

September 21, 2016

Mr. Daniel P. Wolf, Executive Secretary
Minnesota Public Utilities Commission
127 7th Place East, Suite 350
Saint Paul, MN 55101-2147

RE: Proposed Final Scoping Decision for the Line 3 Replacement Project EIS
Docket Nos. PPL-15-137 and CN-14-916

Dear Mr. Wolf,

On February 1, 2016, the Minnesota Public Utilities Commission (Commission) issued an order joining the need and routing dockets in the following matters:

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

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

In this order, the Commission requested the Minnesota Department of Commerce Energy Environmental and Review staff (DOC-EERA) to prepare a combined Environmental Impact Statement (EIS) to address issues related to both dockets. The Commission also requested DOC-EERA staff submit a list of routes for analysis in the EIS.

In response to the Commission's request, DOC-EERA respectfully submits these comments and recommendations, including the following supporting documents: (1) Proposed Final Scoping Decision, (2) Alternatives Screening Report, and (3) Scoping Summary Report.

DOC-EERA staff is available to answer questions the Commission may have.

Sincerely,

/s/Jamie MacAlister
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Energy Environmental Review and Analysis
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BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

COMMENTS AND RECOMMENDATIONS OF MINNESOTA DEPARTMENT OF COMMERCE ENERGY ENVIRONMENTAL REVIEW AND ANALYSIS

DOCKET NOS. PL-9/CN-14-916 AND PL-9/PPL-15-137

Date: September 21, 2016

Staff: Jamie MacAlister.....651-539-1774
John Wachtler.....651-539-1837

In the Matter of the Application of Enbridge Energy, LLC, for a Pipeline Routing Permit for the Line 3 Pipeline Replacement Project in Minnesota

Issue(s) Addressed: What is the scope of information required for the Environmental Impact Statement (EIS) for the Line 3 Pipeline Replacement Project? Specifically, what are the potentially significant issues to be studied, the level of detail required, and range of alternatives to be evaluated?

Documents Attached:

1. Final Scoping Decision Document
2. Alternatives Screening Report
3. Scoping Summary Report
4. Figures 1-4 (maps)

Additional documents and information can be found on eDockets:
[https://www.edockets.state.mn.us/EFiling/search.jsp\(15-137\)](https://www.edockets.state.mn.us/EFiling/search.jsp(15-137)) and on the Department of Commerce's energy facilities website for the Line 3 Pipeline Replacement Project at:
<http://mn.gov/commerce/energyfacilities/Docket.html?Id=34079>.

This document can be made available in alternative formats (i.e., large print or audio) by calling 651-539-1530 (voice).

Summary

The Minnesota Department of Commerce-Energy Environmental Review and Analysis (DOC-EERA) staff have prepared the proposed Final Scoping Decision Document for the Line 3 Replacement Pipeline

Project Environmental Impact Statement (EIS) including route alternatives for consideration in the joint Certificate of Need (CN) and route permit contested case hearing. Key issues raised during the scoping process that will be evaluated in the EIS include the following general topics:

- Pipeline deactivation or abandonment
- Greenhouse gas emissions and climate change
- Potential impacts of oil (diluted bitumen) spills and leaks on area lakes, rivers, groundwater, and other natural resources such as wildlife, wild rice, and human settlements
- Unique tribal concerns (e.g. cultural resources, treaty rights, wild rice areas)
- Local economies
- Natural resource impacts (e.g. water, wetlands, wildlife, and natural communities)
- Development of new pipeline corridor

Alternatives to be considered include:

- Applicant's preferred route
- Alternatives sites,
- Alternative technologies (including truck and rail),
- Modified designs or layouts (including one system alternative, four route alternatives, and 23 segment alternatives)
- Modified scale or magnitude,
- Alternatives incorporating reasonable mitigation measures,
- No action alternative.

Parts VI and VII of these Comments and Recommendations provides more detail on alternatives and DOC-EERA analysis. Based on the screening analysis, DOC-EERA proposes to evaluate four route alternatives in the EIS: RA-03AM, RA-06, RA-07, and RA-08. Only one system alternative, SA-04, is proposed for evaluation in the EIS.

Part I: Proposed Project

Enbridge Energy proposes to construct and operate 337 miles of new 36-inch diameter pipeline that would replace 282 miles of the existing 34-inch diameter Line 3 pipeline within Minnesota (Line 3 Replacement Project or project). As proposed by Enbridge, the existing Line 3 pipeline would be permanently deactivated and remain in place. As proposed, the new pipeline would generally follow the existing Line 3 pipeline along the Enbridge Mainline System right-of-way from the North Dakota-Minnesota border in Kittson County to the Clearbrook Terminal in Clearwater County. From the Clearbrook Terminal the pipeline would be constructed in a new right-of-way ending at a terminal in Superior, Wisconsin. See Figure 1.

The applicant states the purpose of the project is to replace the existing Line 3 in its entirety, including that portion within Minnesota, to address pipeline integrity and safety concerns and restore the line to its original operating capacity of 760,000 bpd. The Applicant has voluntarily decreased operating capacity on the existing pipeline to 390,000 bpd due to integrity and safety concerns.

Enbridge has applied for a Certificate of Need¹ (CN) and a route permit² from the Minnesota Public Utilities Commission (Commission) to construct and operate the project.

The proposed project would cross the Minnesota counties Kittson, Marshall, Pennington, Polk, Red Lake, Clearwater, Hubbard, Wadena, Cass, Crow, Wing, Aitkin, and Carlton (Figure 1 and Table 1.).

1 Minn. Stat. §216B.243, subd. 2 and Minn. R. Ch. 7853

2 Minn. Stat. §216G.02, subd. 2 and Minn. R. Ch. 7852

Table 1			
Location and Length of the Proposed Line 3 Replacement Project in Minnesota			
County	Pipeline Length (miles)	County	Pipeline Length (miles)
Kittson	15.3	Hubbard	44.5
Marshall	35.3	Wadena	7.1
Pennington	19.7	Cass ^a	21.4
Red Lake	15.7		26.1
Polk	14.0	Crow Wing	4.8
Clearwater	42.6	Aitkin	50.9
		Carlton	39.7
Total Miles	337.1		
a Line 3 route exits Cass County into Crow Wing County entering Cass County again. b The sum of addends may not total due to rounding.			

Route Width and Right-of-Way

Enbridge is requesting a route width of 750 feet.³ In some areas a wider route width will be required. The route width is typically larger than the actual right-of-way needed for the project to provide flexibility during construction within a defined area. Within the route width, Enbridge requires a 50 foot permanent easement for the pipeline and 70 feet for temporary work space – resulting in a total construction workspace of 120 feet.⁵ Work space requirements may vary along the project with the landscape and with paralleling of existing pipeline infrastructure.⁴

Associated Facilities

There are eight existing pump stations along Line 3. Four new pump stations are proposed for the Line 3 Replacement Project; these pumps stations would be located east of Clearbrook in the new corridor. Existing and proposed new pump stations are noted in Table 2.

³ Environmental Assessment Worksheet for Line 3 Replacement Project, Minnesota Public Utilities Commission, April 12, 2016 [hereinafter Scoping EAW], eDockets number 20164-119956-01 ⁵ Scoping EAW, Section 6.

⁴ Id.

Table 2				
Existing and Proposed Pump Stations for Line 3 Replacement Project				
Facility Name	Size (Acres) Current/change	County	Type	Designation Current/change
West of Clearbrook				
Donaldson	7/13	Kittson	Pump station	Existing/upgrade
Viking	13/23	Marshall	Pump Station	Existing/upgrade
Plummer	8/13	Red Lake	Pump station	Existing/upgrade
Clearbrook	62/98	Clearwater	Terminal connectivity, pump station, and PIG receiver/launcher and injection from tanks 61, 62, 63, and 64	Existing/upgrade
East of Clearbrook				
Cass Lake	7	Cass	Pump Station	Existing
Deer River	13	Itasca	Pump Station	Existing
Floodwood	5	St. Louis	Pump Station	Existing
Two Inlets	10	Hubbard	Pump Station	New
Backus	10	Cass	Pump station, PIG receiver/launcher	New
Palisade	10	Aitkin	Pump Station	New
Cromwell	37	Carlton	Pump Station	New

Source: Route Permit Application, Enbridge (2015)⁵

Pipeline Deactivation

The applicant proposes once construction of the Line 3 Replacement Project is complete and in service, the existing Line 3 will be permanently deactivated and remain in place in compliance with 49 C.F.R. parts 195.59 and 195.402.⁶ The “old” Line 3 will be disconnected from all operating facilities such as pump stations and terminals, purged of all combustibles, and sealed.⁷ Enbridge will develop a report identifying where the abandoned pipeline crosses over, under, or through a commercially navigable

⁵ Route Permit Application, Section 4.0.

⁶ Route Permit Application, Section 8.0.

⁷ Id.

waterway.⁸ Enbridge will also fill the pipeline with an inert material and continue to monitor the right-of-way.⁹

Part II: Procedural History

On April 24, 2015, Enbridge filed a route permit application to replace the Line 3 crude oil pipeline per Minnesota Rules 7852.0800. They filed the CN application for the project the same day. The Commission accepted the route permit application and the certificate of need application as substantially complete on August 12, 2015.¹⁰

On February 1, 2016, the Commission joined the CN and route permit proceedings and authorized preparation of a combined EIS that addresses issues related to the certificate of need and routing permit dockets in accordance with Minn. Stat. section 116D and Minn. R. 4410.¹¹ Specifically, the order:

- Authorized a combined environmental review of the need and routing docket that “considers the cumulative impact of the Sandpiper Pipeline Project and the Line 3 Project.”¹²
- Asked the Department to submit for Commission approval the list of proposed routes and route segments for further consideration in the EIS; and
- Required completion of the final EIS prior to the filing of intervenor direct testimony.

Scoping Documents

The proposed scope of the EIS is contained in the Final Scoping Decision Document (FSDD). There are also two supporting documents: (1) the Scoping Summary Report, which summarizes the issues in public comments on the draft scope and (2) the Alternatives Screening Report, which describes the process used to identify pipeline alternatives to be evaluated in the EIS.

PART III: Scoping

The purpose of an EIS is to provide information needed to evaluate the potential significant environmental effects of a proposed project, to consider alternatives, and explore methods for minimizing adverse environmental effects.

⁸ Id.

⁹ Id.

¹⁰ See Order Accepting Application as Substantially Complete for Line 3 Certificate of Need Application, August 12, 2015, eDockets Number [20158-113180-01](#) and Line 3 Route Application, August 12, 2015, eDockets Number [20158-113179-01](#).

¹¹ See Order Joining Need and Routing Dockets, February 1, 2016, eDockets Number [20162-117877-01](#).

¹² Id.

The purpose of scoping is “to reduce the scope and bulk of the EIS, identify only those potentially significant issues relevant to the proposed project, define the form, level of detail, content, alternatives, time table for preparation, and preparers of the EIS, and to determine the permits for which information will be developed concurrently with the EIS.”¹³

The scoping environmental assessment worksheet (EAW) and a draft scoping decision document (DSDD) were issued for the Line 3 Replacement Project on April 11, 2016.¹⁴ DOC-EERA staff provided notice of the scoping EAW and the DSDD as well as the schedule for EIS scoping meetings.¹⁵ This scoping notice initiated a 45-day scoping comment period. Comments on the scope of the EIS for the project were accepted through May 26, 2016.¹⁶

Scoping Meetings

Between April 25, 2016, and May 11, 2016, DOC-EERA staff conducted 12 scoping meetings throughout the project area.¹⁷ The meeting format included an open house followed by a formal presentation and an opportunity for the public to ask questions. DOC-EERA, DNR, MPCA, and Commission staff were available at each meeting to answer questions and assist attendees during the open house portion of the meeting. All attendees received information folders which included a public comment form, guidance on how to suggest an alternative pipeline route, the draft scope, and copies of the meeting presentation.

Scoping Summary Report

DOC-EERA held 27 scoping meetings during three scoping efforts (including the meetings held for Sandpiper in 2014) across the project area.¹⁸ In 2015, commenters provided approximately 1,077 individual letters, emails, and verbal testimony. During the recent 2016 scoping process, private citizens, government agencies, tribes, and non-governmental organizations (NGOs) submitted 322 scoping comment letters. Two different form letters were also submitted during the EIS public scoping period in 2016. These constituted a total of 1,118 form letters: 279 comment cards and 839 letters.

¹³ Minnesota Rule 4410.2100, Subp. 1

¹⁴ Scoping EAW; Draft Scoping Decision Document, April 11, 2016, eDockets Number [20164-119960-02](#).¹⁷ Notice of Availability of Scoping EAW and Draft Scope for Sandpiper Pipeline and Line 3 Replacement Projects and Schedule for EIS Scoping Meetings, April 11, 2016, eDockets Number [20164-119967-01](#) [hereinafter EIS Scoping Notice].

¹⁵ See Notice of Availability of Scoping EAW and Draft Scope for Sandpiper Pipeline and Line 3 Replacement Projects, April 12, 2016, e-dockets 20164-119968-01

¹⁶ Id. The scoping meetings and comment period were conducted jointly with the scoping process for the proposed Sandpiper Pipeline Project.

¹⁷ Scoping meetings were joint Line 3 and Sandpiper project meetings; see EIS Scoping Notice.

¹⁸ EIS Scoping Notice; Notice of Application Acceptance – Public Information and Environmental Analysis Scoping Meetings, July 20, 2015, eDockets Number 20157-112551-02; Notice of Public Information and Environmental Analysis Scoping Meetings, August 17, 2015, eDockets Number 20158-113372-01.

The comments provided during scoping have been used to develop the FSDD and other topics to be analyzed in the EIS. The Scoping Summary Report provides details of the scoping process and the methodology used for identifying and extracting substantive scoping comments. Overall, commenters raised similar issues during the 2015 and 2016 scoping periods. Issues of greatest concern raised in comments included:

- route and system alternatives,
- regulatory procedures,
- the long-term impacts of pipeline abandonment and decommissioning of the existing Line 3,
- greenhouse gas emissions and climate change,
- the potential impacts of oil (diluted bitumen) spills and leaks on area lakes, rivers, and groundwater,
- unique tribal concerns such as cultural resources and treaty rights,
- construction impacts,
- effects on local economies, and
- natural resource impacts (e.g. water, wetlands, wildlife, and natural communities).

The potential impacts of greatest concern, especially associated with spills, included those to water resources, aquatic communities, and the local economy.

PART IV: Coordination and Consultation

Agency Review and Assistance

The Minnesota Department of Natural Resources and the Minnesota Pollution Control Agency have assisted DOC-EERA staff in developing the scope of the EIS, including data sources and data analysis methods.

DOC-EERA is also coordinating with state and federal agencies and tribal governments. DOC-EERA holds a monthly agency coordination call that includes the Environmental Quality Board's agency technical representatives, as well the U.S. EPA, the U.S. Army Corps of Engineers, and tribal technical staff from the White Earth, Leech Lake, Fond du Lac, and Mille Lacs bands.

Federal agencies, including the U.S. Environmental Protection Agency, National Park Service, and U.S. Army Corps of Engineers, submitted formal scoping comments.

Tribal Coordination and Consultation

DOC-EERA has met informally with tribal technical staff from Mille Lacs Band of Ojibwe, White Earth Band of Ojibwe, Leech Lake Band of Ojibwe, Fond du Lac Band of Lake Superior Chippewa for their input and expertise on issues to be addressed in the EIS. The Department of Commerce is also consulting with Minnesota tribes formally, government to government. Consultation and coordination efforts will continue through the development of the EIS.

Local Government Outreach

The Commission's order dated August 12, 2015 authorized DOC-EERA to establish one or more citizen advisory committees. As part of the scoping effort in 2015, local units of government throughout the project area were provided with copies of the Line 3 routing permit application and notice of the public information and scoping meetings. DOC-EERA staff made some direct contacts while in the project area during the 15 public information and scoping meetings.

DOC-ERA sent e-mails to the 18 counties and four regional development commissions (RDCs) within the Applicant's preferred route to directly solicit their input on issues and alternatives and gauge interest in participating in an advisory committee. To facilitate responses, DOC-EERA attached the public meeting folder handouts, including a description of both the Line 3 and Sandpiper projects, the draft scoping document for the environmental review document, information on the permitting and environmental review processes, and maps of the route alternatives approved for Sandpiper, with particular emphasis on the proposed shared corridor east of Clearbrook. Only one response was received expressing possible interest in participating in an advisory committee. DOC-EERA staff followed up all of the e-mails with phone calls to discuss the route permit process and environmental review, issues of concern and interest in participating in an advisory committee. Only one local government, Carlton County, submitted a written comment, which was a resolution expressing support for the project. No local government official raised any issues beyond those already identified and no additional interest was expressed for an advisory committee.

PART V: Combined CN and Route Permit EIS

MEPA operates in conjunction with the permitting processes that trigger it. The information in the EIS should be relevant to both the CN and route permit decisions.

The CN regulations, Minn. R. 7853.0120, state the PUC "shall consider only those alternatives proposed before the close of the public hearing and for which there exists substantial evidence on the record with respect to each of the criteria list in part 7853.0130." The route permit regulations, Minn. R. 7852.1400, Subp. 1, state that "The commission shall accept for consideration at the public hearing the routes and route segments proposed by the applicant and may accept for public hearing any other route or route segment it considers appropriate for further consideration."

The Commission in its January 11, 2016, order requested an EIS be prepared according to Minn. Rules 4410. The Commission also requested that the EIS be combined for the CN and route permit decisions. The CN and route permit regulations both require evaluation of reasonable alternatives to a proposed project. However, each uses different criteria for consideration and for the range of alternatives. The EIS will evaluate a range of alternatives to inform the CN decision on whether the proposed pipeline project is needed. In addition, the EIS will evaluate alternative pipeline routes to inform the route permit decision, if the Applicant is granted a CN.

Table 3 provides a summary of the criteria and information generally required for the CN and route permit decisions and the related information to be included in the EIS.

Table 3 CN and Route Permit Information in EIS			
Commission Decision	Certificate of Need		Route Permit
	Is the oil transport needed?	If yes, is a pipeline needed to move it?	If yes, which route should be permitted?
Scope of Information in EIS	Analysis of impacts of proposed action; Analysis of no action.	Analysis of pipeline mode versus other transport modes (e.g rail, truck, and other pipelines).	Analysis of proposed route. Analysis of selected alternative routes.
Applicable criteria	7853.0130, Subp. A, C; 7853.0540	7853.0130, Subp. B	7852.1900; 7852.1400, sub. 3 and 4.; 7852.2600; and 7852.3100

Part VI: Alternatives

Alternatives to the Applicant’s preferred route were proposed during the Line 3 scoping meetings in 2015 and 2016, and through the previously proposed Sandpiper Project in 2014.

Many of the alternatives submitted for Line 3 are the same as those submitted for Sandpiper since the projects were to be co-located east of Clearbrook. These alternatives were included in DSDD released on April 11, 2016 and evaluated in the Alternatives Screening Report.

Because the EIS will inform both the CN decision and the route permit decision and because each uses different criteria for consideration and for the range of alternatives, there are different alternatives applicable to the CN and the route permit in this EIS. A “system alternative” (applicable to the CN) refers to a pipeline that has different intermediate delivery or end points from those proposed by the applicant. A route alternative (applicable to the route permit docket) refers to a different path than proposed for delivering oil to the applicant’s proposed end points.¹⁹ Based on the results of the Alternatives Screening Report, one system alternative, SA-04, and four route alternatives are proposed in the FSDD for analysis in the EIS.

¹⁹ See PUC Order separating the CN and route permits for Sandpiper, October 10, 2014, e-dockets 201410-103639-01

Table 4 provides definitions of the three types of pipeline location alternatives used during scoping, the alternatives screening process, and for the alternatives in the FSDD.

Table 4			
Definition of System, Route, and Route Segment Alternatives			
Category	Symbol	Definition	EIS Section
System Alternative	SA	A new pipeline with different origin, destination, or intermediate points of delivery than those proposed by the applicants.	Certificate of Need Alternatives
Route Alternative	RA	Relatively long sections of new pipeline with the same origin, destination, and intermediate points of delivery as those proposed by the applicants. Can be evaluated as an entire route.	Route Permit Alternatives
Route Segment Alternative	RSA	A short deviation along the project alignment (i.e., tenths of miles to a few miles in length). These begin and end at intermediate points along a route alignment and are considered to resolve or mitigate a perceived localized resource conflict.	Route Permit Alternatives

Development and Analysis of Pipeline Alternatives

The following brief description identifies the alternatives evaluated in the *Alternatives Screening Report*. A full description of the development and classification of alternatives can be found in the *Scoping Summary Report*. Table 5 provides an overview of the pipeline alternatives considered in the *Alternatives Screening Report*.

Route Alternatives

In 2014, the PUC approved 53 route alternatives recommended for consideration in the environmental document and CN hearing. This included SA-03 as modified, which meets the definition of a route alternative because it connects to Clearbrook and Superior. Since that time, DOC-EERA has reclassified the alternatives into the categories described above in Table 4.

During 2015 scoping for the Line 3 project, 11 route alternatives were identified. Of those, seven were subsequently incorporated into the Applicant’s preferred route, two were withdrawn by the proposer (Enbridge), one was subsequently reclassified as a route segment alternative, and one was subsequently reclassified an alternative construction method along the Enbridge Mainline corridor from Clearbrook to Superior.

No new alternatives were developed for Line 3 (or Sandpiper) from comments during the 2016 scoping.

The analysis in the Alternatives Screening Report considers the remaining five route alternatives (Figure 2).

System Alternatives

Eight system alternatives were proposed during the 2014 Sandpiper scoping period. Subsequent deliberations on system alternatives by the PUC resulted in the elimination of two of the system alternatives from consideration.²⁰

No new system alternatives were identified during the 2015 scoping period. Initially, none of the Sandpiper system alternatives connect into the proposed Line 3 Replacement project. However, SA-03 was modified during scoping in 2015 to include a connection to Line 3 and modifications to avoid the natural resources near the Detroit Lakes area and populated areas in the northern Twin Cities Metro area.

In addition, DOC-EERA modified one of the system alternatives originally proposed for the Sandpiper Project (SA-04-SP) so it would connect into the L3R pipeline to allow further consideration in the Alternatives Screening Report. The six system alternatives are considered in the Alternatives Screening Report (Figure 2).

²⁰ See PUC Order separating the CN and route permits for Sandpiper, October 10, 2014, e-dockets 201410-103639-01

TABLE 5 System and Route Alternatives – Line 3 Replacement Project							
Alternative (Previous Designation)	Origin	Intermediate Terminal	Destination	General Orientation	Total Length (Miles)	Minnesota (Miles)	States
Applicant's Preferred Route							
APR-L3	Neche, ND	None	Superior, WI	APR-L3 would begin at the Joliette Valve near Neche (Pembina County) in the northeast corner of ND. The existing Line 3 pipeline extends upstream of the Joliette Valve into Canada, to existing crude oil production facilities located in Alberta. From the Joliette Valve, the APR-L3 would parallel the existing Enbridge mainline system to the Clearbrook terminal in Clearbrook, MN. At Clearbrook the route would turn south, paralleling the route of the Minnesota Pipe Line Company pipeline to a point south of Park Rapids, where it would turn eastward and parallel an existing transmission line corridor until it intersected the existing Enbridge Mainline System corridor in Carlton County. It would follow the existing Enbridge Mainline System corridor into Wisconsin, terminating at the Enbridge terminal at Superior, WI. Enbridge has requested a 750-foot-wide right-of-way along the route. The Project would also include construction of pump stations and control valves along the route.	378	337	ND MN WI
System Alternative							
SA-03-L3	Neche, ND	Crookston (Polk Co., MN)	Superior, WI	This alternative would follow the Applicant's preferred route from Neche, ND to its intersection with the Viking Natural Gas Line in Marshall County. It would then follow the Viking pipeline along U.S. Highway 75 through Polk County to just west of Crookston, MN, where a new terminal would be required to deliver crude oil to the Clearbrook Terminal and the Minnesota Pipeline system. From there, this alternative follows the originally proposed Sandpiper Project SA-03 alternative along the Viking Pipeline toward North Branch, MN. It then turns north to Superior, WI, following existing pipeline corridors.	514.7	473.9	ND MN WI
SA-04-L3 (Alliance-Chicago)	Neche, ND	None	Joliet, IL	This alternative would follow APR-L3 from near Neche (Pembina County), ND, approximately to its crossing with U.S. Highway 29. It would then turn south and run parallel to U.S. Highway 29 to the southern border of ND, where it would intersect and then follow the Alliance pipeline alignment to the vicinity of Joliet, IL.	781	248	ND SD MN IL IA
Route Alternatives							
RA-03-L3 (Viking-Branch- Superior)	Neche, ND	None	Superior, WI	This alternative would follow APR-L3 from Neche (Pembina County), ND, southeasterly to Enbridge's Clearbrook terminal, where it would interconnect with the Minnesota Pipe Line Company pipeline system. The route would then turn and run west, parallel to the existing Line 81 pipeline to the vicinity of Crookston, MN. The pipeline would continue south following the existing Viking pipeline. In Clay County, MN, it would continue southeast, following the Viking pipeline toward North Branch, MN. It would then turn north to Superior, WI, following existing pipeline corridors.	556	515	ND MN WI
RA-03AM-L3 (as modified)	Neche, ND	Clearbrook (Clearwater County, MN)	Superior, WI	This alternative would follow APR-L3 from near Neche (Pembina County), ND, southeasterly to the vicinity of Clearbrook and would interconnect to the location of where the Sandpiper Clearbrook-West terminal had been proposed. South of the location of where the Sandpiper Clearbrook-West terminal had been proposed, the route would follow the same route as RA-03-L3 to Superior.	434	396	ND MN WI
RA-06-L3	Neche, ND	Clearbrook (Clearwater County, MN)	Superior, WI	This alternative follows APR-L3 from near Neche (Pembina County), ND, southeasterly to the Clearbrook terminal at Clearbrook. From Clearbrook to Superior, WI, the route would be located to the north of the existing Enbridge Mainline System corridor.	355	315	ND MN WI
RA-07-L3	Neche, ND	Clearbrook (Clearwater County, MN)	Superior, WI	This alternative would follow APR-L3 from near Neche (Pembina County), ND, southeasterly to the Clearbrook terminal at Clearbrook. From Clearbrook to Superior, WI, the route would be located along the existing Enbridge Mainline System corridor. Route alternative RA-07 would involve the removal of the existing Line 3 and construction of the new Line 3 in the same trench.	327	286	ND MN WI

TABLE 5 System and Route Alternatives – Line 3 Replacement Project							
Alternative (Previous Designation)	Origin	Intermediate Terminal	Destination	General Orientation	Total Length (Miles)	Minnesota (Miles)	States
RA-08-L3	Neché, ND	Clearbrook (Clearwater County, MN)	Superior, WI	This alternative would follow APR-L3 from near Neche (Pembina County), ND, southeasterly to the Clearbrook terminal at Clearbrook. From Clearbrook to Superior, WI, the route would be located along the existing Enbridge Mainline System corridor, following the same general configuration as RA-07-SP to Superior, except that in the portion of the route located in Beltrami, Cass, Itasca, and St Louis counties, the route has been repositioned south and parallel to U.S. Highway 2.	324	284	ND MN WI

Notes: APR-L3 = Applicant’s preferred route for the Line 3 Replacement Project

Other Alternatives

Minn. Rule 4410.2300 also requires one or more of each of the following types of alternatives be included in the EIS, or provide an explanation of why no alternative of a particular type is included:²¹

- Alternatives sites,
- Alternative technologies,
- Modified designs or layouts,
- Modified scale or magnitude,
- Alternatives incorporating reasonable mitigation measures,
- No action alternative.

²¹ Id.

PART VII: DOC-EERA Staff Analysis and Comments

This analysis addresses the alternatives and issues raised during the scoping process for inclusion in the EIS. The analysis is divided into two parts: (1) the alternatives proposed for inclusion in the EIS and (2) the analysis of environmental and other issues to be evaluated in the EIS and the level of detail required.

Alternatives

An EIS must compare the potentially significant impacts of the proposed project with those of other reasonable alternatives.²² Using the criteria in Minn. R. 4410.2300(G), an alternative was screened out of further analysis in the EIS if (1) it would likely not have any significant environmental benefit compared to the proposed project; or if (2) another alternative would likely have similar environmental benefits to another alternative but substantially less adverse economic, employment or sociological impacts. When testing potential alternatives to determine if they met the criteria, environmental benefits were assessed first, and if an alternative met that criteria, other criteria were then considered.

An alternative may be excluded from analysis in the EIS if:

- It would not meet the underlying purpose of the project,
- It would likely not have a significant environmental benefit compared to the project as proposed, or
- Another alternative, of any type, that will be analyzed in the EIS would likely have similar environmental benefits but substantially less adverse economic, employment, or sociological benefits.²³

Alternative Sites

This category includes other oil pipelines (existing, proposed or newly constructed) that may be utilized to meet the demand for oil delivery from the same area as the proposed Line 3 Replacement Project. None of this type of alternative has been proposed during the EIS scoping process for Line 3. However, the EIS will include an assessment of whether an alternative pipeline can transport an equivalent amount of Canadian crude oil.

Alternative Technologies

Rail

The transport of oil by rail involves moving oil from where it is produced to an oil-train terminal for temporary storage and subsequent transport by rail to an interconnection point or refinery where it may be processed into petroleum products. Oil transport begins at each production well. At these wells, oil is loaded onto trucks or transported by gathering pipelines to oil terminals for temporary storage and

²² Minnesota Rule 4410.2300.G.

²³ *Id.*

transfer to other modes of transportation (railroads, trucks and pipelines) for delivery to destination points, typically refineries that process the raw material into various finished products. Oil terminal facilities may be designed specifically for pipelines, unit trains, manifest trains, truck terminals or a combination thereof. This alternative will be evaluated in the EIS.

Truck

Transporting crude oil by tanker truck is another potential alternative to constructing the proposed Project. Tanker trucks are commonly used to move crude oil from wellhead locations not served by pipeline gathering systems to aggregation points and storage facilities. Typically oil tanker trucks are used where the travel distances are not significant. This alternative will be evaluated in the EIS.

Modified Scale or Magnitude

The EIS will evaluate the potential impacts of alternative pipeline capacities. The EIS will not evaluate different pipe metal thicknesses.

Alternatives Incorporating Reasonable Mitigation Measures

Reasonable mitigation measures for impacts that cannot be avoided will be evaluated in the EIS for all route alternatives and route segment alternatives.

No Action Alternative

The EIS will describe the expected condition if the CN is not granted and existing Line 3 is not replaced as proposed. The EIS will describe the level of integrity monitoring and ongoing maintenance digs and repair program to maintain safe operation of the pipeline.

Modified Designs and Layouts: System Alternatives, Route Alternatives, and Route Segment Alternatives

Modified Designs and Layouts: System Alternatives

As discussed above, all of the system alternatives and route alternatives proposed for the Sandpiper Pipeline Project were also proposed for evaluation in the Line 3 Replacement Project. Because these alternatives were developed for Sandpiper, they: (1) start in North Dakota for the purposes of carrying Bakken crude and (2) they all assume construction of a new terminal and associated facilities. Nevertheless, this broad range of system alternatives and route alternatives from the Sandpiper proceeding were carried into the Draft Scoping Decision Document for the Line 3 EIS. Consideration of system alternatives and route alternatives is detailed in the *Alternatives Screening Report*.

Based on the Alternatives Screening Report, DOC-EERA staff identified one system alternative (SA-04-L4) to be carried forward for evaluation in the EIS and contested case hearing (Figure 4).

Modified Designs and Layouts: Route Alternatives

Based on the assessment of environmental benefits/impacts, socioeconomic benefits/impacts, and regulatory and economic feasibility in the Alternatives Screening Report DOC-EERA staff identified four route alternatives to be carried forward for evaluation in the EIS and contested case hearing.

The four alternative routes (RA-03A-M, RA-06, RA-07, and RA-08) proposed for analysis in the EIS are summarized in Table 5 above and shown in Figure 2.

Modified Designs and Layouts: Route Segment Alternatives

Fifty seven route segment alternatives along the applicant's preferred route were proposed during the 2014, 2015, or 2016 scoping processes. (A route segment alternative is a shorter deviation from a larger route designed to avoid a specific conflict or impact.) Of these, Enbridge incorporated 29 into the preferred route. DOC-EERA staff will consider a total of 23 additional route segment alternatives in the EIS. See Figure 3.

Issues Raised During Scoping

An EIS must provide a discussion of potentially significant effects resulting from the project and alternatives. These effects include environmental, economic, employment, and sociological effects.

Pipeline Deactivation and Abandonment

The EIS will evaluate the deactivation of the existing Line 3 pipeline, including abandonment in place, removal following construction of the new Line 3, and removal of existing Line 3 and construction of new Line 3 in the same trench or right-of-way. The applicant proposes to deactivate the line in place, in part due to the safety concerns due to its location in the mainline corridor; Line 3 is in the middle of a corridor with multiple pipelines (see inset of Figure 1) and its removal would cause potential hazards to the other pipelines that would not otherwise occur. Deactivation and abandonment of pipelines in place is common and must comply with federal rule 49 C.F.R. Part 195 and state rules.²⁴ In addition to safety concerns cited by the applicant regarding removal of Line 3, the applicant also cites concerns for additional environmental disturbances and landowner impacts.

Public and tribal concerns for abandoning the pipeline in place include the potential for the line to be reactivated to carry different products, potential for any residual oil in the line to leak into the surrounding environment, cracking or unsealing of the pipe in wetland areas and the potential for the pipe to act as a "drain" and divert water (e.g. drain) a wetland, and the likelihood the pipe will surface in wetland areas without product to keep it weighted in place, thus causing safety hazards and acting as a barrier for water and wildlife, as well as visual aesthetic concerns.

²⁴ 49 C.F.R. 195, paragraphs 195.59 and 195.402

Oil Spill Modeling

One of the most common concerns regarding the proposed project is the potential for a damaging oil spill. Therefore, DOC-EERA staff will evaluate impacts of a crude oil release (large-volume and small or pinhole leaks) to the applicant's proposed route and route alternatives. A more detailed overview of the spill modeling to be completed is provided in the proposed *Final Scoping Decision Document*.

Impact assessments will be based on literature reviews of large and small release volumes, including relevant case studies; a general analysis of impacts from a release to resources along the Project, including impacts to groundwater; the probability of a release; and site-specific modeling of representative sites that can be used to make general comparisons to other locations. Resources to be considered in the analysis include but are not limited to residential structures, populated areas, water and biological resources, cultural resources, and High Consequence Areas.²⁵

Large-Volume Spills Analysis – General Methods

Large-volume spill analysis will consist of spill modeling and a summary and application of methods of spill impacts analyses from other projects, such as the Keystone XL Pipeline EIS, and the *Ecological and Human Health Risk Assessment of Pipeline Releases along the Line 3 Pipeline in Canada*. Spill incident findings and remediation efforts from the National Crude Oil Spill Fate and Natural Attenuation Site near Bemidji, Minnesota, by the USGS, the National Transportation Safety Board report on the Marshall, Michigan, spill, and other case studies will also be evaluated in the analysis.

Transportation Safety Board report on the Marshall, Michigan, spill, and other case studies will also be evaluated in the analysis.

The Applicant will provide data on maximum spill volumes, spill frequency, and the types of crude oil being transported based on the proposed engineering and operations for the pipeline. This information will be reviewed by DOC-EERA and its consultant, DNR, MPCA and other agencies, and will be used to assess the potential risk and consequences of large- and small volume releases..

An estimated large-volume spill footprint will be established using these data and based on methods used by other current or recent investigations, including those used by Exponent, Inc. (Exponent) in a review of the Keystone XL Pipeline FEIS. The methods will consider general geomorphic conditions in Minnesota to develop a general spill footprint. The analysis will also include a review of crude oil release data from the Pipeline and Hazardous Materials Safety Administration (PHMSA) database.

Large-Volume Spill Modeling

Spill modeling is being conducted by RPS ASA, a science and technology consulting firm specializing in environmental modeling, using OILMAPLAND and SIMAP modeling software. OILMAPLAND is a (two-dimensional) land and surface water spill model system that simulates oil and chemical releases from

²⁵ For a definition of High Consequence Areas, see U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration website: <http://primis.phmsa.dot.gov/comm/FactSheets/FSHCA.htm>

pipelines and storage facilities, providing a modeling tool for oil spills that occur on land and then migrate to streams and lakes. SIMAP provides detailed predictions of the three-dimensional trajectory, fate, biological effects, and other impacts of spilled oil and fuels in aquatic environments. Both modeling programs meet PHMSA regulatory requirements.

RPS ASA has the models for a set of scenarios that include the various heavy Canadian crude oil types. These crude oils represent the range of oil densities and chemical compositions expected.

Small Leaks

RPS ASA is evaluating small or pinhole leaks qualitatively through a combination of literature review and relevant case studies. Factors for evaluation will include volume of the release, the length of time for detection, and the types of effects on groundwater, surface water, and soils. The EIS will also present types of remediation and recovery methods.

Potential impacts to shallow groundwater resulting from small (pinhole) leaks will be assessed using the key findings from the risk assessment of the Keystone XL Pipeline conducted by Exponent as well as soil characteristics and permeability from well logs (required for all wells drilled in Minnesota) filed with the Minnesota Department of Health. This information will be used to assess the distance oil would travel in different soil types if a small (pinhole) leak went undetected.

Climate Change

The EIS will assess greenhouse gas (GHG) emissions due to the direct and indirect effects of construction and operation of the proposed project for the life of the project as well as cumulative emissions of the Project when considered with other projects. Construction impacts will include emissions from construction equipment and vehicles, and associated with changes in land use along the construction and operational right-of-way. Operational impacts will include operations of the proposed pipeline, pump stations, storage facilities, and, if appropriate, induced production, transportation, and end use (based on available literature on life-cycle emissions of appropriate oil types). The EIS will identify the types of impacts that climate change may have on the environment, especially in Minnesota. The EIS will also consider the potential impacts of climate change on the project itself.

The EIS will provide an overview of oil production as associated with the proposed project and the potential for induced upstream production and downstream end use as a result of the proposed pipeline. If it is determined to be likely that the proposed pipeline will increase upstream production or downstream end use compared to baseline conditions, the EIS will assess the associated GHG emissions. If no definitive conclusion can be drawn about the likelihood of induced production increases, the EIS will include a comparative per barrel lifecycle assessment of emissions from Alberta tar sands and from other principal sources of crude for American refineries.

Finally, GHG emissions of the proposed project should be used as a proxy for assessing potential climate change impacts in accordance with final guidance from the Council on Environmental Quality (CEQ 2016). The EIS will not attempt to correlate project-related emissions to specific changes in the climate, but will describe direct, indirect, and potential cumulative effects of GHG emissions associated with the project as related to Minnesota's efforts to reduce GHG emissions.

Establishment of a New Pipeline Corridor

Many public comments raise concerns about the establishment of a new pipeline corridor, specifically routes located in the Mississippi River Headwaters area and the “lake district” generally. This concern stems from the fact that as the pipelines in the existing mainline corridor age and need to be replaced, the constraints listed by the Applicant (Chapter 6 of the Application for a Route Permit) may also apply to future pipeline replacements.

While the Applicant has selected a preferred route that best addresses its needs, public concerns about the routing process have focused on the lack of a planning process, statewide or other, that considers the best corridor to route pipelines in Minnesota. Whether this concern is answered through an EIS on a specific project or via a larger planning process or a “generic EIS” is at the core of the public’s concern. An overwhelming amount of public comment and testimony in the Sandpiper docket reflects this large and complicated question.

This issue is also central in the selection of alternatives for consideration in the EIS. DOC-EERA and assisting agencies have struggled with how to reconcile the obligation to respond to an application for a specific pipeline project with these broader issues.

Oil Production and Transportation

The EIS will provide an overview of oil production as associated with the proposed project. The EIS will consider the potential for induced upstream production and downstream transportation/end use as a result of the proposed project. If it is determined to be likely that the proposed pipeline will increase upstream production or downstream transportation/end use compared to baseline conditions, the EIS will assess these impacts as indirect effects of its proposed project. The cumulative effects assessment sections of the EIS will consider existing and future production and transportation to the extent that such production would affect the same resources to the proposed project.

Cumulative Potential Effects

Cumulative potential effects could result from the incremental effects of the Project in addition to other projects, including future projects, in the environmentally relevant area that might reasonably be expected to affect the same environmental resources.²⁶ The purpose of the cumulative potential effects analysis is to evaluate the incremental impacts of other proposed projects, regardless of the proposer, in the environmentally relevant area that may be expected to impact the same resources the proposed project or alternatives.

The EIS will not specifically take into account the cumulative potential effects of the Sandpiper Pipeline Project, since NDPC has requested that project to be withdrawn and there are no pending applications for it in front of any government agency. However, the potential for other future pipelines to be

²⁶ Minn. R. 4410.0200, Subp. 11a

proposed in the same corridor as the Applicant's preferred route for the Line 3 Replacement Project still exists, and this potential impact will be qualitatively evaluated in the EIS.

Other reasonably foreseeable projects will be identified by searching local land use plans, current permit applications, and approved, but not built, projects in the vicinity of the alternatives.

Applicant's Insurance (Financial Assurance)

Given the risk and cost associated with an oil spill, many comments express concerns about the ability of the Applicant to fully remediate the impacts of a large volume oil spill. The question of how to best address this concern is the purview of the Commission. This issue is not addressed in the FSDD.

Potential for Federal EIS

Route alternatives RA-07 and RA-08 cross the Leech Lake Reservation, the Fond du Lac Reservation, and the Chippewa National Forest. Route alternative RA-06 crosses the Fond du Lac Reservation and the Chippewa National Forest. Therefore, if any of these three alternatives were selected for a route permit, they would also require federal and tribal approvals in addition to the state permits.

Scoping Decision and Notice

Following Commission approval of the FSDD, DOC-EERA staff will issue a final scoping decision for the project incorporating all of the Commission edits, if any. After issuance of the final scoping decision, the Department will issue a notice of EIS preparation.²⁷ Per Minnesota Rule 4410.2100, the notice must be published in the *EQB Monitor* and in a newspaper of general circulation in each county where the project may occur, and must include a summary of the scoping decision.²⁸

DOC-EERA staff is planning to provide notice greater than that required by Minnesota Rule 4410.2100.²⁹ DOC-EERA staff plans to provide notice to:

- All landowners along alternatives identified in the FSDD,
- All counties traversed by alternatives identified in the FSDD,

In addition to a summary of the scoping decision, the EIS preparation notice will provide direction on how persons can participate in the CN and route permit proceedings, including how to sign up for the project mailing list and subscribe to eDockets.³⁰

²⁷ Minnesota Rule 4410.2100, Subp. 9.

²⁸ Id.

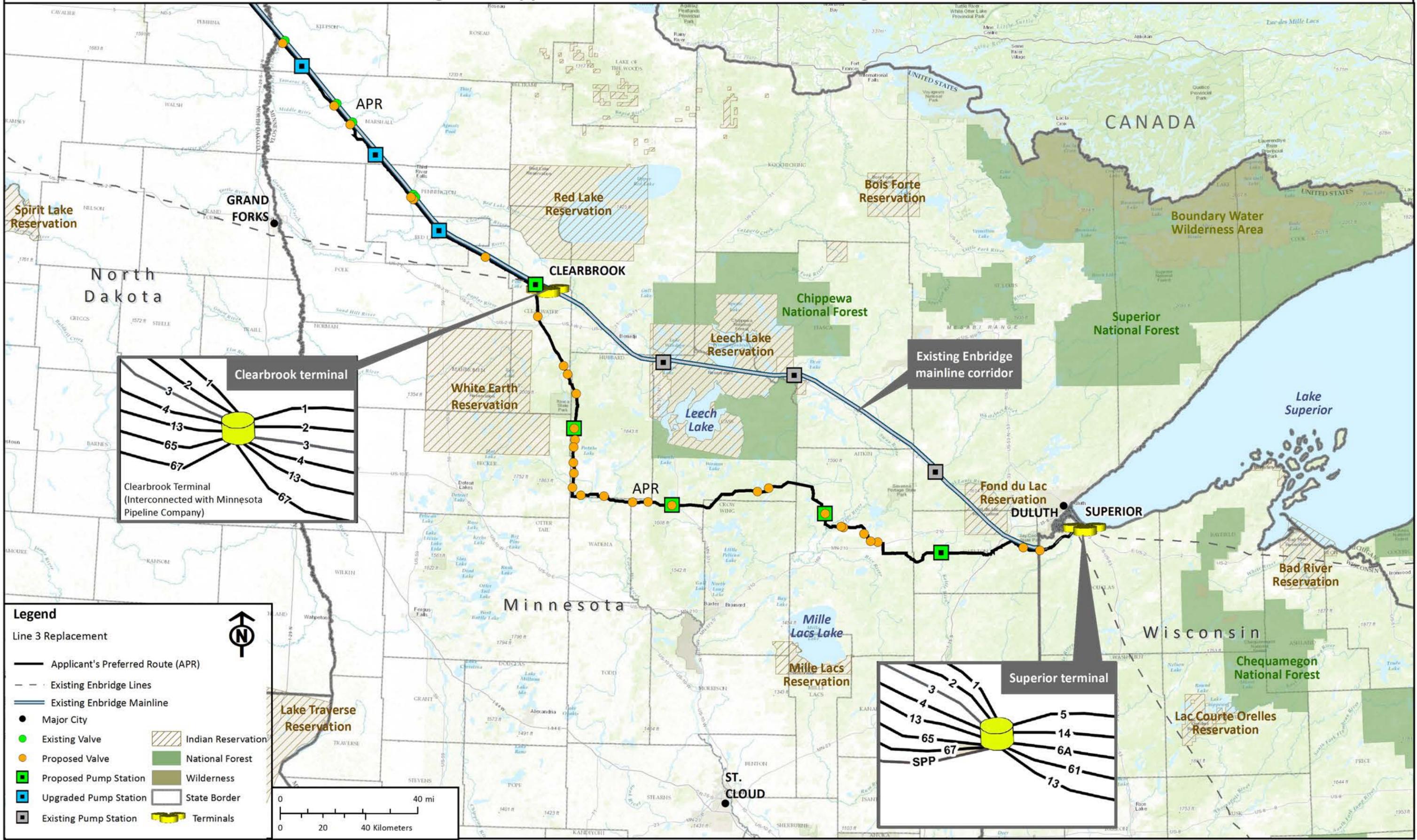
²⁹ 's staff's recommended notice plan is based, in part, on the notice requirements of the Commission's August 25, 2014, order; see Order Accepting Alternative Route and System Alternatives for Evidentiary Development, Requiring Notice, and Setting Procedures, August 25, 2015, eDockets Number [20148-102500-02](#).

³⁰ See, e.g., EIS Scoping Notice ("How to Learn More" and "Project Contacts")

Part VIII. EERA Staff Recommendations

EERA staff recommends that the Commission authorize the Department to issue the Final Scoping Decision for the project, based on the proposed FSDD and incorporating any Commission edits. EERA staff also recommends that the Commission authorize the Department to provide expanded notice of the EIS scoping decision as described above.

Line 3 Replacement Project
Figure 1: Applicant's Preferred Route with Existing Infrastructure



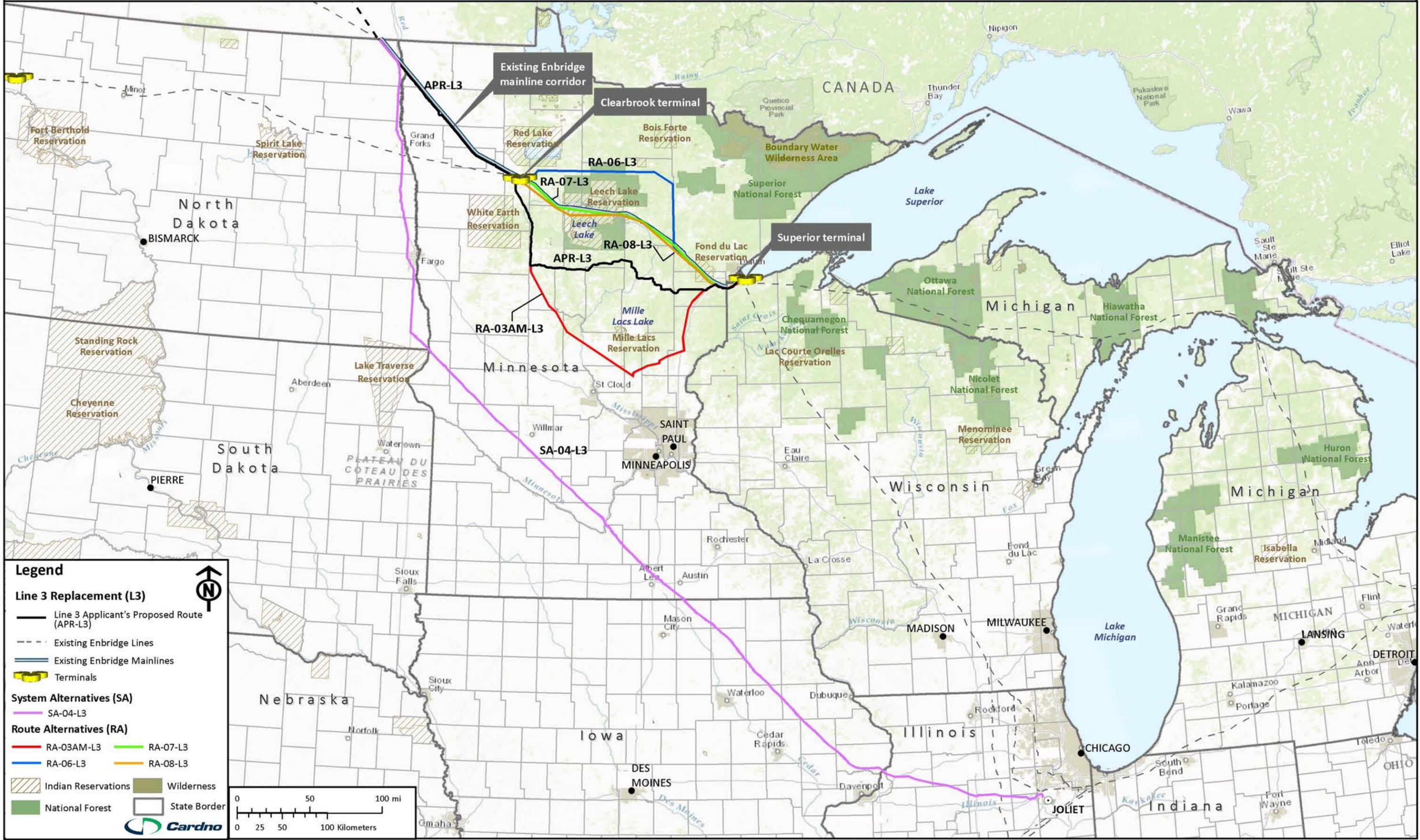
Legend

Line 3 Replacement

- Applicant's Preferred Route (APR)
- - - Existing Enbridge Lines
- Existing Enbridge Mainline
- Major City
- Existing Valve
- Proposed Valve
- Proposed Pump Station
- Upgraded Pump Station
- Existing Pump Station
- Indian Reservation
- National Forest
- Wilderness
- State Border
- Terminals

0 20 40 mi
 0 20 40 Kilometers

Line 3 Replacement Project
Figure 2: Alternatives Selected for Analysis in the EIS



Legend

Line 3 Replacement (L3)

- Line 3 Applicant's Proposed Route (APR-L3)
- Existing Enbridge Lines
- Existing Enbridge Mainlines
- Terminals

System Alternatives (SA)

- SA-04-L3

Route Alternatives (RA)

- RA-03AM-L3
- RA-06-L3
- RA-07-L3
- RA-08-L3

Indian Reservations Wilderness

National Forest State Border

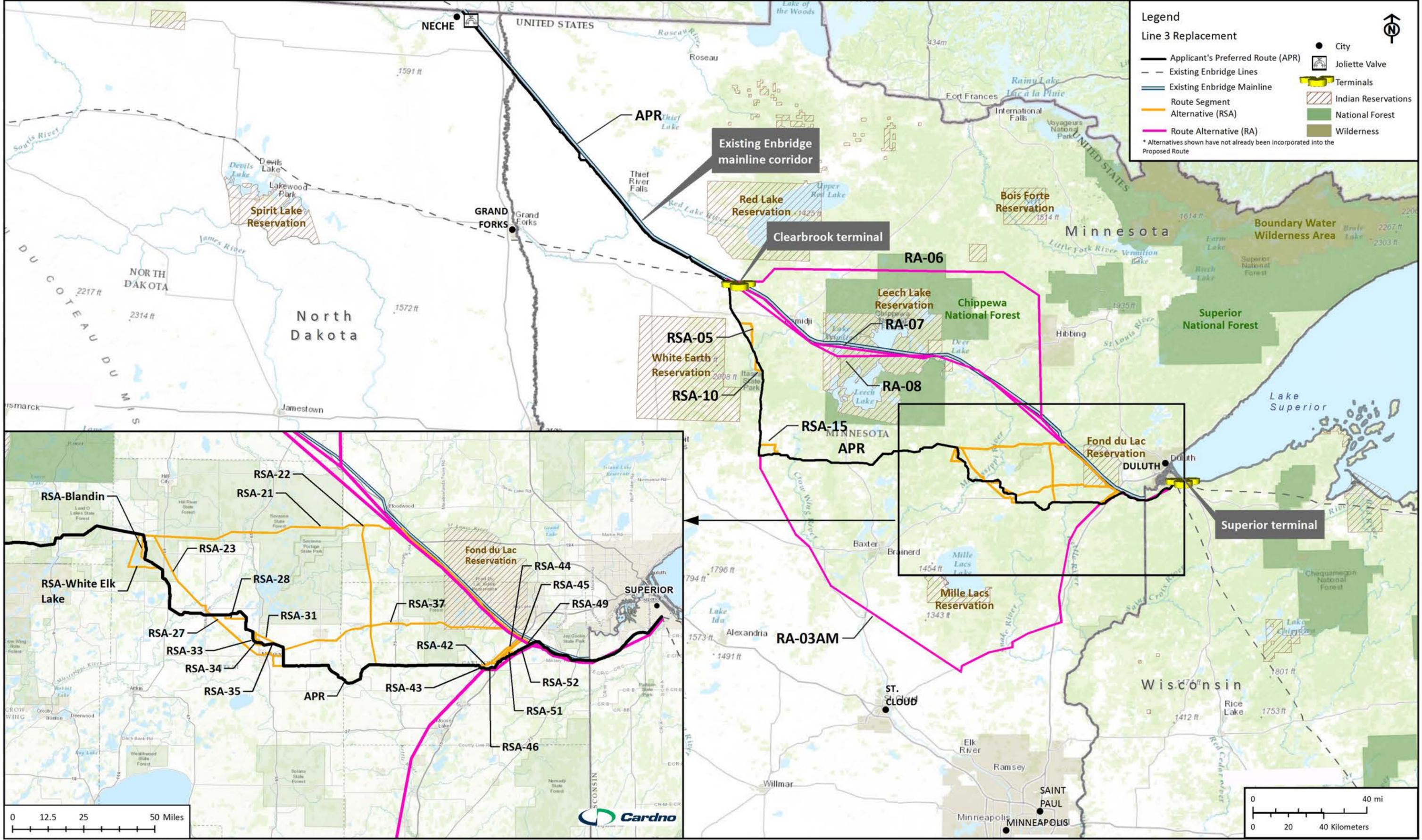
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0 25 50 100 Kilometers

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Line 3 Replacement Project

Figure 3: Route Alternatives and Route Segment Alternatives



Line 3 Replacement Project
Figure 4: System Alternative Selected for Analysis in the EIS



Legend

Line 3 Replacement

- Line 3 Applicant's Proposed Route (APR)
- - - Existing Enbridge Lines
- Existing Enbridge Mainlines
- 📍 Terminals

System Alternatives (SA)

- SA-04-L3

Indian Reservations
 Wilderness

National Forest
 State Border

0 50 100 mi
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