹⁴ Ex. EERA-42 at 6-2, 6-16, 6-127, 6-293, 6-294, 6-328, 6-330, 6-516, 6-607, and 12-39. *See also*, Comment by MPCA at 4, 7 (November 22, 2017) (Batch 25) (eDocket No. 201711-137629-02 (CN)); Comment by MDNR at 6 (November 22, 2017) (Batch 18A) (eDocket No. 01711-137640-01 (CN)).

CONCLUSIONS OF LAW

I. CERTIFICATE OF NEED APPLICATION

A. Jurisdiction

1. The Commission and Administrative Law Judge have jurisdiction to consider Applicant's CN Application pursuant to Minnesota Statutes sections 14.57, 216B.08, 216B.243 (2017), and Minnesota Rules 7829.1000, 7853.0010 - .0800 (2017).

B. Completeness of Application

2. On August 12, 2015, the Commission found the Certificate of Need Application to be substantially complete.²⁷¹⁵

3. The Administrative Law Judge finds the CN Application meets all requirements of Minnesota Rules 7853.0200 - .0270, .0500 - .0540, subject to the exemptions granted by the Commission in its Order Approving Notice Plan, Granting Variance Request, Approving Exemption Requests, and Adopting Orders for Protection and Separate Docket dated January 27, 2015.

C. Notice and Hearing Requirements

4. Minnesota Rule 7829.2560 requires an applicant for a certificate of need submit a Notice Plan for approval by the Commission before filing a certificate of need application.

5. Applicant filed its Notice Plan on October 24, 2014.²⁷¹⁶ The Commission approved the Notice Plan on January 27, 2015.²⁷¹⁷

6. The Administrative Law Judge finds that, prior to filing its Certificate of Need Application on April 24, 2015, Applicant provided all notices required by the Commission-approved Notice Plan.

7. Minnesota Rule 7829.2500 sets forth certain service and notice requirements for a certificate of need applicant and the Commission.

8. The Administrative Law Judge concludes the Applicant and the Commission fulfilled all service and notice requirements set forth in rule and law.

9. Minnesota Statutes section 216B.243, subdivision 4, and Minnesota Rule 7829.2500, subpart 9, require the Commission to hold at least one public hearing on a

²⁷¹⁵ Ex. PUC-6 (Order Finding Application Substantially Complete and Varying Timelines; Notice and Order for Hearing).

²⁷¹⁶ Ex. EN-25 (Pet. for Approval of Notice Plan).

²⁷¹⁷ Ex. PUC-1 (Order Approving Notice Plan, Granting Variance Request, Approving Exemption Requests, and Approving and Adopting Orders for Protection and Separate Docket).

certificate of need application. Minnesota Statutes section 216B.243, subdivision 4, further requires that a Commission employee be available to facilitate citizen participation at the public hearing.

10. In this case, sixteen public hearings were conducted in eight communities throughout the proposed Project area. Members of the public were given an opportunity to appear at the public hearings and to submit written comments. In addition, an evidentiary hearing was held in St. Paul, Minnesota, and occurred over the course of twelve days. Bret Eknes and Scott Ek, members of the Commission's staff, were present at the public and evidentiary hearings to facilitate citizen participation. Therefore, the Commission has satisfied all requirements of Minnesota Statutes section 216B.243, subdivision 4, and Minnesota Rule 7829.2500, subpart 9.

11. Upon review of the record, and subject to the Commission's finding of adequacy of the Environmental Impact Statement prepared in this case,²⁷¹⁸ the Administrative Law Judge concludes that the Applicant and the Commission have provided all necessary notices, and complied with all applicable substantive and procedural requirements for issuance of a certificate of need.

C. Criteria for Evaluating CN Application

12. A certificate of need is required prior to construction of a new "large petroleum pipeline."²⁷¹⁹ A "large petroleum pipeline" is defined as a pipeline greater than six inches in diameter and having more than 50 miles of its length in Minnesota used for the transportation of crude petroleum or petroleum fuels or oil or their derivatives ...²⁷²⁰

13. The criteria for evaluating an application for a certificate of need are set forth in Minnesota Statutes section 216B.243, and expanded upon in Minnesota Rule 7853.0130.

14. Minnesota Statutes section 216B.243, subdivision 3, provides that no proposed large energy facility shall be constructed unless the applicant can show that the demand for electricity cannot be met more cost effectively through energy conservation and load management measures, and unless the applicant has otherwise justified its need.

15. The proposed Project constitutes a "large energy facility," as defined by Minnesota Statutes 216B.2421, subdivision 2(4).

16. Minnesota Statutes section 216B.243, subdivision 3 provides that, in assessing need, the Commission shall evaluate:

²⁷¹⁸ Issues of EIS adequacy were not referred to this ALJ for decision. Therefore, they are not included in this Report.

²⁷¹⁹ Minn. R. 7853.0030 (2017).

²⁷²⁰ Minn. R. 7853.0010, subp. 14 (2017).

- (1) the accuracy of the long-range energy demand forecasts on which the necessity for the facility is based;
- (2) the effect of existing or possible energy conservation programs under sections 216C.05 to 216C.30 and this section or other federal or state legislation on long-term energy demand;
- (3) the relationship of the proposed facility to overall state energy needs, as described in the most recent state energy policy and conservation report prepared under section 216C.18, or, in the case of a high-voltage transmission line, the relationship of the proposed line to regional energy needs, as presented in the transmission plan submitted under section 216B.2425;
- (4) promotional activities that may have given rise to the demand for this facility;
- (5) benefits of this facility, including its uses to protect or enhance environmental quality, and to increase reliability of energy supply in Minnesota and the region;
- (6) possible alternatives for satisfying the energy demand or transmission needs including but not limited to potential for increased efficiency and upgrading of existing energy generation and transmission facilities, load-management programs, and distributed generation;
- (7) the policies, rules, and regulations of other state and federal agencies and local governments;
- (8) any feasible combination of energy conservation improvements, required under section 216B.241, that can (i) replace part or all of the energy to be provided by the proposed facility, and (ii) compete with it economically;
- (9) with respect to a high-voltage transmission line, the benefits of enhanced regional reliability, access, or deliverability to the extent these factors improve the robustness of the transmission system or lower costs for electric consumers in Minnesota;
- (10) whether the applicant or applicants are in compliance with applicable provisions of sections 216B.1691 and 216B.2425, subdivision 7, and have filed or will file by a date certain an application for certificate of need under this section or for certification as a priority electric transmission project under section 216B.2425 for any transmission facilities or upgrades identified under section 216B.2425, subdivision 7;
- (11) whether the applicant has made the demonstrations required under subdivision 3a [regarding use of renewable resources]; and

(12) if the applicant is proposing a nonrenewable generating plant, the applicant's assessment of the risk of environmental costs and regulation on that proposed facility over the expected useful life of the plant, including a proposed means of allocating costs associated with that risk.²⁷²¹

17. Minnesota Statutes section 216B.243 further requires the Commission to adopt rules setting forth the criteria to be used in its determination of need for such facilities.²⁷²² The criteria applicable to a large petroleum pipeline are set forth in Minnesota Rule 7853.0130.

18. Minnesota Rule 7853.0130 provides that a certificate of need shall be granted to the applicant if the Commission determines that:

A. The probable result of denial would be an adverse effect upon the future adequacy, reliability, or efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states, considering:

(1) the accuracy of the applicant's forecast of demand for the type of energy that would be supplied by the proposed facility;

(2) the effects of the applicant's existing or expected conservation programs and state and federal conservation programs;

(3) the effects of applicant's promotional practices that may have given rise to the increase in the energy demand, particularly promotional practices which have occurred since 1974;

(4) the ability of current facilities and planned facilities not requiring certificates of need to meet the future demand; and

(5) the effect of the proposed facility, or a suitable modification thereof, in making efficient use of resources;

B. A more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record, considering:

(1) the appropriateness of the size, the type, and the timing of the proposed facility compared to those of reasonable alternatives;

(2) the cost of the proposed facility and the cost of energy to be supplied by the proposed facility compared to the costs of reasonable alternatives and the cost of energy that would be supplied by reasonable alternatives;

²⁷²¹ Minn. Stat. § 216B.243, subd. 3 (2016).

²⁷²² Minn. Stat. § 216B.243, subd. 1 (2016).

(3) the effect of the proposed facility upon the natural and socioeconomic environments compared to the effects of reasonable alternatives; and

(4) the expected reliability of the proposed facility compared to the expected reliability of reasonable alternatives;

C. the consequences to society of granting the certificate of need are more favorable than the consequences of denying the certificate, considering:

(1) the relationship of the proposed facility, or a suitable modification thereof, to overall state energy needs;

(2) the effect of the proposed facility, or a suitable modification of it, upon the natural and socioeconomic environments compared to the effects of not building the facility;

(3) the effects of the proposed facility, or a suitable modification thereof, in inducing future development; and

(4) socially beneficial uses of the output of the proposed facility, or a suitable modification of it, including its uses to protect or enhance environmental quality; and,

D. it has not been demonstrated on the record that the design, construction, or operation of the proposed facility will fail to comply with those relevant policies, rules, and regulations of other state and federal agencies and local governments.²⁷²³

19. The Applicant bears the burden of demonstrating, by a preponderance of the evidence, the need for the Project.²⁷²⁴

20. A “preponderance of the evidence” means that the ultimate facts must be established by a greater weight of the evidence.²⁷²⁵ “It must be of a greater or more convincing effect and ... lead you to believe that it is more likely that the claim ... is true than ... not true.”²⁷²⁶ In other words, if it is more likely than not that the facts support a finding of need, then the Applicant has satisfied its burden. In contrast, if the evidence casting doubt on the need is stronger and more persuasive, then the Applicant has failed to meet its burden. Under this standard, the Applicant maintains the ultimate burden of persuasion to prove that a need for the Project exists.

21. With respect to whether a more reasonable and prudent alternative to the Project exists, the burden of proof rests upon parties other than the Applicant who have

²⁷²³ Minn. R. 7853.0130 (2017).

²⁷²⁴ Minn. Stat. § 216B.243, subd. 3 (2016); Minn. R. 1400.7300, subp. 5 (2017); Minn. R. 7849.0130 (2017).

²⁷²⁵ 4 Minnesota Practice, CIV JIG 14.15 (2014).

²⁷²⁶ *State v. Wahlberg*, 296 N.W.2d 408, 418 (Minn. 1980).

proposed those alternatives.²⁷²⁷ The same preponderance of the evidence standard applies to this analysis. Accordingly, if it is more likely than not that a more reasonable and prudent alternative to the Project exists, then the party proposing that alternative has satisfied its burden. In contrast, if the evidence casting doubt on the reasonableness or prudence of such alternative is stronger and more persuasive, then the party proposing the alternative has failed to meet its burden.

22. Applicant has established a reasonable need to replace the line due to its age, the need for repairs, and significant integrity issues.

23. The evidence also establishes that apportionment on the Enbridge Mainline System currently exists for heavy crude, has existed for some time, and will continue to exist in the future if this Project is denied.

24. For these reasons, Applicant has established, by a preponderance of the evidence, that the probable result of denial of the Certificate of Need Application would adversely affect the future adequacy, reliability, or efficiency of the transportation of crude oil supply by Applicant's customers, particularly Canadian crude oil shippers.

25. Minnesota Rule 7853.0130(A) does not distinguish among the importance of the need for Applicant, Applicant's customers, and the people of Minnesota and neighboring states. Nor does the rule assign the priority of importance between adequacy, reliability, or efficiency of energy supply. Accordingly, adverse impacts to Applicant's customers is sufficient to establish need for the Project under this criterion.

26. The ALJ further concludes that a more reasonable and prudent alternative to the Project has not been demonstrated by a preponderance of the evidence by parties or persons other than Applicant.

27. Applicant has not established, however, by preponderance of the evidence, that the consequences to society of granting the certificate of need for the Project, as proposed, are more favorable than the consequences of denying the certificate so long as the Project includes Applicant's Preferred Route. However, the cost and benefit calculation under Minnesota Rule 7853.0130(C) changes if Applicant replaces Existing Line 3 in its current location (i.e., if the Commission were to select RA-07 as the pipeline route in this case). In such a circumstance, the benefits to Minnesota and regional refiners, and the people of Minnesota, slightly outweigh the risks and impacts of a new crude oil pipeline.

28. In-trench replacement allows Minnesota the benefits of the Project (that is, replacement of an aging line, elimination of apportionment on the Mainline System, and the economic benefits of removal and replacement); and mitigates, to a large degree, the detrimental impacts that a new oil pipeline and a new oil pipeline corridor would create.

²⁷²⁷ Minn. R. 7853.0130(B) ("A certificate of need shall be granted to the applicant if it is determined that...a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record *by the parties or persons other than the applicant....*") (Emphasis added).

29. Finally, it has not been demonstrated on the record that the design, construction, or operation of the Project will fail to comply with those relevant policies, rules, and regulations of other state and federal agencies and local government. While the Project does not further the renewable energy and reduction in GHG emissions goals and objectives of the State, the evidence presented does not established that the Project will fail to comply with applicable laws or rules.

30. The Administrative Law Judge hereby concludes that, **subject expressly to the selection of RA-07 (in-trench replacement)** and the conditions recommended below, that the Commission **GRANT** Applicant's Application.

II. ROUTE PERMIT APPLICATION

A. Procedural Requirements

31. The Public Utilities Commission and Administrative Law Judge have jurisdiction to consider Applicant's Application for a Route Permit pursuant to Minn. Stat. §§ 14.57, 216B.08, 216G.02 (2017), and Minnesota Rules 1405.0200 - .2700, 7829.1000, and 7852.0100 to .4100 (2017).

32. The Commission determined that the Application was substantially complete on August 12, 2015.²⁷²⁸

33. Minnesota law and rules set forth specific notice and procedural requirements that must be met when a party applies for a route permit for the construction of a pipeline. These requirements are set forth in Minnesota Statutes section 216G.02, .05, and Minnesota Rule 7852.1200, .1300, .1600, .1700, .2000.

34. The Administrative Law Judge finds that all procedural requirements under rule and law for the issuance of a route permit were met, subject to a final order by the Commission finding the Environmental Impact Statement adequate.²⁷²⁹

B. Application of Route Selection Criteria

35. Minnesota Statutes section 216G.02, subdivision 3, requires the Commission to adopt rules setting forth the criteria to be used in its determination of pipeline routes.²⁷³⁰ These criteria are set forth in Minnesota Rule part 7852.1900, subpart 3.

36. Minnesota Rule 7852.1900 provides that, in determining the route of a proposed pipeline, the Commission shall consider the characteristics, the potential

²⁷²⁸ Ex. PUC-6 (Order Finding Application Substantially Complete and Varying Timelines; Notice and Order for Hearing).

²⁷²⁹ All issues related to the adequacy of the Environmental Impact Statement were referred to Administrative Law Judge Eric L. Lipman, who recommended that the EIS be found adequate; and all issues related to the adequacy of the EIS are now before the Commission for final determination.

²⁷³⁰ Minn. Stat. § 216G.02, subd. 3 (2016).

impacts, and methods to minimize or mitigate the potential impacts of all proposed routes so that it may select a route that minimizes human and environmental impact.

37. Minnesota Rule 7852.1900 provides that, in selecting a route for designation and issuance of a pipeline routing permit, the Commission shall consider the impact on the pipeline of the following:

- A. human settlement, existence and density of populated areas, existing and planned future land use, and management plans;
- B. the natural environment, public and designated lands, including but not limited to natural areas, wildlife habitat, water, and recreational lands;
- C. lands of historical, archaeological, and cultural significance;
- D. economies within the route, including agricultural, commercial or industrial, forestry, recreational, and mining operations;
- E. pipeline cost and accessibility;
- F. use of existing rights-of-way and right-of-way sharing or paralleling;
- G. natural resources and features;
- H. the extent to which human or environmental effects are subject to mitigation by regulatory control and by application of the permit conditions contained in part 7852.3400 for pipeline right-of-way preparation, construction, cleanup, and restoration practices;
- I. cumulative potential effects of related or anticipated future pipeline construction; and
- J. the relevant applicable policies, rules, and regulations of other state and federal agencies, and local government land use laws including ordinances adopted under Minnesota Statutes, section 299J.05, relating to the location, design, construction, or operation of the proposed pipeline and associated facilities.²⁷³¹

38. The Administrative Law Judge concludes that RA-07, in-trench replacement, best satisfies the route permit criteria set forth in Minnesota Rules part 7852.1900, subpart 3.

39. Specifically, the Administrative Law Judge concludes that, as compared to Applicant's Preferred Route and other route alternatives, RA-07 best minimizes the impacts on human settlement, the natural environment, the economics within the route, the State's natural resources, and the cumulative potential effects of future pipeline

²⁷³¹ Minn. R. 7852.1900 subp. 3 (2017).

construction. In addition, RA-07 maximizes the use of existing rights-of-way and right-of-way sharing and paralleling.

40. For these reasons, the Administrative Law Judge respectfully recommends that the Commission select RA-07.

III. PERMIT CONDITIONS

41. Pursuant to Minnesota Rule 7849.0400, subpart 1 (2017), the issuance of a CN may be made contingent upon certain conditions set by the Commission.

42. In addition, pursuant to Minnesota Rule 7852.3200, subpart 1 (2017), the Commission shall designate appropriate conditions relevant to minimizing environmental and human impact.

43. As an integral part of her recommendation, the Administrative Law Judge recommends that the Commission include the following conditions on any CN or RP granted in this case:

- Applicant should establish a decommissioning and abandonment fund to ensure the removal of the new Line 3 and the remediation of any environmental damage upon the decommissioning or abandonment of the new line. The amount of this fund should be consistent with the estimated cost of future removal.
- As recommended by the DOC-DER, Applicant should be required to add two pipeline maintenance shops between Clearbook and the Minnesota-Wisconsin border.
- As recommended by the DOC-DER, Applicant should be required to provide to the Commission with an updated, final Field Emergency Response Plan for the Superior Region prior to commencing construction of the Project.
- As recommended by the DOC-DER, Applicant should be required to provide the Commission with periodic updates documenting the adequacy of Applicant's cyber security systems.
- As recommended by the DOC-DER, Applicant should be required to demonstrate that it has adequate and reliable facilities, such as distributed generation or other back-up power available to provide power to valves if there is an interruption.
- As recommended by the DOC-DER, Applicant should be required to have, and continually maintain, road access or access that does not require the use of equipment or machinery, to reach all shutoff valves in Minnesota.

- As recommended by the DOC-DER, Applicant should be required to report annually to the Commission about each exposed pipeline segment along Line 3 with identification of how Applicant will meet its Minnesota operating permit conditions, as well as federal requirements.
- As recommended by the DOC-DER, Applicant should be required to have a “neutral footprint” program as approved in the second upgrade to Line 67 (Docket No. EL9/CN-13-153), if the Commission determines that such a Program will advance the environmental and renewable energy policies and goals of the State.
- Applicant should be required to obtain a corporate guaranty and indemnification/hold harmless agreement from Enbridge, Inc., in which Enbridge, Inc. agrees to guaranty the debts and legal obligations of Applicant (including in the event of Applicant’s insolvency); and indemnify and hold harmless the State of Minnesota from and against all losses and damages arising out of the Line 3 pipeline. Such document must meet the approval of the Commission.
- Applicant, on its own or through Enbridge, Inc., should be required to maintain General Liability (GL) insurance in a minimum amount of its current aggregate limit of \$940 million, which must include Line 3. This policy should include “time element” pollution and “sudden and accidental” exceptions to the pollution exclusions. Moreover, this GL policy should include at least one automatic reinstatement of limits option specific to Line 3. The GL insurance coverage limit should increase by \$10 million every five years over the operation of the Project.
- Applicant (or Enbridge, Inc.) should be required to purchase \$100 million of Environmental Impairment Liability (EIL) insurance dedicated specifically to Line 3. This policy should include one automatic reinstatement of limits option. The EIL insurance coverage limit should increase by \$10 million every five years over the operation of the Project.
- Applicant should be required to provide evidence each year to the Commission of the insurance coverage applicable to Line 3, including but not limited to, the pooled GL insurance coverage and the coverage dedicated specifically to Line 3, as made a condition of any permit issued herein.
- Applicant should be required to maintain insurance coverage for Line 3 totaling at least \$1.2 billion, as offset by any amounts available in the U.S. Oil Spill Liability Trust Fund, to the extent available in the marketplace.
- Applicant should be required to include Minnesota as an additional insured on all GL and EIL insurance policies held by Enbridge, Inc. or

Applicant that cover Enbridge pipelines operating in Minnesota, including, but not limited to, Line 3.

- With respect to the insurance requirements, if, in future years, Applicant asserts that it is not commercially possible to obtain the insurance required in the conditions, Applicant shall have the burden to establish that the required coverage is not available in the marketplace in a particular year. The Commission shall consider, on a yearly basis, whether to allow a variance to the insurance conditions, but the insurance conditions shall remain in effect subject to variances based upon year-to-year marketplace conditions.
- The Commission should incorporate the detailed specifications for the recommended GL and EIL insurance set forth in Appendix A to Mr. Dybdahl's direct testimony (Ex. DER-5).
- Applicant should be required to prepare and implement a written plan to prevent and mitigate sex trafficking during the construction of the new line. This plan should include the mitigation techniques recommended in the EIS at Section 11.4.1.

44. Any of the foregoing Findings of Fact more properly designated as Conclusions of Law are hereby adopted as such.

Date: April 23, 2018

A handwritten signature in black ink, appearing to read 'A. O'Reilly', with a horizontal line extending to the right.

ANN C. O'REILLY
Administrative Law Judge

NOTICE

Under the Minnesota Public Utility Commission's Rules of Practice and Procedure, Minn. R. 7829.0100-.3200, exceptions to this Report may be filed by the parties in this case. Except in cases subject to statutory deadlines or as otherwise specified by the Commission, parties shall file and serve on the other parties any exceptions to the Administrative Law Judge's Report within 20 days of its filing. In cases subject to statutory deadlines, exceptions must be filed and served within 15 days of the filing of this Report.

Parties will be granted an opportunity for oral argument before the Commission prior to its decision.

Exceptions shall be filed on the Commission's eDocket system and served on all parties. Exceptions must be specific, relevant to the matters at issue in this proceeding, and stated and numbered separately.

Except in cases subject to statutory deadlines, a party shall file and serve on all other parties any replies to exceptions within 10 days of the due date for exceptions. In cases subject to statutory deadlines, replies are not permitted.

The Commission shall make its determination on the applications for the Certificate of Need and Route Permit after expiration of the period to file exceptions and replies, as set forth above, or after oral argument, if such is requested and had in this matter.

Notice is hereby given that the Commission may accept, modify, condition, or reject this Report of the Administrative Law Judge, and that this Report has no legal effect unless expressly adopted by the Commission.

MEMORANDUM

The Minnesota Legislature has set out key purposes for contested case proceedings, like this one, under the Minnesota Administrative Procedure Act (MAPA). Those important purposes include: providing “oversight of powers and duties delegated to administrative agencies;” ensuring a “uniform minimum procedure;” increasing “public access to governmental information;” increasing “the fairness of agencies in their conduct of contested case proceedings;” and simplifying “the process of judicial review of agency action as well as increase its ease and availability.”²⁷³² Together, as a community of interested people that includes agency staff, local businesses, trade unions, tribal organizations, elected officials, government bodies, special interest groups, and members of the public, we have fulfilled each of these purposes and more.

The Administrative Law Judge commends the parties and their representatives – attorneys and non-attorneys alike -- on the extraordinary, comprehensive, and professional work they have performed on this case. The Judge also recognizes and appreciates the exhaustive work of State agency staff; and the passionate involvement of public commenters.

At the conclusion of this very complex and difficult process, we have a robust and richly-detailed record, spanning hundreds of thousands of pages of data; but one that is accessible and transparent through the pages of this independent Report. The many hands that contributed to this work have sharpened the key legal and policy questions for the Commission to decide, and made the weighty tasks that still lay ahead more manageable. This is precisely the public service that the MAPA charged us to do and what we have done together.

A. C. O.

²⁷³² See Minn. Stat. § 14.001 (2017).

ATTACHMENT A
Court Reporter Prepared
Public Hearing Statistics

PUBLIC HEARINGS – ENBRIDGE LINE 3 – JUDGE ANN O'REILLY

VOL. 1A - 182 SIGNED IN; 44 SPEAKERS; THIEF RIVER FALLS – 1:00 to 4:15
ACTUAL ESTIMATED ATTENDANCE – 210
136 PAGES OF TRANSCRIPT

VOL. 1B - 79 SIGNED IN; 36 SPEAKERS; THIEF RIVER FALLS – 6:00 to 8:50
ACTUAL ESTIMATED ATTENDANCE – 85 TO 95
119 PAGES OF TRANSCRIPT

VOL. 2A - 239 SIGNED IN; 52 SPEAKERS; ST. PAUL – 1:00 to 5:05
ACTUAL ESTIMATED ATTENDANCE – 345 TO 400
168 PAGES OF TRANSCRIPT

VOL. 2B - 498 SIGNED IN; 77 SPEAKERS; ST. PAUL – 6:00 to 11:45
ACTUAL ESTIMATED ATTENDANCE – 600 TO 650
247 PAGES OF TRANSCRIPT

VOL. 3A – 220 SIGNED IN; 51 SPEAKERS; GRAND RAPIDS – 1:00 to 4:30
ACTUAL ESTIMATED ATTENDANCE – 225
170 PAGES OF TRANSCRIPT

VOL. 3B – 147 SIGNED IN; 27 SPEAKERS; GRAND RAPIDS – 6:00 to 8:40
ACTUAL ESTIMATED ATTENDANCE – 160
117 PAGES OF TRANSCRIPT

VOL. 4A – 156 SIGNED IN; 39 SPEAKERS; MCGREGOR – 1:00 to 4:30
ACTUAL ESTIMATED ATTENDANCE – 160 TO 170
146 PAGES OF TRANSCRIPT

VOL. 4B – 111 SIGNED IN; 42 SPEAKERS; MCGREGOR – 6:00 to 10:25
ACTUAL ESTIMATED ATTENDANCE – 140 TO 150
180 PAGES OF TRANSCRIPT

VOL. 5A – 204 SIGNED IN; 38 SPEAKERS; HINCKLEY – 1:00 to 4:15
ACTUAL ESTIMATED ATTENDANCE – 215 TO 220
148 PAGES OF TRANSCRIPT

VOL. 5B – 108 SIGNED IN; 43 SPEAKERS; HINCKLEY – 6:00 to 9:55
ACTUAL ESTIMATED ATTENDANCE – 115 TO 120
178 PAGES OF TRANSCRIPT

VOL. 6A – 295 SIGNED IN; 53 SPEAKERS; BEMIDJI – 1:00 to 4:47
ACTUAL ESTIMATED ATTENDANCE – 325 TO 350
185 PAGES OF TRANSCRIPT

VOL. 6B – 210 SIGNED IN; 52 SPEAKERS; BEMIDJI – 6:00 to 10:25
ACTUAL ESTIMATED ATTENDANCE – 300 TO 325
207 PAGES OF TRANSCRIPT

VOL. 7A – 624 SIGNED IN; 51 SPEAKERS; DULUTH – 1:00 to 4:50
ACTUAL ESTIMATED ATTENDANCE – 850 TO 900
186 PAGES OF TRANSCRIPT

VOL. 7B – 562 SIGNED IN; 23 SPEAKERS; DULUTH – 6:00 TO 8:15 – STOPPED DUE TO DISTURBANCE
ACTUAL ESTIMATED ATTENDANCE – 1050 TO 1100
99 PAGES OF TRANSCRIPT

VOL. 8A – 193 SIGNED IN; 49 SPEAKERS; CROSSLAKE – 1:00 to 4:50
ACTUAL ESTIMATED ATTENDANCE – 210 TO 215
176 PAGES OF TRANSCRIPT

VOL. 8B – 230 SIGNED IN; 47 SPEAKERS; CROSSLAKE – 6:00 TO 10:05
ACTUAL ESTIMATED ATTENDANCE – 240-245
192 PAGES OF TRANSCRIPT

ST. CLOUD PUBLIC HEARINGS AT 1:00 AND 6:00 BOTH CANCELLED BY ST. CLOUD CONVENTION CENTER

TOTALS:

TOTAL OF PEOPLE WHO SIGNED IN: 4,058

TOTAL OF ESTIMATED ATTENDANCE: 5,535

TOTAL SPEAKERS: 724

TOTAL PAGES OF PUBLIC HEARINGS: 2,654

TOTAL HOURS IN HEARINGS, NOT INCLUDING SET UP AND TAKE DOWN TIME:

60.5 hours over 16 public hearings

ATTACHMENT B

List of Public Hearing Commenters

Public Hearing Commenters

Key

- + indicates that speaker made statements generally in support of Line 3
- indicates that speaker made statements generally in opposition to Line 3
- SA indicates that speaker made comments alternatively in support of System Alternative 4 (SA04)

Thief River Falls 1:00 p.m. Hearing (Hearing #1)

Don Jensen +

Mike Sorteberg +

John LeRohl +

Mary Ackerman –, SA

Shayne Isane +

Lauris Krogstad +

Willis Mattison –, SA

Jeremiah Dennee +

Jim Duchamp +

Cheryl Grover +

Susan Tomte +

Terry Olson +

Alice Peterson –

Tim Berg +

Randy Rice +

Bruce Lenz +

Bruce Sly +

Donna Myhrer –

Alex Aman –

Oliver Urdahl +

Ann Reckinger +
Jill Hall +
Kevin Kavajecz +
Scott Peters +
Mark Johnson +
Dan Fabian +
Ashley Nerhus +
Bruce Thygesen +
Laura Stengrim +
John Munter —, SA
Gerald Krahn +
Sharon Bring +
Cheryl Peters +
Geno Kalinoski +
Dean Holten +
Leanne Novecek +
Pat Gerszewski +
Nick D'Aloia +
Sunny Wilde +
Kam Pederson +
Deb Kiel +
Steve Lillestal +
John Munter —, SA

Thief River Falls 6:00 p.m. Hearing (Hearing #2)

Rick Weins +
Leonard Geske +
Mario LaPlante –
Matt Rustosky +
Rick Trontvet +
Kermit Genereux +
Nancy Norr +
James Retka +
Daniel Sustad +
Tony Litzinger +
Tom Anderson +
Karol Haubrich +
Gordon Wetterlund +
Jim Dagg +
Jared Comstock +
Don Sollom +
Codey Hempel +
Don Loeslie +
Greg Scherzer +
Dan Fabian +
Alex Aman –
John Munter –, SA
Jeremiah Dennee +
Willis Mattison –
Scott Peters +
Deb Kiel +
Jerry Hasnedle +
Gary Page +
Don Sollom +

Arnold Weleski +

Willis Mattison –

Gary Page +

Dan Fabian +

John Munter –, SA

Jerod Comstock (Asked question, no comment)

Dan Sustad +

St. Paul 1:00 p.m. Hearing (Hearing #3)

Chuck Davis –

Eric Beck +

Margaret Sweeney –

William Paulson –

Ulla Nilsen –

DeCoursey Squire –

Ann Manning –

Joel Adams +

Rep. Mary Kunesch-Podein –

Mary Nelson +

Scott Russell –

Christine Dolph –

Sheila Lamb –

Andrew Kozelouzek +

Maggie O'Connor –

Rep. Frank Hornstein –

Mel Olson +

Bob Zelenka +

Rick Olson –

Sen. John Marty –

Tim Olson +

Debra Topping –

Shodo Spring –

Kerry Wang –

Tracy Kugler –

Rachel Rye Butler –

Roberta Haskin –

Brian McNeill –

Brydon Ross +

Ann Shields –
Royce Gay –
Donald Theissen +
York McGee +
Bernadette Knaeble –
Andrew Struss –
Paul Megneghini +
Lisa Venable –
Echo Mitchell –
Amy Blumenshire –
Mary Blitzer –
Jaci Christenson –
Marcy Leussler –
Ron Wetzell –
Patty O’Keefe –
Kevin Whelan –
Kristine Janiksela +
Kevin Thoma +
Kristin Haux +
Ryan Michela +
Dan Mackey +
A.J. Johnson +
Rev. Kelli Clement –

St. Paul 6:00 p.m. Hearing (Hearing #4)

Hobart Stocking –
Mysti Babineau –
Thomas Prew +
Paul MacMillan +
Lori Schott +
Patricia Hammel –
Karen Clark –
Ben Bouska +
Madison Dibble +
John Knetter +
Jay Adams +
Joe Chastan +
Curtis Proud +
Julie Archambault +
Madison Faupel +
Genevieve Zophy –
Thomas Anderson –
Joseph Gore +
Colleen Bonniwell –
Patrick Dechant +
Molly Parker Hoof –
Brent Elliason +
Maybell Eaquay –
Pedon Pinkham –, SA
Ann Kennedy +
Brian Santori +
Carl Sack –
Nolan Berglund –
Marlene Colombe –

Jackie Felder –
Anne Bisgaard –
Ken Pearson –
Karen Hulstrand –
Zachary Binsfield –
Stan Sattinger –
Corey Haste –
Roger Cuthbertson –
Thomas Conrad –
Patrick Tobin +
Joyce Buck –
Mary Lynn DeCarlo –
Kayla Pederson –
Sasha Star –
Crystal Norcross –
Belmont Pinger –
Patricia Hauser –
Darren Cook –
Brian Pastarr –
Brenna Kolstad –
Janet Gray –
Allan Frank –
Molly Sowash –
Abigail Tuominen –
Eleanor Dvorak –
Michelle Wenderich –
Allen Richardson –
Bobby Hall –
Charles Exner –
Dustin Seher –

Tara Houska –
Liam Delmain –
Anne Jones –
Rose Whipple –
Kevin O'Connor +
Morgen Hughes –
Christine Davis +
Elizabeth Johnson +
Jaime Katz –
Nina Berglund –
Charles Richard Steffel –
Tom Hodge +
Jacquiline Rodkewich –
Charles Rios –
Kathy Hollander –
Andy Pearson –
Ethan Nuss –
Susu Jeffrey –
Alice Madden –

Grand Rapids 1:00 p.m. Hearing (Hearing #5)

Jeff Reynolds +

Tamara Lowney +

Jenna Johnson +

Kurt Daudt +

Shannon Benzer +

John Pierson, Jr. +

Todd Rothe +

Tom Waller –

Bud Stone +

Tom Howg +

Mike Pavlovich +

Charlene Uecker +

Ken Haubrich +

Jason George +

Jon Cleveland +

Arik Forsman +

Bob Tammen –

Rob Struble –

William E. Johnsen +

Mike Birkeland +

Sharon Dzikonski +

Josh Garner +

Jason Johnson +

Paul Undeland +

Laura Turman –

Aaron Stolp +

Justin Eichorn +

Craig Wilson +

Sam Sparhawk +

Annette Humphrey –
Johnnie Forrest +
Vicki Andrews –
James Voyles +
Erin Roth +
Cyndy Martin +
Brad Shamlala +
Andy Paul +
Noreen Hautala –
Mark Zimmerman +
Lisa Stock +
Garrett Davis +
Trent Wetmore +
Bob Lisi +
Sandra Skinaway –
David Tomassoni +
Jeanne Fahlstrom –
Diana Lieftring –
Paul MacMillan +
Nancy Norr +

Grand Rapids 6:00 p.m. Hearing (Hearing #6)

Noela T. Martell –

Brendan Fouts +

Stacie Hansen +

Nick Wooner +

Stephanie Keup +

Rhett Gunderson +

Jim Hill –

Ashley Evans +

Ron Childs +

Karen Durfee –

James Matheson +

Terry Packer +

Frank Bibeau –

Sherry Beighley +

Dave Rowe +

Loren Solberg +

David Chura +

Jesse Wick +

Adam Erickson +

Lynn Mizner –, SA

John Zasata –

Gary Burt –

Willis Mattison –

Andy Pearson –

Tom Hodge +

John Munter –

Joe Gore +

Gary Burt –

Andy Pearson –

McGregor 1:00 p.m. Hearing (Hearing #7)

Vince Merrill –

Bob Munneke –

George Carlberg +

Jason Mangan +

Lowell LaBerge –, SA

Kevin Miller +

Kathy LaBerge –

Tania Aubid –

Waldan McFarlane –

Joni Phillips –

Carter Saline +

Barbara Courneya –

Dale Lueck +

Heidi Affi –

Justin Monacelli +

Tom Watson –

Doug Connell +

Jim Ramnes +

Nick Peterson +

Terese Mudrick +

Harvey Goodsky, Jr. –

Opitchee Mushkooub –

Emily Archambault +

Matt Rustosky (Asked question, no comment)

Morning Star Goodsky –

John Munter –, SA

Andy Pearson –

Paul MacMillan +

Janet Hill –

Sam Larson+
Algin Goodsky –
Barbara Courneya –
Walden McFarlane –
Melissa Grundahl +
Tania Abid –
John Munter –
Heidi Affi –
Janelle Hnatko +
Kristen Haux +
Tom Watson –

McGregor 6:00 p.m. Hearing (Hearing #8)

Donald Halbert, Jr. –

Jim Butcher –

Robert Marcum –

Alyssa Beaulieu –

Natalie Boyd –

Veronica Skinaway –

Ta' Sina Sapa Win –

Thomas Howes –

Kennan Gonzolas –

Michaa Aubid –

Dan Snidarich +

Roger Voyt +

Bill Reed –

Steve LaFlamme +

David Johnson –

Jason Barber –

Michael Granke +

Ken Janssen +

Elizabeth Skinaway –

Alex Good Cane Milk –

Christine Globus +

Iyawbance –

Azhibik Aubid –

Neo Gabo –

Debra Nokomis Topping –

Dante Benjamin –

Chinoodin –

Reginna Moose –

Rodney Struble –

Sandra Skinaway –
John Munter –, SA
Noela T. Martell Segura –
Algin Goodsky –
Tania Aubid –
Tasina Sapawin –
Natalie Boyd –
Harvey Goodsky –
Dante Benjamin –
Darrell Shingobe –
Morning Star Goodsky –
Bill Reed –
Jason Barber –

Hinkley 1:00 p.m. Hearing (Hearing #9)

Dave Hodek +
Dean Forsythe +
Gary Kmecik +
Sara Ploetz +
Bruce Ahlgren +
Nick Gretzinger +
Audrey Tsinnie +
Jeff Wiklund +
Chris Bratsch +
Todd Kneeland –
Melanie Weberg –
Aaron Perrault +
Kyle Wilander +
Tom Vevea +
Malcolm Nazareth –
Mariani Nazareth –
Mitch Repka +
Jill Beaupre +
Mary Rice +
Mary Disch –
Ron Carlberg +
Tom Johnson +
Jean Ross –
Haley Hoskins +
Sarah Jensvold –
Reuben St. John –
Mary Kruse –
Sharon Day –
Dennis Liebelt +

Marina Vork –, SA
LeRoy Nystrom +
Dylan Mattson +
Layne Johnson +
Luther Sam –
Mary Lynn DeCarlo –
Chris Pope +
Natalie Boyd –
Heidi Affi –
John Munter –

Hinckley 6:00 p.m. Hearing (Hearing #10)

Andrew Struss –

Sheila Lamb –

Loren Radtke +

Justin Smith –

Tyler Broadwell –

McKenna Smith – (with Charlynn Williams)

Philip LaFlamme +

Christina Thurston –

Brian Hanson +

Michael Anderson +

James Stauber +

Zachariah Teitelbaum +

Margaret Sager –

Brett Larson –

Bonnie Matrious –

Thane Maxwell –

Troy Picton +

Mike Bubalo +

Kim Izzard +

Brenna Doheny –

Jurney Matrious –

Phyllis Boyd –

Riley Morgan –

Mysti Babineau –

Natalie Boyd –

Malcolm Nazareth –

Sandra Skinaway –, SA

Rueben St. John –

Willis Mattison –

Elizabeth Skinaway –

Mysti Babineay –

Thane Maxwell –

Charles Lippert –, SA

Noela T. Martell Segura –

Debra Nokomis Topping –

Willis Mattison –

John Munter –

Natalie Boyd –

Bemidji 1:00 p.m. Hearing (Hearing #11)

Kalene Humphrey –

Matt Bliss +

Chad Gilbert +

Gail Wahlberg +

David Manuel –

Jami Gaither –

Laura Kircher +

Stacey Dennee +

Jerome Grudem +

Sheldon Schoenborn –

Debbie Prestby +

Ryan Solee +

Matthew Grossell +

Jack Naastad +

Dan Gaither –

Eugene Strowbridge –

Dennis Wiens +

Joe Van Vynckt +

Anthony Swann –

Brittany Estrada +

Dan Sauve +

Phillip Nelson –

Ronald Erickson –

Jeff Sheldon +

Eryn Wise –

Dawn Goodwin –

Gunther Melander –

Henry Jordan +

Mike Smith +

Steve Green +
Kyle Crocker –
Joe Polo +
Nancy Beaulieu –
Matthew Gordon +
Renee Walker –
Jean Skinaway Lawrence –
Dan Holmes +
LeRoy Sundbom +
Jill Unterberger +
Bill Palmer +
Kim Solberg +
Paul Halvorson +
John Clauer +
Bali Humphrey –
Maurice Spangler –
Hank Reitan –
John Weber –
Henry Krigbaum +
Alvin Rasmussen +
Greg Todavich +
Stanley Kimmes +
Peter Hovde –
Justin Keezer –

Bemidji 6:00 p.m. Hearing (Hearing #12)

David Collins +
Natalie Welle –
Soren Sorenson –
Todd Johnson +
Eric Wright +
Craig Larson +
Daniel Stenseng +
Daryl Bessler +
Donna Gaston –, SA
Tom Greene +
Hans Wronka +
Chris Swenson +
Michael Lane –
Joe Pierce +
Neal Illies +
Angela Sweedman –
Matthew Watkins +
Gypsie Foot –
David Rodriguez –
Karen Johnson +
Tyler Chilson –
Brian Johnson +
Katherine Ballard-Ryan –
Thomas Barrett –
Katie Northbird –
Greg Chester –
Sam Strong –
Marty Cobenais –
Kristin Neises –

Nicolette Slagle –
Kerry Swenson +
William Paulson –
Michelle Johnson +
Tami Liberty –
Todd Thompson –
Danny LeClaire –
Anthony Sul –
Levi Brown –
June Atkinson –
Carrie Huston +
Ryan Palazzo +
Sam Mason +
William Paulson –
Dan Holmes +
Dean Holtan +
Dawn Goodwin –
Allen Richardson –
Thomas Anderson a/k/a Thomas Spanyard –
Andrew Struss –
Noela T. Martella Segura –
Samuel Sparhawk +
Mysti Babineau –
John Munter –, SA

Duluth 1:00 p.m. Hearing (Hearing #13)

Mary Carlson –
Darik Carlson +
Casey Aronson +
Annette Jacobson +
Deb DeLuca +
Norm Voorhees +
Rebecca Kavajecz +
Beth Bartlett –
David Murk +
Dorie Reisenweber/Linda Herron –
Robert Basara +
Tim Evans +
Carol Misiak +
Theresa Jensen +
Tim Byrnes +
Luke Hom +
Jamie LePage +
Greg LeJeune +
Shirley Dolter +
David Ross +
Troy Palmer +
John Fisher-Merritt –
John Langlee +
Patricia Norman +
Anna Yliniemi deferred to Scott Bol –
Keith Nelson +
Bill Mittlefelt –
Greg Boertje-Obed –
Ann Hodge +

Cindy Finch +
Julie Davis –
Jason Risdall +
Sarah Thomsen –
Janet Yardley +
Jason Kruse +
Donald Roberts –
Bill Bennett +
Steve Dahnke +
Colleen Bernu –
Rachel Johnson –
Lori Foat +
Janet Draper –
Eric Mack deferred to Jennifer Maleitzke +
Diane Brainard –
Wendy Ulrich –
Lloyd Schmitz +
Dan Olson +
Bob Osborn +
Chris Zupancich +
Trinity Sorvari +

Duluth 6:00 p.m. Hearing (Hearing #14)

Jeff Kolstad –

Kate Pearson –

Justin Dittmar +

Charlie Bauer +

Cecelia Newton –, SA

Michele Naar-Obed –

Kathleen Spencer –

Buster Killsfirst –

Nikolas Bayuk +

James Mark +

Rob Barkholz +

Robert Tumbleson +

Andromeda Lee –

Pat Farrell –

Elizabeth Jaakola –

Brenda Martini –

Jerry Christoff deferred to Chief Matthew Peigan +

Tom Thompson –

Rose Hoene –

Alex Staten –

Tom Gilliam –

Fred Stein –

Thao Xiong –

(Hearing ended early due to disruption)

Crosslake 1:00 p.m. Hearing (Hearing #15)

Bryan Pischel +
Heidi Laliberte +
Dorothy Mandler –
Ellen Hadley –
Kellen Preiner +
George Pepek –
Steve Gilbertson +
Nick Compton +
Rebecca Gawtry +
James Lawson +
Therese Kunz –
Michelle Barton –
Eric Anderson +
Lloyd Thyen –, SA
John Rutsen –
John Andrews –
David Schliek +
Matt Frost +
Deanna Johnson –
Ron Meyer –
Joan Ingebrigtsen –, SA
Larry Wannebo –, SA
Anthony Coffey –
Jeff Laurel –
Chuck Martin –
Joe Brodil –
Ken Neihart –, SA
Hannah Smith –
Lynne Marchese –

Dave Fischer –
Steve Roe –
Charles Krysel –
Dave Butcher –
John Heintzeman +
Sandi Kruger –
John Karvel –
Vicki Bibeau –
Pat Kastning +
John Bohrman +
Maxyne Friesen –
Sara Thompson –
Sharon Natzel –
Lindsey Ketchel –
Darril Wegscheid –, SA
Jack Riordan –
Wendy Ulrich –
Scott Wester +
John Pechin +
Margaret Sager –

Crosslake 6:00 p.m. Hearing (Hearing #16)

Stephanie Foster –

Jesse Nix –

Alex Vaura +

Judy Murphy –

Jessica Bleichner –

Kriss Wells –

James Warren Northrup III –

John Schwarz +

Richard Eide –

Josh Sanders +

John Elkins –

Tina Clarke –

Maya Fairbanks –

Nathan Warfield +

Andrew Bednarczyk +

Korii Northrup –

Claire Steen –, SA

Bridget Peterson –

Natalia Garcia –

Joe McGaver +

Stuart Perkins –

Jan Mosman –, SA

Thomas Stevens –

Bonnie Rodriguez –

Don Wedll –

Dan Heldt +

Wayne Kastning +

Lisa Morgan Ronnquist –

Daniella Oxendine Molliver –

Ozzie Snowdon –
Rainbow –
Audrey Tzinnie +
Deja LaRocque –
Ellen Hadley –
Dawn Goodwin –
Noela Martell Segura –
Sandra Skinaway –
Jean Ross –
Tom Watson –
Tania Aubid –
Darril Wegscheid –
Lindsey Ketchel –
Tara Houska –
John Munter –
Debra Nokomis Topping –
Jaci Christenson –
Richard Draper –

SUMMARY

Hearing No.	In Support of Project	In Opposition to Project	Alternative Support for SA04	Totals:
1	36	3	4	43
2	29	4	2	35
3	17	35	0	52
4	21	56	1	78
5	38	10	0	48
6	17	11	1	29
7	16	21	2	39
8	6	35	1	42
9	23	16	1	40
10	9	27	2	38
11	31	22	0	53
12	22	28	2	52
13	35	15	0	50
14	7	15	1	23
15	15	29	5	49
16	9	36	2	47
TOTAL	331	363	24	718

Attachment C

Written Public Comments Summary

Line 3 Written Public Comment Totals	
Groups	#
Oppose	68244
Support	3742
SA-04	37
Misc.	58
Refineries	2
Agencies	2
Local Resolutions	81
Companies/orgs.	83
	72249

A. Comments in Opposition to Line 3 Project

Commenters who submitted written comments expressing opposition to the Project made the following general comments:

1. Pipelines would affect Minnesota's Natural Resources

- A pipeline leak in Northern Minnesota would have devastating effects on Minnesota's eco-tourism industry. Eco-tourism including fishing, camping, and other recreational activities brings millions of dollars to Minnesota communities.
- Many Northern Minnesota communities rely on tax revenue generated from lakeshore property owners. A leak from Line 3 would decrease property values and lower tax revenues for these communities.
- Existing Line 3 has had cracking and corrosion problems since the early 2000s and is a danger to Minnesota's environment. Line 3 should not be in operation anymore, and the Project should not be approved.
- The APR and Route Alternatives cross Minnesota's pristine water resources which puts these resources at risk from leaks.
- The APR and route alternatives cross the headwaters of the Mississippi River and a leak could be disastrous for Minnesota's environment, wetlands, and drinking water.
- Pipeline leaks are inevitable. The November 17, 2017, Keystone pipeline leak shows that all pipelines eventually leak, even modern pipelines. Leak detection technology is not 100 percent effective and leaks can go undetected. Even with newer technology, Applicant cannot guarantee that the Project will not leak.
- The Commission should impose conditions to protect the environment before issuing a route permit and certificate of need to Applicant.
- Applicant cannot secure enough insurance coverage to completely pay for cleanup of a pipeline leak similar to the one that occurred in 2010 in Marshall, Michigan. Therefore, Applicant cannot fully protect Minnesota from having to pay the cleanup costs related to a pipeline leak.
- Because Minnesota's water quality is already impaired, approving the Project risks exacerbating water quality in the event of a leak.

2. Climate Change

- The Project would incentivize extraction of more oil which would increase greenhouse gas (GHG) emissions. Minnesota is already seeing the effects of climate change from increased GHG emissions in the increased number of damaging storms and higher temperatures. Approving the Project would contribute to climate change by deepening the dependence on oil which has been scientifically proven to contribute to climate change.
- There are negative health consequences from using petroleum products. Using fossil fuels will decrease air quality, and the health effects of benzene are not fully understood. These impacts will disproportionately affect low income communities and communities of color.
- More people are buying electric and fuel efficient cars which reduces the need for gasoline. Further, more countries and companies have stated that they will be transitioning to electric vehicles. The decreased global demand for gasoline decreases the need for the Project.
- Renewable energy utilization is growing in Minnesota and across the world. The use of renewable energy decreases the demand for oil. Minnesota should invest in renewable energy not fossil fuels.
- The Project has a high estimated social cost of carbon. The social costs of carbon from the Project are estimated at \$287 billion over a 30-year period.
- The Project will negatively impact water quality in Minnesota and will contribute to climate change. These impacts will damage the environment for future generations.
- Minnesota should invest in renewable energy because it will provide more jobs for Minnesota than those created by the Project.
- Minnesota has goals of increasing renewable energy utilization and reducing carbon emissions. Approving the Project is directly contrary to those goals because it deepens Minnesota's dependence on fossil fuels.
- The Project would transport tar sands oil which is the dirtiest type of oil and is more carbon intensive than regular oil. The use of tar sands oil will exacerbate climate change. Additionally, tar sands oil has unique properties which make cleaning it up after a pipeline leak difficult.
- Minnesota's Governor is committed to improving water quality throughout the state. The Project threatens the Governor's commitment.

3. Abandonment

- Minnesota should establish a tariff to fund the eventual dismantling of existing Line 3. Restoration of the abandoned Line 3 should be managed by a Citizen Board similar to the Trans-Alaska Pipeline System Citizen Board. The Citizen Board would be able to hold Applicant responsible for cleanup and taking care of the abandoned pipeline.
- The original covenants or easements for existing Line 3 allow Applicant to operate, repair, and replace the pipeline but do not state that Applicant can abandon the pipeline. Landowners would face lawsuits if they tried to remove the pipeline from their lands. Thus landowners do not have full use of their property and would be forced to deal with Enbridge's abandoned pipeline on their property.
- Applicant has not adequately addressed the risks from corrosion of the pipeline. There are potential consequences from abandoning Line 3 that would negatively affect the environment.
- There are potential health consequences that are related to pipeline abandonment. If the pipeline is abandoned, Applicant should pay health costs related to pipeline abandonment.
- If existing Line 3 cannot be fully removed, abandonment is inappropriate.
- Applicant should work with individual landowners to determine their preferences for whether the pipe should be abandoned or removed, and respect the landowner's wishes.
- If Applicant abandons existing Line 3, it will shift from freezing and thawing which will cause it to leak.
- The Commission needs to create regulations regarding pipeline abandonment. Canada regulates pipeline abandonment and required Applicant to set aside \$ 1 billion for cleanups related to abandoned or decommissioned pipelines. Additionally, there is no fund like in Canada to cover the cost of removing the pipeline.
- More jobs would be created by removing existing Line 3.
- People are not allowed to leave their trash lying around. Applicant should not be allowed to leave its trash in the ground and should remove existing Line 3.
- Just because it is a common business practice to abandon pipelines, it does not mean that it is best for the environment.

- Applicant should not be allowed to abandon existing Line 3. A condition of the permit for the Project should require Applicant to immediately remove existing Line 3.
- Existing Line 3 has had problems with corrosion and cracking. Abandoning this pipeline places citizens living along the pipeline and the environment at risk.

4. Native American Rights

- The Project will negatively impact Native American treaty rights to hunt, fish, and gather wild rice.
- Applicant should establish a compensation fund for tribes to help mitigate any effects from leaks.
- Wild rice is an important cultural, social, economic, and spiritual resource for Native Americans. The APR and Alternative Routes bisect many wild rice waters. A pipeline leak in wild rice water would irreparably damage the water and prevent wild rice from ever growing in those waters. Damaging wild rice would have a severe spiritual and emotional impact on Anishinaabe communities.
- The negative consequences of the pipeline would disproportionately affect Native American communities.
- Applicant has not engaged in meaningful consultation with Native American communities along the APR and Route Alternatives. Specifically there are concerns that burial grounds and memorials may be affected by the building of the Project. Additionally, the cultural director hired by Applicant is an archeologist who lacks experience in understanding Native American cultures and practices and cannot adequately advise Applicant of the cultural impacts imposed by the Project.
- There are many types of plants that would be affected by a leak from Line 3. These plants have cultural significance to Native Americans and should be protected against leaks.
- “Water is life.” Water is an important resource for Anishinaabe culture and should be protected.

5. Lack of Need

- Minnesota’s refineries are operating at full capacity; therefore there is no need for the Project.

- The Project would not benefit Minnesota since Applicant is a Canadian corporation. Additionally, since Minnesota refineries are operating at full capacity, the majority of the oil shipped by the Project would be for use outside of Minnesota.
- The DOC has already stated that there is “no need” for the Project, and the Commission should follow that decision.
- Yes, Minnesota still requires oil, but denying the Project will not immediately stop transportation of oil to Minnesota or require that Minnesotans stop using oil for daily activities. Denying the Project today allows Minnesota to invest in renewable energy in the future by not locking Minnesota into future pipeline use.
- Minnesota has had declining petroleum use since 2004, and projections show that demand for oil will continue to decrease. Therefore there is no need for more oil delivered by the Project.
- Applicant recently upgraded capacity on Line 67 and therefore there is no need for even more capacity.

6. Lack of Benefit to Minnesota

- Although the Project would create jobs, these jobs would be temporary and would not benefit Minnesota long term. Additionally, many of the jobs would be filled by workers from out of state not Minnesotans. There are other industries which could provide long term jobs if they received investment. Investing in these industries would create lasting benefits to Minnesota and local communities.
- Minnesota assumes all of the risk of a pipeline leak for a Canadian company. A shorter pipeline from the source to a Canadian refinery can and should be built. This keeps the risk with the country of origin.
- Since Minnesota refineries are operating at full capacity, the oil shipped through the Project will not be used in Minnesota and will be exported. Minnesota should not bear the risk of a pipeline leak for oil that it will not use.
- Applicant, shippers, and refiners already pass along the taxes that they need to pay to the consumers in the form of increased prices. Any increased tax revenue from Applicant or the Project will be paid by consumers.

7. Applicant’s Record and Reputation

- Applicant has not been honest about its intentions with future pipelines. The Project creates a new pipeline corridor through Minnesota. Applicant has secured more land than was necessary for one pipeline and might reroute more pipelines in the same corridor in the future.

- Applicant has been buying easements, obtaining permits, storing pipe, and beginning construction even though the Project has not been approved. These actions put pressure on the Commission to approve the Project.
- Applicant has not demonstrated that it would be solvent in the case of a leak from the Project. Additionally, there are no insurance brokers that offer environmental insurance coverage so that Enbridge could cover the cost of remediation. There is a risk that Minnesotans will have to pay for cleanup.
- Applicant has a poor pipeline safety record. Applicant was responsible for numerous pipeline leaks. Most notably, in 2010, Applicant caused the largest inland spill in history in Marshall, Michigan. Additionally, Applicant was responsible for a spill in 2002 in Cohasset, Minnesota. Therefore, Applicant cannot be trusted to operate the Project in safe and responsible manner.
- Applicant has not worked well with landowners who currently have pipelines on their property. In many instances, Applicant failed to abide by terms of permits and failed to remediate land after pipeline work was done.
- Applicant is currently suing Minnesota counties to recover over \$20 million in property taxes. If Applicant is successful it would severely harm these counties. Thus, some counties will not see any benefit in property taxes from the Project.
- In Wisconsin, Dane County required Applicant to obtain environmental insurance in order to operate a pump station. Applicant successfully lobbied the Wisconsin Legislature to prohibit Dane County from adding the provision into the permit. Applicant will just lobby the Minnesota Legislature and change any permit condition it does not like.

8. Concerns about Construction/Workers

- Most of the construction workers for pipeline projects stay in work camps when constructing pipelines. Work camps have high rates of sex trafficking. The sex trafficking from these camps disproportionately affects Native American women as has been seen in other communities.
- Most of the construction workers hired to work on the Project will not be from Minnesota and will not be concerned about the impact of construction on Minnesota's environment.

9. Cleanup and Health Effects

- A leak from the Project would be disastrous because the Project would transport diluted bitumen (dilbit) which has unique properties which make cleanup difficult. Any leak of dilbit would have catastrophic effects on Minnesota's environment.

- The side-effects of bitumen are not fully understood. A leak of bitumen into Minnesota waters could have catastrophic health consequences for Minnesotans.
- Applicant should pay to retrain workers who would be displaced if the Project is denied. There is a vibrant renewable energy industry that can support workers.

10. SA-04 and Alternative Routes

- The Project is not needed, but if the Commission determines that the Project is needed it should be routed along the SA-04 route.
- Applicant should reroute the Project to a route with more forgiving soil base which would make cleanup easier.
- More jobs would be created by the Project if the Commission approves SA-04.

B. Comments in Support of the Line 3 Project

Commenters who submitted written comments expressing support for the Project made the following general comments:

1. Economic Benefits

- The Project will create thousands of well-paying jobs for Minnesotans. The jobs would also bring income to cities and towns because the workers would spend money in these communities. These jobs would help drive economic growth in Northern Minnesotan communities that need economic development.
- The Project is estimated to bring in \$19.5 million per year in increased property tax revenues to local governments. Local governments will use these revenues to fund improvements like infrastructure and schools for Northern Minnesota Communities.
- The Project will bring over \$20 billion of investment to Minnesota.
- Applicant is paying the full cost of replacing the aging pipeline, not the taxpayers, therefore it should be supported.

2. Safest Mode of Transportation

- Pipelines are the safest and most efficient method to transport crude oil.
- Approving the Project means that the oil currently shipped by rail can be shipped through pipeline. This will mean that Northern Minnesota will experience less train congestion and face less risk of derailment.

- Transporting oil by train increases the risk of derailment in rural areas. Derailment is a safety threat to Northern Minnesota communities that trains would travel through.
- Transporting oil by train leads to rail congestion which hinders emergency responders in rural areas because the trains are so long.
- Transporting oil by trucks will degrade roads faster. This means that rural taxpayers will bear the cost of road repair from truck transportation. Transporting oil by trucks will increase the number of accidents and make driving less safe.
- Pipelines require less fossil fuels than trains or trucks meaning pipelines are better for transportation because they emit less greenhouse gasses and contribute less to climate change.
- Transporting oil by train prevents farmers from using trains to sell their goods and raises the prices of their goods.

3. Applicant's Record

- Applicant has taken responsibility for past leaks and has learned from past mistakes. Applicant has used the information learned to improve its policies and procedures which help protect the environment. Applicant has remediated any previous leak sites.
- Applicant works well with landowners. Landowners who have Applicant's pipelines currently running through their properties support replacement. Landowners noted that Applicant has been great to work with and treats landowners well and takes good care of local ecosystems.
- Applicant is a good corporate neighbor. Applicant regularly donates funds to community organizations and local fire and police departments.
- Applicant's employees care about their communities and the environment because they live and work in the communities and enjoy nature.
- Applicant has the utmost care for the environment and works with landowners to restore land.
- Applicant has a proven record of safety and takes safety very seriously.
- Applicant will use the highest quality materials, the latest technology, and regularly inspect the Project to make sure that it is safe for the environment.
- Applicant works well with local first responders to conduct training.

- Applicant is a leader in the pipeline industry and can be trusted to operate the Project to the highest standards.

4. National Security

- The pipeline decreases reliance on Middle Eastern oil and diminishes national security issues that arise from use of Middle Eastern oil.
- It is better for national security to support a neighboring country like Canada than other unstable countries because it ensures a stable and reliable source of energy resources.
- Buying from Canada is better for the environment because Canada has more environmental protections than the Middle East or Venezuela.

5. Minnesota's Need

- Minnesota produces no crude oil and the two Minnesota refineries do not meet the state's entire demand for refined oil products. The Midwest gasoline supply is fragile and the Project ensures stable supply.
- When the refineries are not receiving all of the oil they request through the pipeline due to apportionment, the refineries must get crude oil from other sources which raises prices for consumers.
- Applicant provides 80% of the Minnesota refineries' needed oil. Applicant is in the best position to determine whether it needs to replace the pipeline.
- Renewable energy will be needed in the future but the transition to renewable energy is unlikely to happen in the near future because it remains too expensive for many people and still faces many problems. Until the time that renewable energy is a reality, oil will still be needed. Further, there are no standards to determine the environmental impact of renewable energy. Therefore, there is no basis for claims that renewable energy is better for the environment than pipelines.
- Crude oil delivered by the pipeline is necessary to maintain the standard of living Minnesotans enjoy. Many different petroleum byproducts are used in daily life. Many of the recreational activities enjoyed by Minnesotans require oil. There is a high demand for jet fuel, diesel, and propane which are derived from crude oil. America is dependent on oil and that dependence will likely increase in the future. Approving the Project ensures that Minnesota has safe and affordable access to a stable supply of oil.
- Applicant is committed to developing renewable technologies but needs capital to fund that development.

- Removing existing Line 3 without approving a replacement will drive costs up for consumers. Low income families in the Midwest will feel the impact of increased costs the most.
- Applicant would not invest billions of dollars into the Project if it did not think that the upgrade was needed. The Commission should trust that Applicant has done its homework on the need and approve the Project.

6. Pipeline Safety and the Environment

- Applicant has operated multiple pipelines in Minnesota for over 60 years without significant environmental damage. Therefore, pipelines and the environment are not mutually exclusive.
- Applicant is required by a Consent Decree to replace Line 3 as soon as possible.
- A new pipeline is safer for the environment than an aging pipeline or alternative methods of transportation. Existing Line 3 is 60 years old and a new pipeline with modern technology will better protect Minnesota's water resources from leaks.
- State and federal regulations require Applicant to ensure that its pipelines do not leak. These regulations will protect the environment.
- Older pipelines are unsafe for pipeline workers.
- Existing Line 3 is decades old and is undergoing constant repair. Continuing to run the current pipeline jeopardizes the environment by risking a leak. Therefore, the pipeline needs to be replaced.
- The Project will be built with the latest technology which will help prevent leaks. A new pipeline will also require less energy to operate which will reduce GHG emissions.
- All things break at some point. It is more financially responsible to replace existing Line 3 than to keep making repairs.
- All infrastructure must eventually be replaced; the same is true for pipelines.
- Not replacing existing Line 3 will require endless integrity digs which will be disruptive to landowners and the environment and will be costly.

7. Replace but No New Route

- The current pipeline needs to be replaced because it is in danger of leaking but Applicant should not put a new pipeline in a new corridor. Establishing a new corridor will expand the impacts on Minnesota's environment.

- A new pipeline is needed because existing Line 3 is running at low capacity, but Applicant should not establish a new pipeline corridor in Minnesota.

8. Benefits of Abandonment

- Abandonment is superior to removing the pipeline because abandonment reduces the risk of soil instability.
- Removing the pipeline would cause disruptions for communities and landowners. Removing the pipeline also risks damaging other pipelines in the corridor.

9. Public Support for the Project

- Denying Applicant's application would create a hostile climate for business in Minnesota. Businesses will leave Minnesota, and Minnesota would lose jobs.
- The DOC is trying to silence the valid opinions of employees and taxpayers by stating there is no need for the Project.
- Most of the landowners along the APR did not object to construction of the Project on their property.

10. Benefits of APR

- The APR follows 80% of the existing utility corridor so it limits the potential impacts on the environment.
- Applicant underwent extensive planning to make sure that the APR avoids sensitive resources and population centers. Additionally, the engineers planned the location of permanent valves to maximize accessibility and ensure safety.
- The APR will maximize efficiency which would result in significant energy savings.

C. Alternative Routes

Commenters who submitted written comments expressing support of route alternatives made the following general comments:

- SA-04, RSA-53, and other alternative routes would be less damaging to the environment.
- The APR would decrease property values in Northern Minnesota. Additionally, counties along the APR and Route Alternatives would lose income from seasonal homeowners who would leave the area. SA-04 would alleviate this problem.

- The APR and Route Alternatives could contaminate water in Grand Rapids but a leak from SA-04 would be less damaging.

D. Miscellaneous Comments

Some commenters submitted comments about topics that were not relevant to the Project or could not be determined to be in support or in opposition to the Project.

Group A (Oppose):

Philip Bergh
Denise Marlowe
Luca Raffo-Simoes
Abi Evans
Nancy Hassett
Carol McCormick-
Buchmeier
Denny Wagner
Stephanie Warhol
Greg Chester
Karen Davis
Simon Gretton
Ryan Meehan
Shea Peeples
Debra Topping
Michael Wetzel
Cari Monroe
Terri Abrahamson
Elizabeth Andrews
Kathleen Berrigan
Lisa Bolton
Race Cleveland
Susan Dergantz
Eileen Duncan
Molly Flerlage
Gail Francis
Lily Frenette
Carmen Garson-
Shumway
Katya Gordon
Ditto Greensky
Laura Grevas
Holly Hagstrom
Jnana Hand
Alyssa Hauser
Kathryn Keiner
Stuart Knappmiller
Dave BobCat Lobins
Kate Raybon
Malaika Rosenfeld
Lois Schreur
Madison Schumacher
Sarah Stahelin

Claire Stoscheck
Rochelle Tyson
Lora Wedge
Dan Wicht
Sara Bjerke
John Gibson
Karen Stout-Heller
Mark Herwig
Allan Larson
Linda Dean
Stewart Corn
Allen Frechette
Mark Miklas
Sarah Steele
Jamey Erickson
Thomas Anderson
Sylvia Archer
Bob Hinton
Racy Kugler
Brian PaStarr
Sharli Schaitberger
Kaia Svien
Shary Zuff
Julia Brokaw
Jerome Buchmeier
Jonathan Christensen
Stephen Clemens
Chelsie Easterlund
Abigail Evans
Catherine Ferguson
Geoffrey Fischbein
Rowan Glaser
Kathy Grimes
Samantha Lorentz
Jack McCarthy
Carol McCormick-
Buchmeier
Lori Olinger
Wendy Paulsen
Deb Rogers
Kathryn Weber
Kate Winsor
Teddie Potter

Mary Androff
Thomas Bauch
Jeffrey Bergeron
Bobbi Jo Bergeron
Greg Chester
Julie Pinomaki
Lisa Schlingerman
Sam Benson
Ashley Fairbanks
John Musick
Joanne Mylbah
Mark Paquette
Joni Phillips
Brandy Schmidt
Gary Burt
John Finnegin
Joanne Kaye
Natalae Alluneedis
Nate Arthur
Erika Bailey-Johnson
Jack Bohnhoff
Richard Bruesewitz
Charles Campbell
Rita Chamblin
Derick Cich
Jesse Coenen
Susan Degrantz
Nicholas Eltgroth
Ethan Eno
Mary Fernstrum
Sally Fineday
Janet Folsom
Aaron Gendler
Donald Hawkins
Scot Hollonbeck
Anja Hovde
Karon Johnson
Terra Jonker
Regina Kijak
Karen Kimbrough
Maria Leskoviansky
Patricia Linn
Laurie Macpherson

Georgia Morgan
Janet Munger
Ryan Neily
Barbara Ocskai
Allison Ostrer
Lyn Clark Pegg
Savannah Pemberton
Susan Pohl
Robert Schleich
Donovan Skinaway
Maurice Spangler
Jerry Tobe
Sandra van den Bosse
Mackenzie Welch
Bill Werner
Margaret Chittick
Paul Courneya
Erin Drum
Ariana Jahiel
Diana Lieffring
Suzanne Long
Heather MacDougall
Adam Rogowski
Rossell Reid
Scott Russell
Elena Santarella
Judi Schiller
Claire Schmidt
Don Schuld
Richard Schiller
Hannah Shumway
Elliot Tanin
Dana Trickey
Kenneth Wendinger
Elizabeth Brannan
Mark White
Susan Adams
Luke Anderson
Kit Arnquist
Amy Beckman
Stan Carignan
Judy Carpenter
Lowell Carpenter
Pazong Chang
Sarah Govig
John Heine

Maiginou Her
Roberta Hudlow
Rachel Johnson
Richard Kagan
Nance Kent
Timothy King
Terry Lamb
JoAnn Larson
Teresa Mann
Kathy Olson
Denise Perry
Cynthia Purchase
Isabella Romàn
Stephanie Sanders
Dave Sanderson
Donald Siems
Mary Siems
Jim Steitz
Edieson Vang
Myles Wagner
Elizabeth Wells
Deb Wellwork
Slim Wick
Paul Wolfe
Mephew Yang
Diana Zesemer
Grayce Armstrong
Murina Berhe
Carrie Bisson
Richard Bly
John Brand
Mark Cook
Grace Corbin
Blue Delli quanti
Diane Dobitz
Wesley Enterline
Renate Heurich
Ms Jerulle
Alec Matter
Emily Murdock
Tiffany Parks
Alexandra Rupnow
Janet Ryan
Kris Simonson
Benjamin Skowronek
Janet Spalding

Cassandra Steiner
Taylor Stevens
James Tidwell
Laurie Vinyon
Christopher Weatherly
Kriss Wells
Stephen Wineteer
Susan Wood
Linda Antil
Robert Marcum
Evangeline Moen
Jeff Mosner
Barbara Nelson
Maggie O'Connor
Jonathan Roberts
Stan Sattinger
Joanne Schubert
Steven Dock
Brett Smith
Carol Spear
Eve Thorne
Josh Yank
Elizabeth Bartlett
Jan Best
Eric Boone
Chris Erickson
Margaret Fawcett
Mary Fratto
Mary Furman
Michael Goldner
William Haider
Steve Harrington
Valarie Harrington
Dan Hooley
Mary Hooley
David Johnson
Deanna Johnson
Pamela Johnson
Mary Johnston
Vicki Lipstreuer
Janell Miersch
Annette Schmit-Cline
Becky Rossow
Nancy Blethen
Linda Ganske
Mark Nelson

Pat Olson
Linda Peterson
Terri Pina
Linda Quistad-Berg
Luke Rumpca
Paul Schol
Gerald Stegora
Kathleen Stoddart
Paul Tuveson
Morgan Walsh
Lawrence Whitaker
Mary Scully Whitaker
Joanne Woytcke
Alison Baker
Nancy Beaulieu
Rachel Belvedere
Betty Berger
Paul Berland
Michelle Brandenburg
Henry Campbell
Andrew Deziel
Joy Dunna
Mary Fairbanks
Ann Fromell-Theis
Andrew Gregory
Aldona Grinius
Lydia Hayes
Laura Hayes
Emma Jones
Katie Kilroy-MArac
Samual Lett
Fiona Montie
Leo Montie
Kelly Neubauer
Kathy Offner
Anne Reich
Avery Reyes-Beattie
Jason Rodney
Gwen Saliars
Kimberly Schulte
Mary Shesgreen
Terri Staufer
Richard Stuckey
John Torgerson
Cassidy Valade
Natalie Welle

Wichahpi Otto
Mary Adams
Bonnie Albers
Barry Bobcock
Laurel Bangs
Amy Blumenshine
Constance Bonniwell
Stacy Gatto
Jacqueline Hadfield
Kelly Harrington
Janet Hill
Diane Johnson
Barbara Kaufman
Kathleen Mary Kiemen
Kathryn McKenzie
Laura McLain
Ronald Miles
Carole Mitchell
Ellen Morrow
Chuck Morrow
Nancy Oldham
Katy Olson
Doretta Reisenweber
Lowell Schellack
Jack Sea
John Shaw
Dean Sweeney
Barbara Thomalla
Wallace Warhol
Bernadette Welter
Bill Amamski
David Auerbach
Elizabeth Baker-Knuttila
Sandra Barnhouse
Bonnie Beckel
Frank Bender
Bickey Bender
Randy Berntson
Fiona Winter Bjorklund
Kristi Brugz
Jim Butcher
Rebecca Corruccini
Chuck Diessner
Joan Diessner
Eleanor Dvorak
Carol Femling

Rich Femling
Dawn Gaetke
Henry Holcomb
David Howd
Bruce Johnson
Mary Beth Jones
David Kappy
James Knittel
Mary Kowalski
Antonia Cinder
Peter Lindholm
Mary Bahr
Brian Major
Beth Monke
Ken Neihart
Kate Nettleman
Debra Ostlund
Jordan Peasch
Molly Parker Hoof
Johna Radke
Doug Rasch
Kathy Rasch
Leslie Shank
Sarah Sells
John Schirber
Carl Shalanksy
Ann Shields
Eileen Shore
Mark Snyder
Simon Townsend
David Van Sant
Darril Wegscheid
Stephen Wiley
Alice Williams
Bea Winkler
Zamzam Yusef
Gareth Zehngut
Aimee Sutherland
Al Martin
Alan Smith
Annette Ruedenberg
Ann Burns
Anna
Arlene Birt
Audrey Kramer
Barb Nelson

Bruce Rewaldt
Camaray Davalos
Chelsea DeArmond
David Reisenweber
Dean Borgeson
Dianna Brainard
Emily Baierl
Emily Moore
Garnsey Sloan
Gary Hill
Gina Hickson
Ginner Ruddy
Grant Garriott
Kathy Garriott
Jaqueline Rodkewich
Lois Dalsin
Jeff Burnoski
Jenny Hill
John Munter
Judy Stern
Karen Hulstrand
Gary Herbranson
Kathy Herbranson
Kevin Zickert
Kristi Dank
Kristeen Bullwinkle
Kristen Anderson
Alexis Hatfield
Linda Mielke
John Mielke
Brian Gould
Lynn Sue Mizner
Marty Roers
Mary Gangelhoff
Mary Ludington
Mike Larson
Barb Larson
Michael Prouty
Molly Sowash
Monique Strong
Nancy Terhark
Nate Griswold
Patricia Hauser
Patricia Holmes
Dawn Tuveson
Rachel Melis

Rob Galler
Rebecca Krasky
Ross Hunter
Ryan Busch
Sabrina Caprioli
Sandy Loney
Shanai Matteson
Sharon Natzel
Ruby Woletz,
Madeline Mahoney,
Sije Bergland-Darvik,
Maddie Christy,
Ted Jorstad,
Emily Green
Susan Evans
Susan Schwanekamp
Ted Benson
Tess Dornfeld
Tim Johnson
Tyler DeArmond
Jeanne Fahlstrom
Wendy Aaserud
Wendy Ward
William Reed
Bonnie Reed
William Schnell
Heidi Affi
Elizabeth Anders
Deborah Andresen
Mike Androff
Daniel Armstrong
Don Arnosti
Leo Babeu
Nicholas Baer
Wanda Ballentine
Robert Barros
Mary Beattie
Jill Beaupre
Janelle Beitz
Ric Berkholtz
LynMarie Berntson
Colleen Bertino
Paula Birdle
Danette Blue
Tristan Bolstad
Mary Breen

Sophie Breen
Jonee Brigham
Frab Brinkman
Aaron Camacho
Paul Carlson
Cleone Carlson
Jane Carlstrom
Carolyn Carr
Sarah Cavanaugh
Rita Childers
Jaci Christenson
Diana Cimino
Bryan Claypool
Rebecca Comeau
Lena Copenace
Leslie Crichton
Chiara D'Angelo
Claire DeBerg
Jenny Dick
Mary Dosch
Susan Downfeather
Anne Dunn
Alix Dvorak
Polly Edington
Cheryl Edwards
Deanna Ensley
Donald Finn
Mahmud Fitol
Maxyne Friesen
Ike Furbush
Elaine Gaston
Kelley Gatta
Kathy Gilchrist
Bethani Glander
Dawn Goodwin
Michelle Grabowski
Chelsie Grayhawk
Molly Griffin
Benashii Griffith
Jo Haberman
Ellen Hadley
Marlene Haider
Susan Hajiani
Patricia Hammel
Donald Hankins
Sarah Harper

Liz Harper
Lindsey Hartjes
Noreen Hautala
Elizabeth Hegstrom
Christine Hell
Pat Helmberger
Susan Hutchins
Stephanie Johnson
Curtis Johnson
Adam Johnson
Kelsey Jones-Casey
Isabel Keller
Lucy Kennedy
Mary Kne
Zhi You Koh
Ramona Kones
Tanner Laduke
Ronald LaRose
Charles Larson
Vince Leo
Andy Lininger
Ruben Littlewolf
Nena Lovelace
Gail Loverud
Susan Lyback
Aaron Mandell
Natalie Manypenny
Cathrine Meeder
Patricia Mitchell
Gerald Montie
George Moore
Tisha Moore
Anthony Morrison
Gordon Murdock
Garrett Nelson
Brian Nerbonne
Brad Neuhauser
Jeanne Newstrom
Deb Newstrom
Steve Northbird
Nora Otto
Kara Parker
William Paulson
Lee Pedersen
Glenn Peterson
Leslie Pilgrim

Jennifer Pray
Kathleen Quinn
Linda Rasmussen
Jim Reents
Linda Reese
Julia Reich
Nina Reyes
Jonathan Rice
Aaron Richner
Christina Rodriguez
Irina Rossi
John Roterman
Hattie Ryan
Ian Saari
Michelle Shaw
Kristi Sheldon
William Shippen
Phil Smith
Scott Smith
Nicholas Snavelly
Carolyn Spangler
Ben Spidahl
Anne Marie Spindahl
Anna Splady
Rich Staffon
Alena Stewart
Destiny Stillday
Jane Stock
Ryan Sweere
Courtney Tchida
Sara Thompson
Paige Tighe
Helen Tjader
Jim Tjepkema
Dawn Trexel
Abigail Tuominen
Colleen TwoFeathers
Holly Vanderhaar
Joel Verschay
Mark Voorhees
Eleanor Wagner
Sandra Wagner
Mae Wall
Bill Wall
Inez Westbrook
Rhonda White

Timothy Wotzka
Craig Sterle
Sandy Sterle
Victoria VanHeel
Paul Stolen
Thaddeus Austin
Bruce Busta
Brenda Martini
Mary Disch
Andrew Dvorak
James Hietala
Therese Kunz
Sharon Kutter
Daniel McNeil
Robert Morgan
Tim Scherkenbach
Catherine Zimmer
Patricia Filmore
Pat Gilsvik
John Weber
Donna Myhrer
John Munter
Willis Mattison
DeCourcy Squire
Ann Manning
Christine Dolph
Maggie O'Connor
Roberta Haskin
Brian McNeil
Ron Wetzell
Bill Adamski
Hobart Stocking
Tom Anderson
Sara Suppan
Jessica Garranal
Ruth Joneston
Saul Bujold
David Johnson
Stanley Sattinger
Roger Cuthbertson
Darren Cook Jr.
Alec Holaman
Allan Frink
Michelle Wenderlich
Spencer Polk
Emma Kiley

Catherine Peregrino
Anne Jones
Angelique Hassett
Jaime Katz
Corey Haste
Ruth Lindh
Cathy Geist
Frank Bass
Stephanie Tulowetzke
Elaine Wynne
Tom Waller
Tim Howg
William Steele
John Munter
Waldan McFarlane
Joni Phillips
Barbara Courneya
David Johnson
Elizabeth Skinaway
Chinoodin
Rodney Struble
Melanie Weberg
Mary Disch
Thane Maxwell
Ellen Hadley
George Pepek
John Andrews
Deanna Johnson
Joan Ingebrigtsen
Anthony Coffey
Jeff Laurel
Chuck Martin
Joe Brodil
Ken Neihart
Hannah Smith
Dave Butcher
Sandi Krueger
John Karvel
Vicki Bibeau
Maxyne Friesen
Darril Wegscheid
Kriss Wells
Tina Clarke
Maya Fairbanks
Karii Northrup
Claire Steen

Natalia Garcia
Thomas Stevens
Ozzie Snowdon
Tina Clark
Dawn Goodwin
Jean Ross
Tom Watson
Tara Houska
John Munter
Jaci Christenson
Richard Draper
Kalene Humphrey
Jami Gaither
Dan Gaither
Eugene Strowbridge
Kyle Crocker
Nancy Beaulieu
Jean Skinaway
Lawrence
Maurice Spangler
John Weber
Hank Reilan
Peter Hovde
Soren Sorenson
Donna Gaston
Greg Chester
John Munter
Mary Carlson
Beth Bartlett
John Fischer
Bill Mittlefehldt
Greg Boertje-Obed
Rachel Johnson
Janet Draper
Diana Brainard
J. Sanford Dugan
Elizabeth Dugan
Adam Kaseno
Charlie Bauer
Michele Naar-Obed
Pat Farrell
Brenda Martini
Tom Thompson
Tom Gilliam
Thao Xiong
Tim Anderson

Francois Medion
Peter Hovde
John Musick
Joanne Mylbah
Mark Paquette
John Reynolds
Terri Abrahamson
Rollin Brockman
Noreen Brockman
Janet Folsom
Lily Frenette
Norman Herron
Arne Ion
David Schimpf
Dan Wicht
Julius Salinas
Donna Dregger-Holmes
Nancy Hassett
James Carey
Karen Williams
Alice Peterson
Randy Peterson
Karen Aalto
Joseph Aalto
Gary Dirlam
Marissa Huberty
R.D. Learmont
Jan Bilden
Melissa Polster
Rita Swatosh

Mass emails/signatures

- Batch 18 – 291 from Sierra Club North Star Chapter.¹
- Batch 18A – 933 comments from Power shift network.²
- Batch 20 – 28,000 signatures.³
- Batch 22 – 38,375 signatures from change.org petition against Project in support of Youth Climate Intervenors.⁴
- Batch 30 – 99 comments opposing the Project.⁵
- Batch 28 – 456 comments from Minnesota Interfaith Power & Light.⁶

¹ Comment by Sierra Club North Star Chapter (Nov. 27, 2017) (Batch 18) (eDocket No. 201711-137679-02 (CN)).

² Comment by Power Shift Network (Nov. 27, 2017) (Batch 18A) (eDocket No. 201711-137680-01 (CN)).

³ Comment by Anonymous Group (Nov. 27, 2017) (Batch 20) (eDocket No. 201711-137694-02 (CN)).

⁴ Comment by Youth Climate Intervenors (Nov. 28, 2017) (Batch 22) (eDocket No. 201711-137701-01 (CN)).

⁵ Comment by Comment Cards (Dec. 8, 2017) (Batch 30) (eDocket No. 201712-138037-02 (CN)).

⁶ Comment by Minn. Interfaith Power and Light (Batch 28) (Dec. 1, 2017) (eDocket No. 201712-137884-01 (CN)).

Group B (Support):

Jerad Liedberg
Dennis Erickson
Roger Lundmark
Justin Nos
Leah Schwer
Joel Troumbly
Nancy Utke
Kent Utke
Frank Block
Mike Bergerson
Bill Erzar
Albertus Conner
Bruce Drone
Colt Kinney
Ann Kennedy
Jason Kruse
Jan Larson
Don Lindsey
Jason Market
Bill Clark
Todd Golley
Thomas Greene
Leanne Golley
Eric Anderson
Loren Lilly
Trevor Lindblom
Justin Baker
Janelle Hnatko
Kristine Janiksela
Lisa Stock
Ashley Evans
Jay Frausway
Julie Archanbault
Nick Kaneski
Benjamin Kelley
Michael Zalaznik
Annette Jacobson
Kevin Kavajecz
Todd Zawacki
Jennifer Christianson
David Bergman
Samantha Meltun
Jenna Johnson
Joel Adams

Stephanie Johnson
Jeremy Bugbee
Joe Mattison
Trevor Seely
Tommy LaBonne
Marsha Ness
Todd Ochsner
Rick Olson
Deborah Prestby
Dawn Runquist
James Sajdak
Jean Scheet
Joe Van Vynckt
Andrew Vogt
RJ Bauer
David Birgy
Michael Bouchard
John Bradford
Terry Brumfield
Randy Charles
Douglas Collins
Cassidy Croley
Jerry Davis
Wendell Derrick
Shelly Dillon
Austin Flemister
Michael Gilbert
Joseph Goodfox
Bryan Greene
Brian Griffin
David Grow
Matt Harris
John Healy
Erika Hogulnd
Richard Holden
Farron Hollabaugh
Andrew Hurlburt
Brett Johnson
Chris Jost
Andrew Kingsland
Lloyd Mason
Johnny May
Nicholas Merrill
Tommy Morgan

Rodney Pilgreen
Preston Ri'chard
Juan Ruiz
Stephanie Schemenauer
Evertt Smith
Harold Smith
Clayton Smith
David Sowell
Diller Stine
Josh Taxis
Shannon Tilman
Darrell Turner
David Warner
Charles Yates
Ralph Zoller
William Berry
Andrew Anderson
William Anderson
Kyle Ashcroft
Bill Astell
Ron Baert
Francis Barbeau
Art Becker
William Becker
Peter Berg
Sheila Beutler
Robin Block
Stephen Block
Roseanne Caughey
John Chapman
Michael Chorney
Jerry Christoff
Nick Compton
Patrick Connolly
Tom Curley
Rachel Dzuck
Jor Edwards
Peter Ekstrom
Daniel Falk
Gerald Fisher
Mary Gangelhoff
David Gladen
Todd Golley
Michael Goman

Jeff Halter
Mary Holschuh
Keven Hubbard
Greg Huber
Catherine Huisman
Wayne Jacobson
Karen Johnson
Shawn Johnson
Laura Jones
Deborah Katzmark
Ben Kelley
Darrell Kennedy
Richard Kern
Thomas Kern
Stephanie Keup
Rebecca Kingsley
Stephen Kintgen
Charles Korton
Aleksandr
Richard LaValley
James Lawson
Paul MacMillan
Jesse Martus
Mike Masessa
Ron Massie
Ali Mudrick
Terese Mudrick
Mark Mudrick
Danny Nelson
Glenn Nelson
Bradly Norman
Jeff Novak
Keith Ochsner
Paula Olsen
William Olson
Andrew Paul
Seth Pennington
Kori Perkkio
Cheryl Peters
Nicholas Peterson
John Pettingill
James Ravnika
Chris Rogney
Jerry Schmidt
Jesse Sherman
Richard Swarek

Rob Thompson
Mike Trianoski
Rachel Van Drunen
Tammy Van Drunen
Gary Werkhoven
Jeff Wiklund
Kim Wilson
Marie Winker
Jared Baudoin
Clay LaFaye
Shannon LaFaye
Daniel LeBrun
Wallace Lively
Erik Lysne
Bruce Montgomery
Bob Nagel
Bob Russo
Debra Schommer
Richard Sowell
Eric Wendlandt
Melissa Augustin
Bill Bergen
Alphonse Bialke
Theresa Brandt
Joanie Brooks
Jane Carlson
Terry Carlson
Christopher James
Keith David
Steven Delarceda
Richard DeMenge
Carolyn Dodge
Debbie Ellsworth
James Fuhr
Ryan Gaffke
Ellyn George
Steven Gerard
Brenda Gettel
Greg Goldman
Tara Greer
Jim Gustafson
John Handforth
Alice Harmon
Matthew Hayes
Terry Hoy
Laura Kircher

Bob Klenk
Nathan Kraulik
Brian Lackie
Mary Madill
Kim Oelfke
Greg Peterson
Quinten Nelson
Saurabh Rana
Dennis Rud
Mabel Semler
Tracey Sorenson
Roz Sourdif
Sulo Walli
Malcom Vinger
Joy Westby
Jason Westlund
John Westlund
Cathy Witthoeft
Mark Zimmerman
Andrew Anderson
Reynald Baribault
Sandra Barkley
Blanch Byaard
Debb Beveridge
Lowell Bliss
Jeff Borling
Bradley Box
Jeffrey Boyer
Tony Bratton
John Bronk
Vern Bryce
Mike Carlson
Assunta Carnevale
Daniela Carnevale
Luigino Carnevale
John Kaufman
Cass Chaine
David Chura
Mary Cimenski
Steve Cimenski
Kathleen Corte
Martha DaBrow
Richard Dare
Harry DeCrescenzo
Brad Dely
J. David Digatono

Mark Dobberpuhl
Shirley Dolter
Amber Donner
Patricia Douglas
Scott Drennen
John Dufrense
Tanya Estrada
Frank Fazzino
Craig Fellman
Harlan Foss
Brendan Fouts
Thomas Frazier
Benjamin Frings
Ron Gullicks
Myra Hafner
Mark Hagebak
Marty Halverson
James Haskell
Gary Haubrich
Tammy Hedlund
Donald Heinzer
Damon Herold
Richard Hiltunen
Dan Hinrichs
Fritz Hinzmann
Jim Hoffman
Paul Holt
Lana Hom
Humam Huwaish
Alan Jaques
Jan Jenson
Barbara Job
Chuck Johannsen
Craig Johnson
Matt Johnson
Jon Jordi
Richard Kalinoski
Nancy Karas
James Kegg
Richie Kennedy
Andy Kircher
Greg Kremer
Rachael Krivinchuk
Ralph Kuechle
Hunter Leon
Bryce Lundberg

Karl Lundin
Paul MacMillan
Don Marte
Cyndy Martin
Cory Martinson
Maya Mattke
Andrew Mayry
Daniel Melton
Bill Molyneux
Vernon Meyer
Pamela Nelson
Joe Newlander
Harvey Orndorff
Lori Paris
Richard Paulson
Eric Peterson
Christina Pierson
Neil Pittman
Theda Pittman
Mike Plummer
Marcia Podratz
James Prescott
Casey Quinn
Justin Reid
David Rohl
Gerard Rosenmeier
Elain Schrade
Warren Sjoberg
Jayson Sorum
Alan Stingley
Kathy Sucher
Billie Sutton
Kurt Thiel
Bruce Thompson
Al Thompson
Susan Titel
Gerald Tucker
David Unterburger
Vicki Wagner
Chad Ward
Jane Wegener
Blaise Weidenborner
Deborah Rogers Weisz
Dot Wilkins
Mike Wisniewski
Roland Yeaton

Cheryl Zachman
Paul Bailey
Carol Bailey
Pat Evenwoll
Brent Hallback
Douglas Jackson
Dean Swenson
Stephanie Baker
Steve Balaich
Jonathan Black
Michael Blandford
Jack Boote
James Bottelson
Victor Bradshaw
Torinzo Burns
Rachael Byars
Tom Campbell
Suzanne Cervin
Sam Chapman
Kenneth Daley
Tina Diem
Ronald Dunn
Dave Flaatt
Shelly Gaddy
Joseph Hedrick
Danny Hendrix
Sandy Henry
Maggie Igel
Kirk Ilenda
Joan Jackson
Darrin Jackson
Beverly Maddox
Bob Manning
Jim Martin
Aaron Mielke
Meerim Miland
Victor Mitchell
Justin Monacelli
Ronald Moore
Marsha Nelson
Mark Newman
Joshua Pattison
Barbara Perrella
Jim Pertuga
Gary Pohlman
John Purget

Patricia Sigford
Phil Sowden
Daniel Spearman
Jeff Taylor
Cole Weikle
Jonathan Wilson
Charles Brown
Bobby Davis
Claire Dee
Douglas Edge
Mary Jo Edge
Debra Graves
Tim Halberg
Jennett Harrell
David Holst
Bryn Johnston
Al Koren
Ross Lewis
Robert Olson
Bev Ruzicka
Lony Schaff
Christofer Sears
Jean Sheet
Dale Thompson
Luke Vaneps
James Winkler
Robert Woodke
Edward Anderson
Bruce Bjerke
Donna Carpenter
Dean Forsythe
Lisa Giesen
Jason Kadelbach
Andrea Kemp
Daniel Kleinhans
Shane Kogan
Rhiannon Martineau
Joseph Miller
Norma Miller
Craig Noble
Laura Nordberg
Debbie Olson
Greg Running
John Ryan
Rebecca Sheets
Danna Skull

Steven Sorensen
Greg Spaulding
Michael Stang
Nick Ylitalo
Rebekah Anderson
Tyler Austreng
David Casteel
Dave Hauser
Lisa Karulak
Keith Knox
Joseph Lasselle
Artur Nunes da Silva
Theresa Picton
Jacqueline Pechin
Josh Sanders
Seth Tramm
Kirk Brock
Steve Dahnke
Bruce Daniel
Danielle Durkin
David East
Harlan Highberg
David Lucia
Chris Meyers
Carter Saline
Roger Sorben
Tracy Carlson
Barry Cashman
Brandon Chase
Dale Christy
Christopher Cleveland
Jeffrey Daveau
Cynthia Finch
Jim Fisher
Shawn Fortune
John Grover
Jeffrey Gundry
Tad Howard
Ember Junger
Bruce Kriens
Shelly Liljequist
Tom Lindgren
Robert Manthey
James Marcucci
W.G. Naijar
Larry Nixon

Eugene Omersa
Karen Panula
Tom Peterson
Shawn Reivard
Bob Schoneberger
Richard Schroeder
Bart Anderson
Bryce Beckstrom
Wade Fremling
Kenneth Pentlicki
Susan Scufsa
Suzanna Somrock
Ray Somrock
Bruce Bahneman
Tracy Baker
William Bird
Donald Bilsa
Debbie Carlberg
Tina Christensen
Brad Dahn
Carolyn Drinkwine
Frank Dyr Dahl
Deanna Dyr Dahl
Tom Gross
Jake Hendrickson
Mark Herman
Lisa Jackson
Darlene Johnson
Al Klienke
Cathy LaFave
Jeanne Lamb
Michael Line
Bruce Lundeen
Rosemary Naastad
Gregory Nelson
Judy Nelson
Katherine Olson
Ronald Dracy
Eugene Osterberg
Shirley Pommerville
Michael Riess
Jerome Roehl
Larry Salmela
Larry Skallet
Loren Solberg
Allen Stanley

Samuel Stuart
Jennifer Thomas
Kristin Toney
Brian Utecht
Michael Williams
Keri Wyman
Greg Yetter
Grady Bell
John Bruchson
Elliot Dando
Christine Davis
Richard Dyernes
Gretchen Gribben
Todd Kramer
Brucienne Ploog
Thomas Prew
Brian Rajala
Steven Sorenson
Dan Stein
Rob Toland
Dennis Virden
Trent Wetmore
Allan Jahnke
Allison Hafften
Ambrose' June
Weitemier
Bonnie Jensen
Brad Salo
Brent Horton
Brian Pankow
Bruce Michon
Calvin Johannsen
Carl Saul
Charlotte Hanson
Chris Zupancich
Craig Rossman
Curis Pianalto
Dale Tuma
Dave Myers
David Rho
Dean Will
Donald Schoeb
Edward Simon
Eric Abrahamson
Erik Richgels
Eva Braford

Frieda Bruck
Gary Aubol
Gary Richardt
Gerald Brustman
Gordon Renn
Greg Olson
Henry Korpela
Hugh Smith
James Blakesley
James Madsen
James Scott
Jamie Mueller
Jamie Nelson
Janie Golden
Jason Rice
Jason Seidenstucker
Jeffrey Dunn
Jennifer Fuchs
Jared Kahle
Jerome Hill
Jerry Rich
Jill Unterberger
Jim Ramnes
John Acheson
Sarah Acheson
John Eiken
John Murlowski
Jose Acurero
Joseph Mario
Karl Lindin
Kathie Boniface
Kathy Grell
Kenneth Riason
Keri Lynn Igo
Kevin Hubbard
Kevin McCarney
Kevin Shaw
Lance Novacek
Lee Erdman
Leonard Jankowski
Leslie Korman
Lorraine Little
Luke Schoenecker
Mark Micale
Martin Feil
Mary Liz Holberg

Michael Blowers
Michael Graetz
Mike Abendroth
Mike Harris
Milo Hawkinson
Nick Reynolds
Niki Harriman
Nila Spitzack Hetteen
Norma Essex
Norman Sannes
Paul Snobl
Phillip LaFlamme
Randy Virta
Richard Berg
Robert Stokes
Roger Aukes
Ron Fuchs
Rose Hella
Ryan Bohman
Scott Leslie
Scott Smith
Scott Welter
Sherry Beighley
Stephen LaValle
Steve Green
Steve Letko
Steven Carmazon
Thomas McCarney
Thomas Raster
Tim Larson
Todd Brister
Todd Dormes
Todd Wick
Thomas Unterberger
Valerie Bordson
Warren Johnson
William Anderson
William Novacek
Bruce Ahlgren
Casey Bergman
Troy Bergman
Andrew Bischoff
Matthew Bordson
Bonnie Brand
Patricia Brister
Eric Coletta

Teagan Drayton
Charles Drayton
Megan Erickson
David Evans
Kristen Fellner
Terese Gornick
David Hennen
Alexander Hnatko
Max Jeronimus
Joseph Kackos
Bob Kangas
Mark Kayser
Kimberly Keuning
Gary Kmecik
Corey Koecher
Whitney Kolquist
Josh Kyle
Karl Ludwig
Eric Mack
Renaë Marquis
Megan Michelizzi
David Myers
Thomas O'Brien
Mark Olson
Tim Pollock
Kathryn Reynolds
James Rockney
Glenn Rolloff
Adam Rudebeck
Todd Saatoff
Brien Schacherer
Nate Schuld
James Sojka
Steven Spata
Scott Stenger
Jared Stull
Addie Swenson
Pamela Toland
Dick Turnball
Joe Woltmann
Donald Cloose
James Dodds
Henry Bell
Ron Carlberg
Arik Forsman
Shane Henriksen

Thomas Jones
Andrew Onken
Jon Rahkola
Joseph Seacotte
Derek Claypool
Rosanne Joy Coughy
John Gilbertson
Richard Leino
Eileen Leino
Nathan Roth
Lauris Krogstad
Susan Tomte
Terry Olson
Bruce Lenz
Ann Reckinger
Bruce Thygeson
Sharon Bing
Leanne Novacek
Pat Gerszewski
Sunny Wilde
Steven Lillestd
Kevin Malwitz
James Retka
Steve Haubrich
Dan Fabian
Scott Peters
Eric Beck
Joel Adams
Mary Nelson
Andrew Kozeloczek
Paul Meneghini
Kristine Juniksela
Ryan Michela
Daniel Mackey
Curtis Proud
Harvey Robbins
Michele Bradley
Christine Davis
Jeff Reynolds
Josh Garner
Jason Johnson
Sam Sparhawk
Andy Paul
Garrett Davis
Joe Gore
Brendan Fouts

Nick Wooner
Ashley Evans
Ron Childs
James Matheson
David Rowe
Mike Warner
Rick Cannata
Jason Mangan
Kevin Miller
Carter Saline
Justin Monacelli
Melissa Grumdahl
Janelle Hnatko
Christine Globus
Dean Forsythe
Sara Ploetz
Audrey Tsinnie
Jeff Wiklund
Chris Bratsch
Aaron Perrault
Kyle Wilander
Jill Beaupre
Mary Rice
Ron Carlberg
Tom Johnson
Haley Hoskins
Dylan Mattson
Loren Radtke
Brian Hanson
Michael Anderson
Tony Wicken
Bryan Pischel
Heidi Laliberte
Kellen Preiner
Steve Gilbertson
Nick Compton
Recca Gantry
James Lawson
Eric Anderson
Pat Kastning
John Bohrmann
Scott Wester
John Pechin
Nathan Warfield
Joe McGaver
Dan Heldt

Wayne Kastning
Kevin Olson
Fredrick Hage
Jean Ann Lynch
Tanner Kastning
Chad Gilbert
Gail Wahlberg
Laura Kircher
Stacey Dennee
Jerry Grudem
Debbie Prestby
Jack Naastad
Joe Van Vynckt
Daniel Sauve
Mitch Loomis
Jeff Sheldon
Mike Smith
Joe Polo
Matthew Gordon
Dan Holmes
Jill Unterberger
Bill Palmer
Kim Solberg
Paul Halverson
John Clauer
Alvin Rasmussen
Greg Todavich
Stanley Kimmes
Ruth Rasmussen
David Collins
David Stenseng
Bradley Eck
Jason Emery
Angie Emery
Tom Greene
Hans Wronka
Neal Illies
Karen Johnson
Michelle Johnson
Carrie Huston
Scott Barrett
Jill Beaupre
Samuel Sparhawk
Tracey Sorenson
William Zelazay
Annette Jacobson

Deb Deluca
Rebecca Kavajecz
David Murk
Dan Holmes
Robert Basara
Tim Evans
Carol Mesiak
Luke Hom
Jamie LePage
Greg LeJeune
Jon Langlee
Patricia Norman
Cindy Finch
Jason Risdall
Janet Yardley
Bill Bennett
Steve Dahnke
Lori Foat
Robert Osborn
Chris Zupancich
Arvid Davis
Matthew Peigan
Kathleen Quinn
Annie Rohde
Jack Alwin
John Forney
Jodie Schrupp
Sherry Kloha
Mark Magnuson
Liz Voltz
Aitkin Growth Inc.
Delta Air Lines
Kermit Genereux
Jim Gustafson
Ted Crowe
Bruce Cox
Douglas Green
Kevin Hopkins
Tom Pellette
Warren Anderson
Jeff Anderson
Tim Anderson
Susan Anderson
Baker Hughes
Imperial
Matthew Watkins

Mary Jo Wolter
Lori Kuhlman
Robert Osborn
Skylar Kastning
Andrew Arnold
Randy Lasky
Jennifer Arnold
Jeff Holly
Deborah Amberg
Josh Purrenhage

Batch emails/letters:

- Batch 27 – 152 emails in support.⁷
- Batches 29A-H – 754 in support.⁸
- Batches 31A-J – 1939 in support.⁹

⁷ Comment by Form Email (Dec. 1, 2017) (Batch 27) (eDocket No. 201712-137880-01 (CN)).

⁸ Comment by Comment Cards (Dec. 8, 2017) (Batch 29A) (eDocket No. 201712-138035-01 (CN)); Comment by Comment Cards (Dec. 8, 2017) (Batch 29B) (eDocket No. 201712-138035-03 (CN)); Comment by Comment Cards (Dec. 8, 2017) (Batch 29C) (eDocket No. 201712-138035-05 (CN)); Comment by Comment Cards (Dec. 8, 2017) (Batch 29D) (eDocket No. 201712-138035-07 (CN)); Comment by Comment Cards (Dec. 8, 2017) (Batch 29E) (eDocket No. 201712-138035-09 (CN)); Comment by Comment Cards (Dec. 8, 2017) (Batch 29F) (eDocket No. 201712-138035-11 (CN)); Comment by Comment Cards (Dec. 8, 2017) (Batch 29G) (eDocket No. 201712-138035-13 (CN)); Comment by Comment Cards (Dec. 8, 2017) (Batch 29H) (eDocket No. 201712-138035-15 (CN)).

⁹ Comment by Form Letter (Dec. 8, 2017) (Batch 31A) (eDocket No. 201712-138040-02 (CN)); Comment by Form Letter (Dec. 8, 2017) (Batch 31B) (eDocket No. 201712-138040-04 (CN)); Comment by Form Letter (Dec. 8, 2017) (Batch 31C) (eDocket No. 201712-138040-06 (CN)); Comment by Form Letter (Dec. 8, 2017) (Batch 31D) (eDocket No. 201712-138040-08 (CN)); Comment by Form Letter (Dec. 8, 2017) (Batch 31E) (eDocket No. 201712-138040-10 (CN)); Comment by Form Letter (Dec. 8, 2017) (Batch 31F) (eDocket No. 201712-138040-12 (CN)); Comment by Form Letter (Dec. 8, 2017) (Batch 31G) (eDocket No. 201712-138040-14 (CN)); Comment by Form Letter (Dec. 8, 2017) (Batch 31H) (eDocket No. 201712-138040-16 (CN)); Comment by Form Letter (Dec. 8, 2017) (Batch 31I) (eDocket No. 201712-138040-18 (CN)); Comment by Form Letter (Dec. 8, 2017) (Batch 31J) (eDocket No. 201712-138040-20 (CN)).

Group C (SA-04):

Anne Cremons
Kent Koerbitz
Bill Kunkel
Kenny Landis
Jamie Landis
Andrew Mack
Eric Mack
Kent Reynolds
Bobby Russell
Diane Brandt
Brian PaStarr
Leo Soukup
Mary Ackerman

James Cole
Diane Cole
David Schrupp
Joyce Alvin
Judy Gitar
Daniel Erkkila
Barbara Larson
Dale Mitchell
Tami Stanley
Mary Ackerman
Mark Buechele
Mary Gannon
Sawyer Garrison

Robert Hall
Nathan Hierlmaier
Emily Hierlmaier
Zania Hierlmaier
Aislin Hierlmaier
Deanna Johnson
Kathleen Branson
Steve Lindow
William Gehrman
David Fischer
Charles Krysel

Group D (Miscellaneous Comments):

David Smith
KayLee Defa
William Gehrman
Linda Peterson
Mary Pierce-Slocum
Kathryn Wagner
Mikie Walker
Irene Weis
Sharon Planer
Brucienne Ploog
Ruth Rasmussen
Mary Carlson
Susan Helf
A woodsman
Rick Gravrok
Shana Skallet
Sara Socha

Stacey Stang
Gilbert Statz
Richard Stoltman
Ray Swenson
Keith Tilotson
Cheryl Urie
David Wahlberg
Helen Widorski
Grecia Glass
Wichahpi Otto
Stephen Roe
Nicholas Doucette
Jim McBreen
Irene Robinson
Ellen Hadley
Bruce Levi
Kathy Levi

Steve Veverka
Jeff Chudek
Loran Hillesheim
Tessa Larson
Greta Larson
Melodee Monicken
Rick Olson
Phil Smith
Mike Birkeland
Lisa Brunner
Jim Goodman
Gerald Striegel
Andy Pearson
Willis Mattison
Kaia Svien
Bill Adamski
Ann Shields