Levi, Andrew (COMM)

From: Paul Blackburn <paul@paulblackburn.net>
Sent: Monday, July 10, 2017 11:23 PM
To: MN_COMM_Pipeline Comments
Cc: 'Winona Laduke'; frankbibeau@gmail.com
Subject: Honor the Earth Comments on DEIS For CN-14-916 and PPL-15-137
Attachments: 2017-07-10 Honor the Earth Comments on DEIS.pdf; Honor the Earth Att A - Highlights.pdf; Honor the Earth Att B - Comments on Pinhole Release Analysis.pdf

Hi Jamie –
Please find attached Honor the Earth's Comments on the Line 3 "Replacement" Project DEIS, CN-14-916 and PPL-15-137, and Attachment A and B to them. Attachment C will come in one or more additional emails.
Thank you!
Paul Blackburn

Attachments for Honor the Earth Comment Letter #2667 included as H 5 and H 6.

Levi, Andrew (COMM)

From: Paul Blackburn <paul@paulblackburn.net>
Sent: Monday, July 10, 2017 11:41 PM
To: MN_COMM_Pipeline Comments
Cc: 'Winona Laduke'; frankbibeau@gmail.com
Subject: Honor the Earth Comments on DEIS For CN-14-916 and PPL-15-137 Attachment C
Attachments: Honor the Earth Att C - Bob Merritt Line 3 DEIS Review.pdf; Honor the Earth Att C - Bob Merritt Appendix A.pdf; Honor the Earth Att C - Bob Merritt Appendix B.pdf; Honor the Earth Att C - Bob Merritt Appendix C.pdf; Honor the Earth Att C - Bob Merritt Appendix D.pdf

Hi Jamie –
Please find attached Honor the Earth's Attachment C and its four Appendices A, B, C, and D, to our Comments on the Line 3 "Replacement" Project DEIS, CN-14-916 and PPL-15-137.
Thanks again –
Paul Blackburn

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VIA EMAIL

July 10, 2017

Jamie MacAlister
Environmental Review Manager
Minnesota Department of Commerce
85 7th Place East, Suite 280
St. Paul, MN 55101-2198

Re: 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, OAH 65-2500-32764, MPUC PL-9/CN-14-916

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

Dear Ms. MacAlister:

Honor the Earth hereby submits the following comments on the Draft Environmental Impact Statement ("DEIS") prepared as per the requirements of the Minnesota Environmental Policy Act, Minn. Stat. Ch. 116D ("MEPA") for the Line 3 "Replacement" Project ("Project") in response to the Minnesota Department of Commerce ("Department") Revised Notice Of Availability Of Draft Environmental Impact Statement and Public Information Meetings for the Proposed Line 3 Pipeline Project, issued on May 15, 2017, which notice established a comment period ending on July 10, 2017, in the above captioned dockets. In turn, the Department has prepared the DEIS on behalf of the Minnesota Public Utilities Commission ("Commission"), which is the responsible governmental unit ("RGU") that is ultimately responsible for compliance with MEPA.

Enbridge Energy, Limited Partnership, in cooperation with its affiliates ("Enbridge"), has submitted Applications for a Certificate of Need and Routing permit to the Commission. The Project would include the construction of a new 36-inch diameter crude oil pipeline that would have an initial capacity of 760,000 bpd but would be constructed with steel pipes and other components that would allow it to transport up to 915,000 bpd of crude oil from the Tar Sands Region in Alberta via Minnesota to Enbridge's terminal in Superior, Wisconsin.

Honor the Earth appreciates this opportunity to improve the DEIS. This being said, there is much more that we would like to comment on, but given the length of this DEIS and our limited resources, we are unable to submit comments that are as complete as we would have liked.

Honor the Earth is deeply concerned about a number of significant deficiencies in the DEIS, including the following:

- the statement of purpose and need is overly narrow and based entirely on Enbridge's purpose and need, without consideration of the underlying purpose and need, such that it does not comply with MEPA;
- due to the legal inadequacy of the statement of purpose and need; the DEIS fails to include reasonable alternatives instead includes patently unreasonable alternatives, such as trucking, making the DEIS alternatives analysis wholly defective;
- the defects in selection of alternatives means that all of the comparisons of alternatives in Chapters 5, 6, 7 and 12 are fatally flawed;
- the tribal resources and environmental justice analyses are wholly inadequate;
- the abandonment analysis fails to include any reasonable data on contamination, fails to include a contamination plan for review by the Commission, and fails to outline any role for private landowners in determination of the mitigation that is appropriate for their land;
- the DEIS fails to include Enbridge's proposed expansion of the Project to 915,000 bpd, which is a phased action the impacts of which must be considered; and
- the DEIS fail to include any description of a new pipeline from the Superior Terminal to Illinois, which pipeline is necessary to utilize 72% of the capacity of the Project, such that a Wisconsin to Illinois pipeline is a connected action under MEPA.

The foregoing deficiencies are so significant that Honor the Earth requests that the Department revise the DEIS and provide for additional public comment on it.

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COMMENTS ON THE EXECUTIVE SUMMARY

In response to the Executive Summary, Honor the Earth has attached its "Line 3 DEIS Highlight Reel" as its summary comments on the DEIS. Attachment A.

We are concerned that the DEIS is excessively encyclopedic rather than analytical as required by Minn. Stat. § 116D.04. Also, it appears that the Department cut and pasted a substantial proportion of the material in the DEIS from Enbridge documents without critical analysis and often without updating the material. 2667-1

Further, we are concerned that the DEIS assumes that Enbridge will comply with statutory and regulatory requirements, when the record shows that it has regularly fails to comply with the law, including, for example, the following instances: 2667-2

- https://insideclimatenews.org/news/20131202/enbridge-could-be-forced-boost-pipeline-safety-mich-after-water-violations
- https://www.desmogblog.com/2016/07/19/former-inspectors-describe-dangerous-flaws-construction-major-east-coast-gas-pipeline
- http://grangehallpress.com/Enbridgeblog/2013/01/20/the-latest-construction-violation/
- http://archive.jsonline.com/news/wisconsin/37009324.html
- http://michiganradio.org/post/enbridge-energy-could-face-fines-after-incident-pipeline-thats-under-construction
- http://oxfordleader.com/enbridge-sub-contractor-ticketed/
- http://www.freep.com/story/news/local/michigan/2016/08/03/ag-bill-schuette-enbridge-violating-straits-pipeline-easement/88039662/
- https://insideclimatenews.org/news/20130709/mich-officials-step-scrutiny-enbridge-after-water-law-violations
- https://www.dnr.illinois.gov/programs/NRDA/Pages/Lakehead.aspx

We suggest that the Commission and Department be less trusting than they appear to be.

COMMENTS ON DEIS CHAPTER 2 – PROJECT DESCRIPTION

Comments on DEIS Section 2.1

Although the Project would be initially limited to operation at 760,000 bpd, according to page 8-3 of Enbridge's CON Application, it would have an ultimate capacity of 915,000 bpd:

> Pursuant to the requirement of Minn. R. 7853.0530, Enbridge is providing for the Commission's information the ultimate design capacity for the pipeline considering its diameter, wall thickness, steel grade, and crude slate (irrespective of the number of pump stations proposed for the Project), which is 1,016 kbpd. This figure in turn, yields an ultimate annual average capacity of 915 kbpd. Further engineering design studies would be required to determine the number of pump stations needed to achieve the ultimate design capacity level, but that is not the level sought in this Appliction [stet.].

Operation of the Project at its ultimate capacity represents a net capacity expansion of 525,000 bpd over the capacity of the existing Line 3 Pipeline, and an expansion over the Project of 155,000 bpd, which is itself a substantial volume of oil. Expansion of the Project from 760,000 bpd to 915,000 bpd would increase its capacity by 20.4%.

The DEIS does not describe the physical changes that would be required to increase capacity of the Project from 760,000 bpd to 915,000 bpd. Therefore, it is not possible to know whether such subsequent changes would require any substantial environmental review. It could be that the expansion would require only the installation of new pumps without the construction of any new pump stations or other construction impacts. In contrast, the vast majority of the construction activity needed to allow operation at 915,000 bpd would likely be performed as part of the initial construction of the Project, including installation of higher capacity pipe. Yet, the DEIS does not evaluate the construction that would be undertaken following the initial phase of construction, and then compare this to the construction that would be undertaken as part of the first phase of the Project that is necessary to allow the expansion. 2667-3

Construction of the Project with pipe that is sufficient to transport up to 915,000 bpd, requires that the pipe be constructed now using thicker steel. Page 8-5 of the CON Application contains Table 8.1.E.2-1:

Table 8.1.E.2-1 Mainline Pipe Design Parameters	
Design Parameter	**Specification**
Pipe Size (Diameter)	36-inch outside diameter (NPS 36)
Estimated Length	337 miles
Wall Thickness	
Nominal	0.515 inch
Road Bore	0.600 inch
Cased Railroad	0.600 inch
Uncased Railroad	0.750 inch
Horizontal Directional Drill (HDD)	0.750 inch
Coating, mainline	14 mils Epoxy Bonding
Coating, trenchless	40 mils Epoxy Bonding ABR
Grade (Pipe Type)	X70 carbon steel pipe manufactured according to API Specifications 5L PS2
Maximum Operating Pressure[3]	1440 psig

Thus, the steel wall thickness will range from 0.515 inch to 0.750 inch. This page also states that the Project will be constructed from X70 carbon steel manufactured according to API Specifications 5L PS2.

In contrast, the existing Line 3 Pipeline is a 34-inch diameter pipe comprised of steel with a thickness of 0.375 inches.[1] Enbridge's original application letter for a Presidential Permit for Line 3 states:

> The facilities in respect of the proposed 34 inch pipe line at the international boundary are as follows:
>
> A pipe line of the pipe manufactured to American Petroleum Institute specification 5LX, with an outside diameter of 34 inches, a wall thickness of .375 inches, minimum yield strength of 52,000 pounds per square inch, proposed test pressure after installation of 1028 pounds per square inch . . . .

Thus, construction of a pipeline to move just 760,000 bpd would require a smaller diameter pipe with thinner steel.

[1] Letter, Lakehead Pipe Line Company to U.S. Secretary of State (August 31, 1967) (application for a Presidential Permit for Line 3 Pipeline).

In comparison, the Line 67 Project approved by the Commission in 2008[2] has an ultimate capacity of 800,000 bpd[3] and Enbridge's application for that pipeline contains the following pipe specification[4]:

> Pipe will be 36-inch outside diameter, 0.375 to 0.469 inch wall thickness, API 5L Grade X70, double submerged are (DSAW) steel pipe. The maximum allowable operating pressure will be 1050 to 1313 psig.

This means that the Project will be constructed from pipe with a pipe wall thickness greater than necessary to transport 760,000 bpd. Both the existing Line 3 and Line 67 pipe were constructed using pipe that is 73% thinner than the Project. Put another way, based on pipe wall thickness alone, the Project will be built using at least 27% more steel than is necessary to transport 760,000 bpd. But, this percentage does not account for the greater amount of steel needed to fabric a 36-inch diameter pipe as compared to a 34-inch diameter pipe. Therefore, construction of the Project as designed will require significantly greater amounts of steel than required to transport 760,000 bpd, which is the purported purpose of the Project contained in DEIS Section 2.1.

Construction of the Project with pipe that is larger diameter and has thicker pipe walls than required to transport the capacity proposed by the Project means that each pipe segment's weight is greater than necessary for the Project and will result in greater road wear, energy consumption, and pollution impacts to transport and construct the pipeline than is required for the Project's capacity. Further, the use of thicker steel also results in thicker welds and greater use of welding materials and greater air impacts resulting from welding activities. Consequently, some of the impacts of expanding capacity to 915,000 bpd will be created during construction of the Project and should be considered as part of the DEIS.

Should the Project be built, it is entirely foreseeable that Enbridge would ultimately increase the pipeline's capacity to 915,000 bpd. Therefore, operation at 915,000 bpd is a "reasonably foreseeable future project" and is a cumulative impact as defined by Minn. R. 4410.0200, Subp. 11.

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[2] In the Matter of the Application of Enbridge Energy, Limited Partnership, and Enbridge Pipelines (Southern Lights) LLC for a Certificate of Need for the Alberta Clipper Pipeline Project and the Southern Lights Diluent Project, DOCKET NO. PL-9/CN-07-465, Order Granting Certificate of Need (Dec. 29, 2008).

[3] 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. PL9/CN-13-153, Application for a Certificate of Need
for a Crude Oil Pipeline, Section 7853.0230, Page 12.

[4] Application for Certificate of Need for a Crude Oil Pipeline, Docket No. PL9/CN-07-465, Alberta Clipper and Southern Lights Diluent Projects, June, 2007Section 7853.0530, Page 5.

Further, construction of the Project to allow future expansion to 915,000 bpd and future operation at such capacity would have "cumulative potential effects," as this term is defined by Minn. R. 4410.0200, Subp. 11a, which includes consideration of the effects of "future projects actually planned or for which a basis of expectation has been laid." With regard to whether an expectation has been laid, this definition states:

> In determining if a basis of expectation has been laid for a project, an RGU must determine whether a project is reasonably likely to occur and, if so, whether sufficiently detailed information is available about the project to contribute to the understanding of cumulative potential effects. In making these determinations, the RGU must consider: whether any applications for permits have been filed with any units of government; whether detailed plans and specifications have been prepared for the project; whether future development is indicated by adopted comprehensive plans or zoning or other ordinances; whether future development is indicated by historic or forecasted trends; and any other factors determined to be relevant by the RGU.

Minn. R. 4410.2300(H) requires that "for the proposed project and each major alternative there shall be a thorough but succinct discussion of potentially significant adverse or beneficial effects generated, be they direct, indirect, or cumulative." Since design of the pipe in the Project to transport up to 915,000 bpd creates an expectation of a future expansion of the Project, the effects of operating a future expansion at up to 915,000 bpd are cumulative potential effects and must be analyzed by the DEIS.

Expansion of the Project to a capacity of 915,000 bpd is a phased action pursuant to Minn. R. 4410.0200, Subp. 60, because expansion of the Project would have "environmental effects on the same geographic area" and would be "substantially certain to be undertaken sequentially over a limited period of time." As a phased project, the expansion "must be considered in total when determining the need for an EIS and in preparing an EIS." Minn. R. 4410.2100, Subp. 4 (emphasis added). Although this subpart also allows the Commission to "treat the present proposal as the total proposal," it may also "select only some of the future elements for present consideration in the threshold determination and EIS."

With regard to its exercise of discretion of this phased action under Minn. R. 4410.0200, the DEIS contains no information about the potential scope of construction required for this subsequent phase. As such, it is impossible for the Commission to rationally evaluate whether this expansion will create significant independent impacts, or whether instead the impacts of the subsequent phase would be *de minimis*. For example, expansion of capacity to 915,000 bpd

could include only the installation of additional pumps at existing pump stations, and not include any new impacts to land or the construction of any new facilities. Should the impacts of the subsequent phase be *de minimis*, it would be irrational for the Commission to evaluate such impacts as a later phased action because doing so would be inefficient and result in unnecessary segmentation of environmental review. In any case, the EIS should contain sufficient information for the Commission to make a rational decision on whether or not to treat the Project as the "total proposal" or to exercise its discretion to "select only some of the future elements for present consideration in the . . . EIS", but at present the DEIS is completely silent about the potential for a subsequent phase. 2667-4

The Commission should consider the 915,000 bpd ultimate capacity with regard to those elements of construction that would be impacted now by virtue of use of thicker steel, because these impacts will occur during construction and would be a moot point in any subsequent environmental review. For example, the use of 27% heavier pipe for the same segment length would have a correspondingly greater impact on road wear and tear during transport of the pipe to construction sites. Use of thicker pipe steel would also irretrievably commit substantially greater amounts of iron and other metals (27% more) to the Project than are necessary to transport 760,000 bpd. It would also commit greater amount of fuel to the project to transport the steel to Minnesota and then to construction sites. It would also commit greater amounts of fuel to construction of the project, due to the greater power need to lift and place the steel in the ground. It would also result in greater air impacts caused by welding thicker steel. Such impacts must be evaluated before approval of use of the thicker steel pipe to be used in the Project.

Unlike expansion of a road project either in terms of distance or lanes, creating the potential to expand the capacity of an existing crude oil pipeline segment in the future requires an irretrievable commitment of resources now. Further, most of the impacts of building a higher capacity pipeline occur before its expansion. This means that the Commission must make a reasoned judgement about which elements of a proposed future phase must be evaluated in the initial phase. It would be irrational to ignore the impacts related to construction of a higher capacity pipeline when such impacts occur during initial construction of the pipeline. It would also not be rational to fail to evaluate whether the impacts of a subsequent expansion of a pipeline would be *de minimis* relative to the impacts of constructing the pipeline so that it could be expanded, so that a rational decision can be made on whether to simply evaluate the impacts of an expansion in an initial environmental review. Where some or all of the "future elements" of a phased project relate closely to construction activities that would be analyzed in an initial environmental review, an RGU must consider which elements of the subsequent phase must be considered in the initial environmental review.

The Commission should also use the Project's ultimate capacity with regard to consideration of alternatives, because it would be unreasonable to not consider alternatives in light of the Project's ultimate capacity. The use of thicker steel increases the future utility of the pipeline relative to alternatives, because expansion through the use of additional pumping horsepower might require fewer resources and have lower impacts that expansion of alternatives. Moreover, consideration of a lower capacity alternative to the Project would result in the use of thinner steel, and this should be compared to the use of Enbridge's proposed steel thickness of the Project.

The Commission should also evaluate the potential impacts of oil spills from the Project based on its ultimate capacity, because it is likely that the Commission will not conduct new spill modeling and oil spill impact analysis in any subsequent application for expansion of the Project to 915,000 bpd. Also, the Commission, the parties, and Minnesota's citizens should know now what the likely spill impacts would be from operation at 915,000 bpd, because this is the likely foreseeable capacity for the majority of the life of the Project, such that construction of the Project would likely result in foreseeable oil spills larger than those that would result from operation at 760,000 bpd.

With regard to right of way width, Enbridge has requested that the Commission permit a 750-foot route width (375 feet on each side of the Project's centerline). The 50-foot permanent right-of-way would be located within this 750-foot corridor. The 750-foot route width would encompass construction workspace for the pipeline and associated facilities, and would allow Enbridge to make small-scale refinements of the pipeline centerline within the corridor, as needed, prior to and during construction. However, it appears that Enbridge is acquiring an easement that is sufficiently wide for additional pipelines. The DEIS should determine if such additional pipelines are possible and describe how many additional pipelines could be included in this corridor.

Comments on DEIS Section 2.2

Minn. R. 4410.2300.E requires that each EIS contain a statement that allows "the public to identify the purpose of the project." This being said, Minn. R. 4410.2300.G requires that an RGU also determine the "the underlying need for or purpose of the project," because doing so is necessary to determine whether or not an alternative should be excluded from analysis in the EIS. Thus, an EIS must have a clear statement not only of a project's underlying purpose, but also of the need that underlies it. The EIS statement of purpose has a profound effect on the scope and analytical integrity of the EIS, because it determines the scope of alternatives to the Project that will be considered in the EIS, as well as the factors that the DEIS considers in the evaluation of an Alternative's ability to accomplish the Project purpose. 2667-5

2667-5 cont

Providing a clear statement of the underlying purpose and need for the Project is particularly critical here, because the purpose of the Final EIS is to support the Commission's determination of need pursuant to Minn. Stat. § 216B.243 and Minn. R. Ch. 7853, which allows broad consideration of the purpose and need for a proposed project. With regard to the purpose of the MEPA analysis, Minn. R. 4410.0300, Subp. 3 states: "Environmental documents shall be used as guides in issuing, amending, and denying permits and carrying out other responsibilities of governmental units to avoid or minimize adverse environmental effects and to restore and enhance environmental quality." Also, Minn. R. 4410.2000, Subp. 1, states:

> The purpose of an EIS is to provide information for governmental units, the proposer of the project, and other persons to evaluate proposed projects which have the potential for significant environmental effects, to consider alternatives to the proposed projects, and to explore methods for reducing adverse environmental effects.

Thus, a failure by a Final EIS to provide information on the potential environmental impacts of alternatives that are considered by the Commission pursuant to is broad mandate under Minn. Stat. § 216B.243 and Minn. R. Ch. 7853 would mean that such impact statement would fail to accomplish the purposes of MEPA. Further, such failure also means that the Final EIS would not adequately explore ways of reducing environmental effect.

In particular, the DEIS may not itself predefine the Project's purpose and need because this will be defined by the Commission through its Certificate of Need hearing. Adopting a narrow definition of purpose and need in the EIS essentially pre-determines the ultimate issue in this hearing and means that the Commission's evaluation of alternatives will be broader than the EIS's evaluation of alternatives. The result will be that the FEIS will not fully inform the Commission about the environmental impacts of all of the alternatives it must consider under Minn. R. Ch. 7853. Even worse, by limiting information about available alternatives, an excessively narrow statement of purpose and need would steer the Commission's certificate of need analysis away from consideration of a broad selection of possible alternatives and towards Enbridge's preferred alternative – which is contrary to the fundamental purpose of MEPA. When a MEPA analysis is intended to support a determination of need, the RGU must be particularly careful to define the purpose and need for a project broadly to ensure that MEPA's purpose is fully accomplished.

DEIS Section 2.2 fails to include a clear statement of the underlying purpose and need for the Project. Also, Section 2.2 defines project purpose and need overly narrowly and in accordance with Enbridge's narrow and self-serving definition of Project purpose. In fact, DEIS Section 2.2's statements related to purpose are comprised entirely of Enbridge's allegations, and

therefore this section is entirely aligned with Enbridge's purpose for the Project. Moreover, this section contains no analysis of the scope of purpose and need or the merits of Enbridge's allegations, which instead are taken at face value. This failure to comply with MInn. R. 4410.2300.G's requirement for a definition of the "underlying" purpose and need for the Project based on independent judgment means that the subsequent analysis in the DEIS related to selection of possible alternatives for further analysis and possible way to limit adverse environmental effects fails to investigate and select from among available alternatives in accordance with MEPA.

2667-5 cont

Section 2.2 does not discuss Project purpose and need in broad terms related to the underlying markets and potential customers for the crude oil that the Project would transport. Further, this section contains no critical analysis or discussion of the appropriate range of Project purpose in this particular circumstance. Instead, Section 2.2 defines purpose and need strictly in accordance with Enbridge's narrow definition of it. In fact, all of the statements about purpose in Section 2.2 are based on Enbridge allegations. The subheadings related to purpose include the following:

- Corrosion and Cracking of the Existing Pipeline Have Reduced Performance;
- Enbridge Believes Replacing the Existing Pipeline Is Less Expensive and Avoids Extensive Inspections;
- Enbridge States that Demand for Canadian Crude Oil Exceeds Current Capacity;
- Enbridge has Indicated that Expanded Capacity Would Reduce Curtailment and Improve Operational Flexibility;
- Expanded Capacity Would Improve Energy Efficiency on Enbridge's System.

Thus three of the five subheadings are simply restatements of Enbridge's purpose for the Project. The first merely states that the capacity of the existing pipeline has been reduced due to weakness in its pipe and notes that the pipe is subject to a consent decree that includes requirements for heightened safety conditions.[5] This is not a statement of purpose, but rather a description of the current situation. The fourth subheading restates Enbridge's allegations about energy efficiency.

The DEIS attempts to create the appearance that it is avoiding predefining project purpose and need in accordance with Enbridge's definition through the artifice of attributing statements to Enbridge. This is mere wordplay. What is important is how DEIS Section 2.2 defines the Project's purpose and need. Attribution of the adopted purpose and need to Enbridge

[5] The Consent Decree in *United States v. Enbridge Energy, Limited Partnership, et al.*, C.A. No. 1:16-cv-914 was approved by the U.S. District Court for the Western District of Michigan on May 23, 2017. This consent decree is evidence that rigorous compliance with the Pipeline Safety Act, 49 U.S.C § 60101 *et seq.* ("PSA") is intended to ensure the continued safe operation of the existing Line 3 Pipeline until it is no longer needed.

does not change the fact that DEIS Section 2.2 defines project purpose entirely with regard to Enbridge's definition of it. Moreover, attributing statement of purpose to Enbridge cannot cure a failure by DEIS Section 2.2 to properly define the "underlying" purpose and need of the Project. 2667-5 cont

All of the substantive statements in DEIS Section 2.2 related to the purpose and need for the Project uncritically accept Enbridge allegations:

- With regard to Project expense and inspections, the DEIS uncritically repeats Enbridge allegations regarding the required number of integrity digs, the relative cost of the Project in comparison to maintaining the existing pipeline, the invasiveness of the Project relative to maintaining the existing pipeline, and the annual cost of maintaining the existing pipeline in comparison to maintaining the Project. The DEIS contains absolutely no critical analysis of any of Enbridge's allegation or information relate to the financial merits of the Project relative to the existing pipeline.
- With regard to demand for Canadian crude oil, DEIS Section 2.2 says only, "Enbridge maintains the demand for crude oil feedstock from western Canada is currently greater than the capacity of the Enbridge pipeline system." DEIS Section 2.2 contain zero critical analysis of this statement. The DEIS should include information about project need sufficient to define a range of possible need, including the data that supports the Enbridge assertion about demand.
- With regard to curtailment and operational flexibility, DEIS Section 2.2 uncritically accepts Enbridge's allegations with regard to apportionment, future demand for transportation services, and operational flexibility.
- With regard to improvements in efficiency, DEIS Section 2.2 states that "According to Enbridge" the Project would increase efficiency relative to the new pipeline. The DEIS contains no critical analysis of the relative efficiency of pipelines.

Honor the Earth notes that all of the foregoing allegations are subjects that will be scrutinized by the Commission in the Certificate of Need hearing. Therefore, the DEIS should not simply assume that these allegations are correct. Since DEIS Section 2.2 states that all of the descriptions of purpose are those of Enbridge, this section in fact expressly adopts Enbridge's definition of Project purpose. Moreover, it does so without any critical analysis. Thus, the DEIS has in effect adopted Enbridge's purpose for the Project. The DEIS could have simply stated that it adopts Enbridge's purpose for the Project and produced the same result. By adopting Enbridge's purpose for the Project, the DEIS has pre-defined the purpose exactly as does Enbridge and thereby fundamentally limits the scope of the EIS analysis required by MEPA. Moreover, adoption of Enbridge's purpose also limits the scope of the DEIS more narrowly than must be considered by the Commission pursuant to pursuant to Minn. Stat. § 216B.243 and

Minn. R. Ch. 7853, such that a Final EIS will not fully support the Commission's required analysis.

2667-5 cont

The analytical role of DEIS Section 2.2 is to define the scope of the underlying purpose of the Project, but it must do so in a way that allows the Commission to analyze Project purpose as broadly as required by Minn. Stat. § 216B.243 and Minn. R. Ch. 7853. DEIS Section 2.2 could have discussed the customers, markets, and refineries that would be served by the proposed Project as a means of better understanding its commercial benefits and limitations and the underlying need for the Project. This type of analysis would not predetermine the outcome of the Certificate of Need hearing, because DEIS Section 2.2 could then have used such analysis to define the Project's purpose and need in broad terms rather than in Enbridge's narrow terms. Then, the Commission would be in a position to consider a broad range of environmental impact evidence, rather than only evidence for alternatives that fall within the DEIS's current narrow definition of purpose and need.

In this regard, the DEIS should discuss a range of possible future Canadian crude oil supply scenarios, not for the purpose of determining need, but rather to define the possible range of need for the Project. The effect of the continuing low price of oil on opening new wells or mines in Canada or the worldwide glut of oil on the market was not evaluated. Canadian oil is more expensive-to-extract and transport to the Gulf Coast market than other sources of oil in the world. Electric transportation options are further reducing demand for oil are not viewed as an alternative. Since 2012, the write-downs from Statoil ASA, Royal Dutch Shell PLC and Total companies and other Canadian producers have exceeded $20 billion, and oil price has fallen from more than $100 a barrel in 2014 to less than $50 today. Exxon Mobil has announced $3.4 billion in Canadian tar sands assets will be stranded assets if the price of oil does not go above $60. The economics of the Canadian oil industry are not favorable for growth. It would be inappropriate for the DEIS to simply assume that Enbridge's demand forecasts are correct, because the Commission itself will evaluate them and other forecasts to determine if they are reasonable.

By adopting a narrow definition of purpose and need, the DEIS limits the alternatives selected to a narrow set that, with the exception of SA-04, are entirely defined in terms of Enbridge's purpose and need. Such narrow definition is illegal. Therefore, the Commission must adopt a legally permissible definition of purpose that is broad enough to encompass the full scope of alternatives allowed by Minn. Stat. § 216B.243 and Minn. R. Ch. 7853.

Because the DEIS relies entirely on statements of purpose provided by Enbridge without any critical analysis of these statements, DEIS Section 2.2 does not a clear statement of purpose and need. Taking DEIS Section 2.2 at face value, it defines the purpose and need of the project as:

1) Reducing Enbridge's cost of operation;
2) Reducing maintenance and the impact of maintenance on current easement holders of the existing Line 3 Pipeline;
3) Meeting current and possibly future demand for crude oil transportation services for Canadian crude oil by refineries apparently in Petroleum Area Defense District II (the Midwest region), which demand is assumed to be greater now and in the future than the current capacity of the Enbridge Mainline System;
4) Allowing Enbridge's customers access to crude oil transportation service capacity that exceeds customer demand;
5) Restoring the capability of Line 3 to transport heavy crude oil and to increase its capacity in order to reduce limits on customer access to crude oil transportation services and increase the operational flexibility of the Mainline System; and
6) Increasing the energy efficiency of transporting crude oil of Enbridge's Mainline System.

2667-5 cont

The foregoing definition entirely fails to address the "underlying" purpose and need for the Project, and instead defines purpose and need entirely in terms of Enbridge's needs. Enbridge's purpose and need for the Project is not the "underlying" purpose and need for the Project. Most of the foregoing elements are specific to Enbridge and cannot logically be applied when evaluating reasonable alternatives. For example, reducing Enbridge's costs of operation, providing additional service to Enbridge's customers on the Mainline System, and increasing Enbridge's operational flexibility and energy efficiency, could not be accomplished by alternatives other than those that modify Enbridge's pipeline system. Those elements that could arguably relate to other alternatives, such as the alleged greater demand and restrictions on customer access to crude oil transportation services, are based entirely on allegations made by Enbridge without any critical analysis of how such statements relate to the "underlying" purpose and need for the Project. Thus, the DEIS entirely fails to describe the "underlying" purpose and need for the Project, and instead defines purpose and need with regard only to Enbridge's purpose and need for the Project. This failing has significant implications for all subsequent analysis contained in the DEIS.

Comments on DEIS Section 2.5

2667-6

The DEIS fails to consider the costs of expansion of pipelines downstream from the Superior Terminal. The following table shows that it is physically impossible to use all of the net Mainline System capacity increase that would be provided by the Project without constructing additional pipeline capacity from the Superior Terminal through Wisconsin.

2667-6 cont

Capacity Into Superior Terminal		Capacity Out of Superior Terminal		Capacity in minus Capacity Out (bpd)
Pipeline	**Capacity In (bpd)**	**Pipeline**	**Capacity Out (bpd)**	
Line 1	237,000	Line 5	540,000	
Line 2B	442,000	Line 6	667,000	
Line 3	390,000	Line 14	318,000	
Line 4	796,000	Line 61	1,200,000[6]	
Line 67	800,000	Calumet Refinery[7]	45,000	
Total Pipeline Capacity Into Superior Terminal	2,665,000	Total Pipeline Capacity Out of Superior Terminal	2,770,000	-105,000
Line 3 Replacement Project Initial Capacity Net Increase	370,000	Assume No Additional Capacity Constructed Out of Superior Terminal	0	+370,000
Mainline Capacity Into Superior Terminal With Line 3 Replacement Project at Initial Capacity	3,035,000	Total Pipeline Capacity Out of Superior Terminal	2,770,000	+265,000
Line 3 Replacement Project Ultimate Capacity Net Increase above Initial	155,000	Assume No Additional Capacity Constructed Out of Superior Terminal	0	+155,000
Mainline Capacity Into Superior Terminal With Line 3 Replacement Project at Ultimate Capacity	3,190,000	Total Pipeline Capacity Out of Superior Terminal	2,770,000	+420,000

There is currently up to 105,000 bpd more capacity out of Superior Terminal than there is into it; therefore, it would be possible to use the Project's capacity up to this amount without constructing a pipeline in Wisconsin. This would still leave up to 265,000 bpd of the Project's capacity stranded at the Superior Terminal. Thus, absent construction of a pipeline in Wisconsin, it would be impossible for Enbridge to use 72% of the Project's initial net capacity increase. It is irrational to expect that Enbridge would build the Project for the purpose of

[6] Since the pump stations in Wisconsin have received all permits, and it is Honor the Earth's understanding that their construction is essentially complete, it is reasonable to assume that Enbridge will expand Line 61's capacity to 1,200,000.

[7] The Calumet Refinery does not operate at 100% of its capacity on a sustained basis, so its average demand would be less than 45,000 bpd.

increasing the capacity of the Mainline System and not build sufficient downstream capacity to transport the full volume of crude oil that could be transported by the Project.

2667-6 cont

Since Section 2.5 considers the cost of building a pipeline in Canada and North Dakota that would connect to the pipeline built in Minnesota, it must also consider the cost of constructing a pipeline that would be needed in Wisconsin and Illinois. Such cost is relevant and necessary when comparing the cost of the Project to System Alternative SA-04, which would deliver crude oil to Illinois. Absent such cost estimate, it would not be possible to compare the socioeconomic impacts of SA-04 to the Project and logically required pipeline capacity in Wisconsin. Enbridge has provided a cost estimate of $3.5 to $4 billion, as discussed below.

The DEIS must also consider construction of additional pipeline capacity in Wisconsin to be a connected project under Minn. R. 4410.0200, Subp. 9c, which defines a "connected action" as follows:

> Two projects are "connected actions" if a responsible governmental unit determines they are related in any of the following ways:
>
> A. one project would directly induce the other;
>
> B. one project is a prerequisite for the other and the prerequisite project is not justified by itself; or
>
> C. neither project is justified by itself.

Since it would be impossible for Enbridge to use all of the net increase in the Mainline System capacity that would be provided by the Project without constructing additional pipeline capacity out of the Superior Terminal, the Project would: (a) directly induce construction of an additional pipeline in Wisconsin; (b) be a prerequisite for an additional pipeline in Wisconsin; and (c) not be justified without construction of additional pipeline capacity in Wisconsin. As regards potential impacts, MEPA does not distinguish between impacts that would be caused by a connected project within the State of Minnesota versus the impacts to State interests that would be caused by a connected action located outside of Minnesota. Therefore, a pipeline in Wisconsin is a connected action as defined by Minn. R. 4410.0200, Subp. 9c.

Minn. R. 4410.2100, Subp. 4, states: "Multiple projects and multiple stages of a single project that are connected actions . . . must be considered in total . . . in preparing the EIS." Although construction of a pipeline in Wisconsin would obviously not be within Minnesota's permitting jurisdiction, such construction would nonetheless impact Minnesota's environment because it would create a greater risk of oil spills into the Nemadji River and Lake Superior,

which could threaten Minnesota's interests in Lake Superior aquatic resources. Also, a pipeline out of the Superior Terminal would cross the St. Croix River watershed and thereby threaten Minnesota's interests in this river's aquatic resources. Therefore, construction of a pipeline in Wisconsin would be a reasonably foreseeable future project that would have impacts on Minnesota's environment, such that its direct impacts on Minnesota must be evaluated by the DEIS.

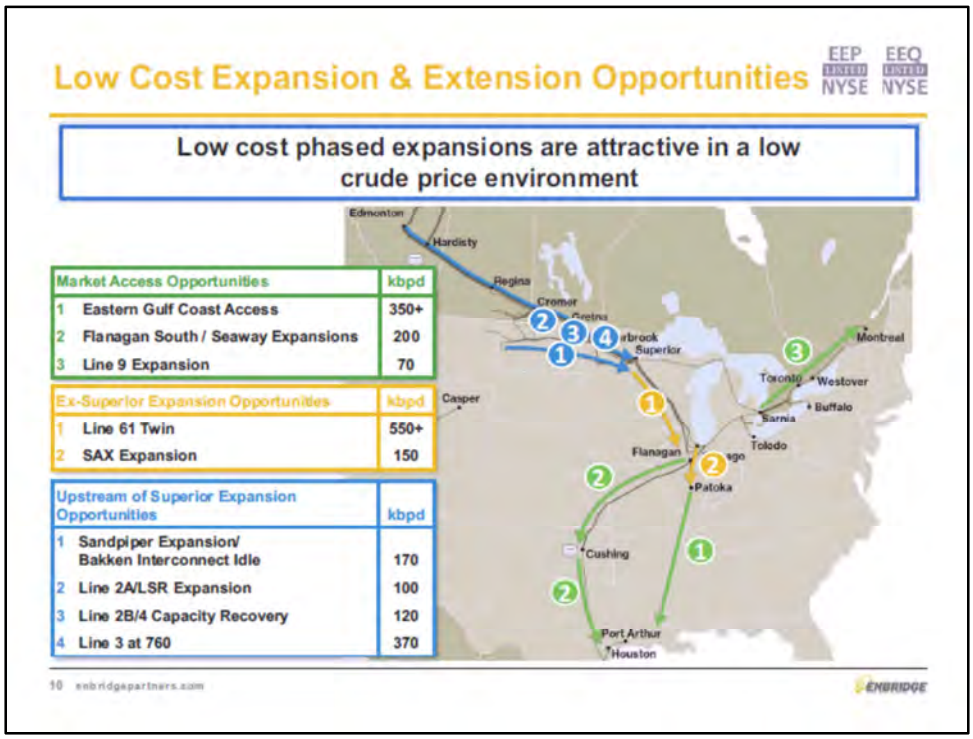
2667-6 cont

Further, a pipeline in Wisconsin would have cumulative potential effects as this term is defined by Minn. R. 4410.0200, Subp. 11a, because it is a project that would affect the some of the same environmental resources as the Project and a reasonable expectation has been laid for an additional Wisconsin pipeline, because it would be impossible to use 72% of the Project's capacity absent construction of an additional pipeline in Wisconsin, such that construction of a pipeline in Wisconsin is reasonably likely to occur. Further, it is Honor the Earth's understanding that Enbridge has conducted significant right of way analysis for a new pipeline corridor in Wisconsin, as well as engineering related to a new pipeline in this corridor. Thus, Enbridge has available to it "sufficiently detailed information . . . about the project to contribute to the understanding of cumulative potential effects." Moreover, the Commission may not simply ignore construction of a pipeline in Wisconsin without investigating:

> whether any applications for permits have been filed with any units of government; whether detailed plans and specifications have been prepared for the project; whether future development is indicated by adopted comprehensive plans or zoning or other ordinances; whether future development is indicated by historic or forecasted trends; and any other factors determined to be relevant by the RGU.

Enbridge has called a proposed pipeline through Wisconsin " the Line 61 Twin." For example, Enbridge presented the following slide to its investors in its Fourth Quarter 2014 Earnings & 2015 Financial Guidance Presentation on February 19, 2015, showing that it planned to construct a "Line 61 Twin" pipeline from Superior, Wisconsin, to Flanagan, Illinois, which would have an initial capacity of 550,000 bpd:

2667-6
cont



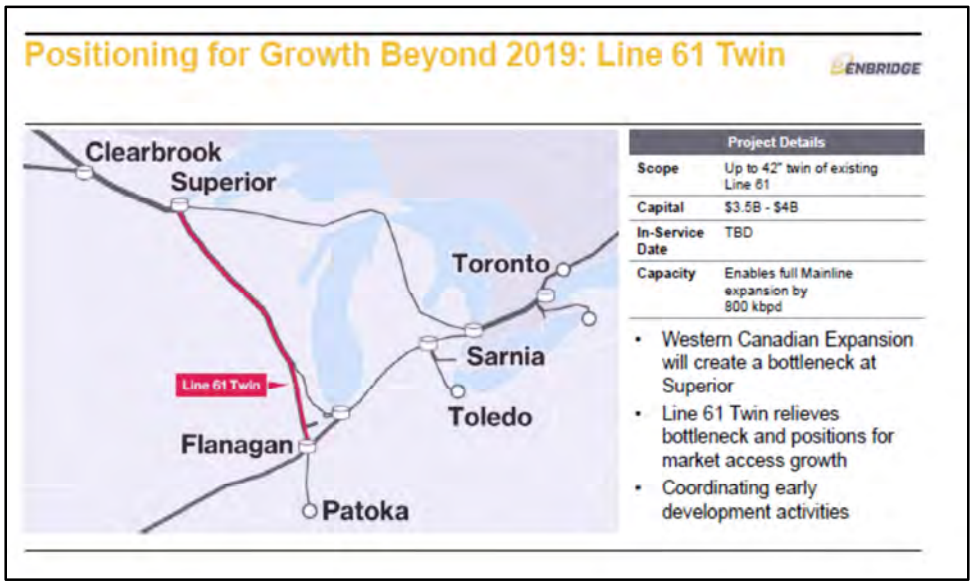
Enbridge presented this same slide in the following presentations:

- March 2015 Investment Community Presentation;
- June 23-24, 2015, Credit Suisse MLP & Energy Logistics Conference; and
- December 2015 Investment Community Presentation.

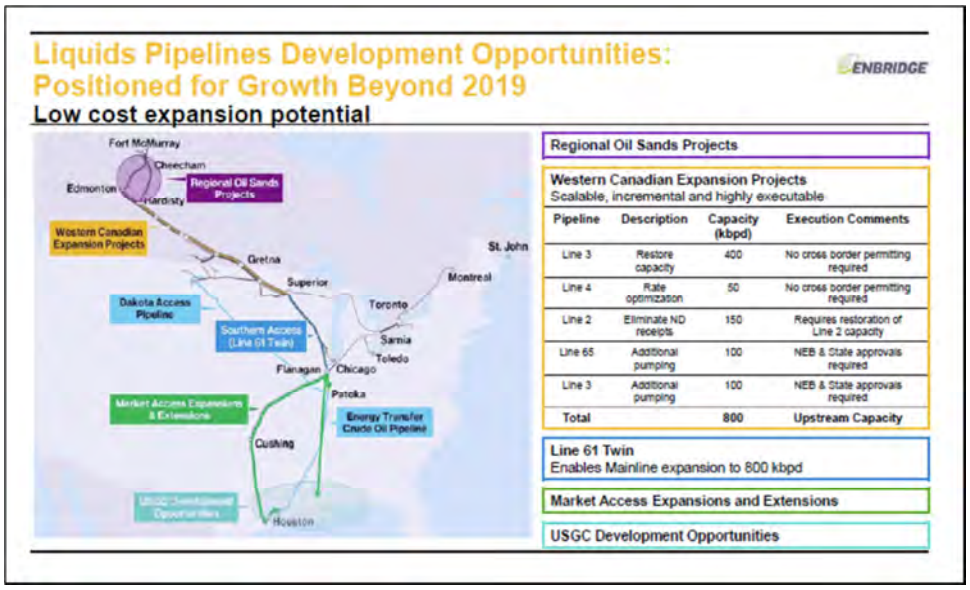
Similarly, Enbridge included the following slide on page 30 of its July 2016 Investment Community Presentation, which for the "Line 61 Twin" project provides:

- a capital cost estimate of $3.5 to $4 billion;
- an estimated capacity of 800,000 bpd; and
- an admission that the "Line 61 Twin" will be necessary to relieve a bottleneck at Superior caused by Enbridge's planned western Canadian pipeline expansion, which includes the Project as well as other system expansions.

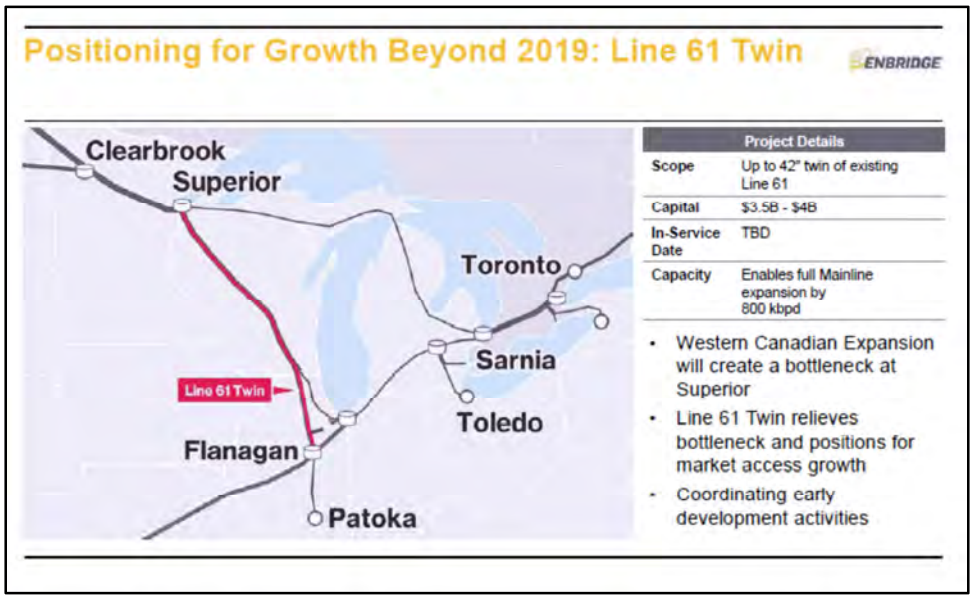
2667-6
cont



Enbridge included the following slides on page 31 of its September 2016 Investment Community Presentation, on pages 39 and 40 of its November 2016 Investment Community Presentation, and on pages 40 and 41 of its January 2017 Investment Community Presentation, which continue to show a commitment to build the "Line 61 Twin" project:



2667-6 cont



Since January of 2017, Enbridge's presentations have avoided any mention of the additional capacity needed to fully utilize the Project's capacity. Instead, Enbridge has claimed that full expansion of Line 61 "connects restored Line 3 volumes to Market Access pipelines," which is possible for up to 105,000 bpd (28%) of the Project's initial capacity, but not possible for the remaining 72% of the Project's capacity. Enbridge's obfuscation aside, the foregoing slides provide ample evidence that the Project is inextricably linked to construction of the Line 61 Twin pipeline in Wisconsin, because otherwise a bottleneck will exist that would prevent use of 72% of the capacity that would be provided by the Project.

Comments on DEIA Section 2.7.1.1

The DEIS states: "Enbridge proposes a two-tiered program for monitoring and inspecting construction: (1) a direct program of Environmental Inspectors (EIs); and (2) an independent third-party system of monitors to be implemented by state agencies." The DEIS should recommend that this mitigation term be improved by requiring that third-party monitors have stop-work authority.

Comments on DEIS Section 2.7.2.3

This section describes the construction methods in wetland areas bit fails to describe when and how the pipeline would be anchored to prevent buoyancy.

Comments on DEIS Section 2.7.2.4

This section states: "Disturbed wetlands would be seeded with oats or a temporary seed mix (unless standing water is prevalent), or as otherwise directed by landowners or regulatory agencies. Enbridge Chapter 2 Project Description Line 3 Replacement Project Draft Environmental Impact Statement 2-31 would otherwise allow the wetlands to revegetate naturally from the seeds and rhizomes present in the topsoil and natural recruitment." The DEIS should describe methods and likely outcomes for restoration and regeneration of wild rice beds.

Comments on DEIS Section 2.7.2.6

With regard to winter construction the DEIS states: "However, Enbridge could be required to use winter construction procedures at locations where the approach to saturated areas is lengthy or the length of the saturated areas themselves is long." The DEIS should identify these winter construction areas, and state who will select them and how the will be selected.

Comments on DEIS Section 2.7.2.9

With regard to urban areas the DEIS states: "Approximately 8 acres of the total area of the proposed Line 3 Replacement Project construction work area would include "developed land," defined as land consisting of more than 30 percent asphalt, concrete, and buildings. Approximately 124 residences would be within 300 feet of the Project's construction work area, and 19 residences would be within 50 feet, including seven within the construction workspace and one within the permanent right-of-way." The DEIS should describe the potential impacts to these residences in more detail, including as statement about whether or not any homes will be taken and the rights of homeowners to protect themselves and their families during construction. The DEIS should also assess the risk of damage to these homes and their families from a catastrophic rupture of the Project.

Comments on DEIS Section 2.10 Potentially Connected Actions

DEIS Section 2.10 fails to identify construction of a pipeline in Wisconsin as a potential connected action. The evidence for the necessity and inevitability of constructing this pipeline is contained in our comments on DEIS Section 2.5. The Line 61 Twin project in Wisconsin is a connected action within the meaning of Minn. R. 4410.0200, Subp. 9c, such that the DEIS must consider its environmental and socioeconomic impacts and costs. 2667-7

Section 2.10 also fails to discuss the impacts of expansion of the Project to 915,000 bpd. Instead, it states: 2667-8

2667-8 cont

> Any future actions associated with additional increases in throughput on the proposed Line 3 Replacement would require a new application for a Certificate of Need from the Commission and a review of the need for the requested increase. Enbridge has not indicated any plans for future increases in throughput at this time and hypothetical future increases in throughput have not been evaluated as part of this EIS.

The fact that an expansion of capacity of the Project beyond 760,000 bpd would require a certificate of need from the Commission is irrelevant to the need for the DEIS to analyze the cumulative impacts and cumulative potential effects of such expansion.

According to page 8-3 of Enbridge's CON Application, the Project has an ultimate capacity of 915,000 bpd:

> Pursuant to the requirement of Minn. R. 7853.0530, Enbridge is providing for the Commission's information the ultimate design capacity for the pipeline considering its diameter, wall thickness, steel grade, and crude slate (irrespective of the number of pump stations proposed for the Project), which is 1,016 kbpd. This figure in turn, yields an ultimate annual average capacity of 915 kbpd. Further engineering design studies would be required to determine the number of pump stations needed to achieve the ultimate design capacity level, but that is not the level sought in this Appliction [stet.].

Operation of the Project at its ultimate capacity represents a net capacity expansion of 525,000 bpd over the capacity of the existing Line 3 Pipeline, and an expansion over the Project of 155,000 bpd, which is itself a substantial volume of oil. Expansion of the Project from 760,000 bpd to 915,000 bpd would increase its capacity by 20.4%.

The DEIS does not describe the physical changes that would be required to increase capacity of the Project from 760,000 bpd to 915,000 bpd. Therefore, it is not possible to know whether such subsequent changes would require any substantial construction effort or environmental review. It could be that the expansion would require only the installation of new pumps without the construction of any new pump stations or construction of other facilities. This could limit the impacts of an expansion below the threshold where the Commission would conduct any substantial environmental review.

2667-8 cont

In contrast, the vast majority of the construction activity and resource commitment needed to allow operation at 915,000 bpd would be performed as part of the initial construction of the Project, including installation of higher capacity pipe and construction of all other pressurized components of the pipeline, including valve, PIG launchers, manifolds, etc. to allow operation of the Project at 915,000 bpd. Such construction represents a massive initial investment of resources and money, and constructing the Project with higher pressure components would increase the environmental impacts of construction now. Yet, the DEIS does not evaluate the construction that would be undertaken following the initial phase of construction, and then compare this to the construction that would be undertaken as part of the first phase of the Project that is necessary to allow the expansion. Instead, DEIS Section 2.10 merely states: "Enbridge has not indicated any plans for future increases in throughput at this time and hypothetical future increases in throughput have not been evaluated as part of this EIS." This statement is specious. It is irrational to conclude that Enbridge would invest at least hundreds of millions of dollars now in substantially thicker pipe and higher pressure pipeline components to allow operation of Line 3 at 915,000 bpd and state that Enbridge has no plans future increases in throughput at this time. Such statement is contradicted by all available evidence. Enbridge may not have chosen an exact date when it would increase the capacity of the Project, but the great weight of evidence shows that it is almost certain that Enbridge will expand the capacity of the Project during the timeframe of impacts considered by the DEIS. It is reversible error for the DEIS to accept a bald-faced statement about the likelihood of future expansions that is contradicted by Enbridge's own design, commitment of physical and financial resources, and statements to investors.

Construction of the Project with pipe that is sufficient to transport up to 915,000 bpd, requires that the pipe be constructed now using thicker steel. Page 8-5 of the CON Application contains Table 8.1.E.2-1:

2667-8 cont

Table 8.1.E.2-1 Mainline Pipe Design Parameters	
Design Parameter	**Specification**
Pipe Size (Diameter)	36-inch outside diameter (NPS 36)
Estimated Length	337 miles
Wall Thickness	
Nominal	0.515 inch
Road Bore	0.600 inch
Cased Railroad	0.600 inch
Uncased Railroad	0.750 inch
Horizontal Directional Drill (HDD)	0.750 inch
Coating, mainline	14 mils Epoxy Bonding
Coating, trenchless	40 mils Epoxy Bonding ABR
Grade (Pipe Type)	X70 carbon steel pipe manufactured according to API Specifications 5L PS2
Maximum Operating Pressure[3]	1440 psig

Thus, the steel wall thickness will range from 0.515 inch to 0.750 inch. This page also states that the Project will be constructed from X70 carbon steel manufactured according to API Specifications 5L PS2.

In contrast, the existing Line 3 Pipeline is a 34-inch diameter pipe comprised of steel with a thickness of 0.375 inches.[8] Enbridge's original application letter for a Presidential Permit for Line 3 states:

> The facilities in respect of the proposed 34 inch pipe line at the international boundary are as follows:
>
> A pipe line of the pipe manufactured to American Petroleum Institute specification 5LX, with an outside diameter of 34 inches, a wall thickness of .375 inches, minimum yield strength of 52,000 pounds per square inch, proposed test pressure after installation of 1028 pounds per square inch . . . .

Thus, construction of a pipeline to move just 760,000 bpd would require a smaller diameter pipe with thinner steel.

In comparison, the Line 67 Project approved by the Commission in 2008[9] has an ultimate capacity of 800,000 bpd[10] and Enbridge's application for that pipeline contains the following pipe specification[11]:

[8] Letter, Lakehead Pipe Line Company to U.S. Secretary of State (August 31, 1967) (application for a Presidential Permit for Line 3 Pipeline).

> Pipe will be 36-inch outside diameter, 0.375 to 0.469 inch wall thickness, API 5L Grade X70, double submerged are (DSAW) steel pipe. The maximum allowable operating pressure will be 1050 to 1313 psig.

2667-8 cont

This means that the Project will be constructed from pipe with a pipe wall thickness greater than necessary to transport 760,000 bpd. Both the existing Line 3 and Line 67 pipe were constructed using pipe that is 73% thinner than the Project. Put another way, based on pipe wall thickness alone, the Project will be built using at least 27% more steel than is necessary to transport 760,000 bpd. But, this percentage does not account for the greater amount of steel needed to fabric a 36-inch diameter pipe as compared to a 34-inch diameter pipe. Further, all other pressurized components would also be constructed using greater amounts of steel than for a pipeline designed to transport up to 760,000 bpd. Therefore, construction of the Project as designed will require significantly greater amounts of steel than required to transport 760,000 bpd, which is the purported purpose of the Project contained in DEIS Section 2.1.

Construction of the Project with pipe that is larger diameter and has thicker pipe walls than required to transport the capacity proposed by the Project means that each pipe segment's weight is greater than necessary for the Project and will result in greater road wear, energy consumption, and pollution impacts to transport and construct the pipeline than is required for the Project's capacity. Further, the use of thicker steel also results in thicker welds and greater use of welding materials and greater air impacts resulting from welding activities. In contrast, it is likely that the only major equipment remaining to be installed to allow operation at 915,000 bpd would be additional pumps, which may be installed only in the pump stations that would be modified or constructed for the Project.

Enbridge states: "Further engineering design studies would be required to determine the number of pump stations needed to achieve the ultimate design capacity level . . . ." It seems doubtful that Enbridge is clueless about the likely number and locations of new pumps. The fact that additional engineering studies would be needed does not mean that an expansion is not possible or difficult, it just means that Enbridge would need to confirm the engineering for an expansion given operational data. Even if a limited number of pump stations are needed, their

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[9] In the Matter of the Application of Enbridge Energy, Limited Partnership, and Enbridge Pipelines (Southern Lights) LLC for a Certificate of Need for the Alberta Clipper Pipeline Project and the Southern Lights Diluent Project, DOCKET NO. PL-9/CN-07-465, Order Granting Certificate of Need (Dec. 29, 2008).

[10] 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. PL9/CN-13-153, Application for a Certificate of Need
for a Crude Oil Pipeline, Section 7853.0230, Page 12.

[11] Application for Certificate of Need for a Crude Oil Pipeline, Docket No. PL9/CN-07-465, Alberta Clipper and Southern Lights Diluent Projects, June, 2007Section 7853.0530, Page 5.

construction and the impacts of their construction would not be substantial relative to the impacts of constructing the Project now to allow higher capacity operation. Likely, even the foundations and locations for the additional pumps are included in the designs for the Project's pump stations, such that the only remaining work to increase the capacity of the Project at these pump stations would be to ship the pumps to the pump stations and install them. Compared to the costs, effort, and impacts associated with constructing the Project to operate at higher pressure, the costs, effort, and impacts of installing the pumps would *de minimis*. Consequently, most of the impacts of expanding capacity to 915,000 bpd will be created during construction of the Project, such that the expansion must be seen as being reasonably foreseeable, if not inevitable.

2667-8 cont

Should the Project be built, it is entirely foreseeable that Enbridge would ultimately increase the pipeline's capacity to 915,000 bpd. Therefore, operation at 915,000 bpd is a "reasonably foreseeable future project" and is a cumulative impact as defined by Minn. R. 4410.0200, Subp. 11.

Further, construction of the Project to allow future expansion to 915,000 bpd and future operation at such capacity would have "cumulative potential effects," as this term is defined by Minn. R. 4410.0200, Subp. 11a, which includes consideration of the effects of "future projects actually planned or for which a basis of expectation has been laid." With regard to whether an expectation has been laid, this definition states:

> In determining if a basis of expectation has been laid for a project, an RGU must determine whether a project is reasonably likely to occur and, if so, whether sufficiently detailed information is available about the project to contribute to the understanding of cumulative potential effects. In making these determinations, the RGU must consider: whether any applications for permits have been filed with any units of government; whether detailed plans and specifications have been prepared for the project; whether future development is indicated by adopted comprehensive plans or zoning or other ordinances; whether future development is indicated by historic or forecasted trends; and any other factors determined to be relevant by the RGU.

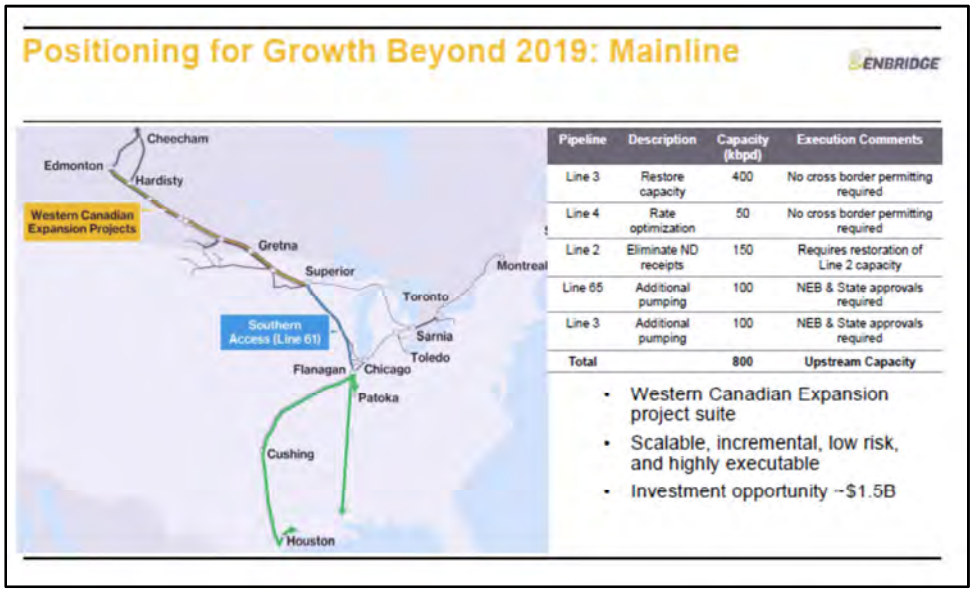
A review of available facts demonstrates that the Commission must find that expansion of Project capacity to 915,000 bpd is reasonably likely to occur and that sufficient detailed information about the expansion is available.

With regard to whether sufficiently detailed information is available, Enbridge does in fact have detailed plans and specification for expansion of the Project, an example of which is

the specification for thicker walled, higher pressure steel pipe. Other examples include the specifications for all other pressurized components, such as valves, which specifications are matched to the pipe steel specification. Likely, the specifications for the pump stations have reserved locations for the installation of additional pumps. Together, all of these specifications provide enough information to confirm that the Project could be made to operate at 915,000 bpd.

2667-8 cont

With regard to whether Enbridge plans to expand Project capacity, it has stated in multiple investor presentations that it plans to do. In its July, September, and November 2016 and January 2017 Investor Presentation Enbridge provided the following slide that shows that Enbridge has told its investors that it intends to expand the Project sometime after 2019. Since Enbridge plans to start operation of the Project in 2019, this means that expansion of the Project within the timeframe analyzed by the DEIS is foreseeable and very likely to occur. With regard to the fact that Enbridge notes that this expansion would be only 100,000 bpd, instead of the 155,000 bpd expansion noted in its CON Application, this slide also states that the net capacity increase provided by the Project would be 400,000 bpd instead of 390,000 bpd, even though Enbridge submitted the CON Application long before it issued this investor presentation. Similar slides are included in Enbridge's September 2016, November 2016, and January 2017 investor presentations. The fact that Enbridge is identifying the expansion of Line 3 to its ultimate capacity to its investors is also evidence that the expansion project is "substantially certain to be undertaken sequentially over a limited period of time." Minn. R. 4410.0200, Subp. 60.



With regard to "whether future development is indicated by historic or forecasted trends," Enbridge's forecast of demand for crude oil transportation services assumes that future capacity

expansion of the Mainline System will be necessary. Further, Enbridge took a similar approach of incremental expansion with regard to the Line 67 (Alberta Clipper) Pipeline, which had an initial capacity of 450,000 bpd and was expanded in two phases to 800,000 bpd of operation in Minnesota. Thus, historic examples and Enbridge's own forecasted trends make expansion of the Project "reasonably likely to occur."

2667-8 cont

The law does not require that a "phased action" have a date certain for when it would be constructed. Instead, it requires only that a project be "substantially certain" to happen. Enbridge's significant commitment of material and financial resources to allow expansion of the Project, in combination with its statements to its investors that it is planning to expand the Project, make the expansion "substantially certain" to happen. In light of the evidence, the DEIS Section 2.10 statement that "Enbridge has not indicated any plans for future increases in throughput at this time" is false, because it has in fact indicated plans for future increases.

Minn. R. 4410.2300(H) requires that "for the proposed project and each major alternative there shall be a thorough but succinct discussion of potentially significant adverse or beneficial effects generated, be they direct, indirect, or cumulative." Since design of the pipe in the Project to transport up to 915,000 bpd creates an expectation of a future expansion of the Project, the effects of operating a future expansion at up to 915,000 bpd are cumulative potential effects and must be analyzed by the DEIS.

Expansion of the Project to a capacity of 915,000 bpd is a phased action pursuant to Minn. R. 4410.0200, Subp. 60, because expansion of the Project would have "environmental effects on the same geographic area" and would be "substantially certain to be undertaken sequentially over a limited period of time." As a phased project, the expansion "must be considered in total when determining the need for an EIS and in preparing an EIS." Minn. R. 4410.2100, Subp. 4 (emphasis added). Although this subpart also allows the Commission to "treat the present proposal as the total proposal," it may also "select only some of the future elements for present consideration in the threshold determination and EIS."

With regard to its exercise of discretion of this phased action under Minn. R. 4410.0200, the DEIS contains no information about the potential scope of construction required for this subsequent phase. As such, it is impossible for the Commission to rationally evaluate whether this expansion will create significant independent impacts, or whether instead the impacts of the subsequent phase would be *de minimis*. For example, expansion of capacity to 915,000 bpd could include only the installation of additional pumps at existing pump stations, and not include any new impacts to land or the construction of any new facilities. Should the impacts of the subsequent phase be *de minimis*, it would be irrational for the Commission to evaluate such impacts as a later phased action because doing so would be inefficient and result in unnecessary segmentation of environmental review. In any case, the EIS should contain sufficient

information for the Commission to make a rational decision on whether or not to treat the Project as the "total proposal" or to exercise its discretion to "select only some of the future elements for present consideration in the . . . EIS", but at present the DEIS is completely silent about the potential for a subsequent phase.

2667-8 cont

The Commission should consider the 915,000 bpd ultimate capacity with regard to those elements of construction that would be impacted now by virtue of use of thicker steel, because these impacts will occur during construction and would be a moot point in any subsequent environmental review. For example, the use of 27% heavier pipe for the same segment length would have a correspondingly greater impact on road wear and tear during transport of the pipe to construction sites. Use of thicker pipe steel would also irretrievably commit substantially greater amounts of iron and other metals (27% more) to the Project than are necessary to transport 760,000 bpd. It would also commit greater amount of fuel to the project to transport the steel to Minnesota and then to construction sites. It would also commit greater amounts of fuel to construction of the project, due to the greater power need to lift and place the steel in the ground. It would also result in greater air impacts caused by welding thicker steel. Such impacts must be evaluated before approval of use of the thicker steel pipe to be used in the Project.

Unlike expansion of a road project either in terms of distance or lanes, creating the potential to expand the capacity of an existing crude oil pipeline segment in the future requires an irretrievable commitment of physical and financial resources now. Further, most of the impacts of building a higher capacity pipeline occur before its expansion. The Commission must make a reasoned judgement about which elements of a proposed future phase must be evaluated in the initial phase. It would be irrational to ignore the impacts related to construction of a higher capacity pipeline when such impacts occur during the initial construction of the pipeline. It would also not be rational to fail to evaluate whether the impacts of a subsequent expansion of a pipeline would be *de minimis* relative to the impacts of constructing the pipeline so that it could be expanded, so that a rational decision can be made on whether to simply evaluate the impacts of an expansion in an initial environmental review. Where some or all of the "future elements" of a phased project relate closely to construction activities that would be analyzed in an initial environmental review, an RGU must consider which elements of the subsequent phase must be considered in the initial environmental review. The fact that Enbridge intends to commit substantial resources and effort in its construction of the Project to allow its expansion is evidence that the expansion project is "substantially certain to be undertaken sequentially over a limited period of time." Minn. R. 4410.0200, Subp. 60.

The Commission should also use the Project's ultimate capacity with regard to consideration of alternatives, because it would be unreasonable to not consider alternatives in light of the Project's ultimate capacity. The use of thicker steel increases the future utility of the

pipeline relative to alternatives, because expansion through the use of additional pumping horsepower might require fewer resources and have lower impacts that expansion of alternatives. Moreover, consideration of a lower capacity alternative to the Project would result in the use of thinner steel, and this should be compared to the use of Enbridge's proposed steel thickness of the Project.

2667-8 cont

The Commission should also evaluate the potential impacts of oil spills from the Project based on its ultimate capacity, because it is likely that the Commission will not conduct new spill modeling and oil spill impact analysis in any subsequent application for expansion of the Project to 915,000 bpd. Also, the Commission, the parties, and Minnesota's citizens should know now what the likely spill impacts would be from operation at 915,000 bpd, because this is the likely foreseeable capacity for the majority of the life of the Project, such that construction of the Project would likely result in foreseeable oil spills larger than those that would result from operation at 760,000 bpd.

Further, the expansion of the Project is not "hypothetical." The word "hypothetical" is defined as: "involving or being based on a suggested idea or theory : being or involving a hypothesis : conjectural." Mirriam-Webster Online Dictionary. The expansion of the Project is not based on mere conjecture and not a mere whimsical idea or theoretical. Instead, the evidence available to the Commission shows that the expansion is "substantially certain" to happen. Minn. R. 4410.0200, Subp. 60.

The expansion is also not "hypothetical" because Enbridge has described the expansion of the Project to its investors. Enbridge does not describe its future expansion plans to its investors as "hypothetical" plans. Instead, they are plans presented to investors that attempt to show that Enbridge will take actions in the future that would increase the value of investments. The information provided to investors about the expansion of Line 3 is provided to aid them in decisions about committing financial resources to Enbridge. Accordingly, even though the information is about Enbridge's future plans, it is clear that Enbridge intends that its plan to expand the Project be relied upon in real-world financial decisions. Enbridge's statements about its plans to expand the capacity of the Project in combination with its proposed commitment to construct the project with thicker and stronger steel pipe and other components, make the expansion project a phased action that is "substantially" certain to happen. Accordingly, the Commission must also evaluate the potential cumulative impacts and potential cumulative effects of the expansion of the Project to 915,000 bpd.

COMMENTS ON DEIS CHAPTER 4 – ALTERNATIVES TO THE PROJECT

DEIS Chapter 4 is fundamentally flawed for a variety of reasons. At a fundamental level, Chapter 4's discussion of alternatives is deeply biased toward Enbridge's definition of purpose,

because DEIS Section 2.2 merely apes Enbridge's definition of the purpose for the Project. In fact, DEIS Section 2.2's statements related to purpose are comprised entirely of Enbridge's allegations, and therefore this section is entirely aligned with Enbridge's purpose for the Project. 2667-9

Minn. R. 4410.2300.E requires that each EIS contain a statement that allows "the public to identify the purpose of the project." This being said, Minn. R. 4410.2300.G requires that an RGU also determine the "the underlying need for or purpose of the project," because doing so is necessary to determine whether or not an alternative should be excluded from analysis in the EIS. Thus, an EIS must have a clear statement not only of a project's underlying purpose, but also of the need that underlies it. The EIS statement of purpose has a profound effect on the scope and analytical integrity of the EIS, because it determines the scope of alternatives to the Project that will be considered in the EIS, as well as the factors that the DEIS considers in the evaluation of an Alternative's ability to accomplish the Project purpose.

Providing a clear statement of the underlying purpose and need for the Project is particularly critical here, because the purpose of the Final EIS is to support the Commission's determination of need pursuant to Minn. Stat. § 216B.243 and Minn. R. Ch. 7853, which allows broad consideration of the purpose and need for a proposed project. The certificate of need statute and regulations do not restrict consideration of alternatives to only those route alternatives that start and end at the points proposed by Enbridge. Instead, Minn. Stat. § 216B.243, Subd. 3(6), requires that the Commission consider:

> 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 . . . .

Thus, this statute expressly requires that the Commission consider "upgrading of existing . . . transmission facilities . . . ." Also, Minn. R. 7853.120 states that the Commission "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 listed in part 7853.0130." Thus, the law expressly allows intervenors to propose – and mandates that the Commission consider – a broad range of alternatives, subject only to the condition that they be supported with "substantial evidence." The other limitation on the range of alternatives is found in Minn. R. 7853.0130(B), which limits the Commission's consideration to "reasonable" and "prudent" alternatives. Still, this limitation must be understood in light of the broad statutory language.

With regard to the purpose of the MEPA analysis, Minn. R. 4410.0300, Subp. 3 states: "Environmental documents shall be used as guides in issuing, amending, and denying permits

and carrying out other responsibilities of governmental units to avoid or minimize adverse environmental effects and to restore and enhance environmental quality." Also, Minn. R. 4410.2000, Subp. 1, states:

> The purpose of an EIS is to provide information for governmental units, the proposer of the project, and other persons to evaluate proposed projects which have the potential for significant environmental effects, to consider alternatives to the proposed projects, and to explore methods for reducing adverse environmental effects.

Thus, a failure by a Final EIS to provide information on the potential environmental impacts of alternatives that are considered by the Commission pursuant to is broad mandate under Minn. Stat. § 216B.243 and Minn. R. Ch. 7853 would mean that such impact statement would fail to accomplish the purposes of MEPA. Further, such failure also means that the Final EIS would not adequately explore ways of reducing environmental effect.

In particular, the DEIS may not itself predefine the Project's purpose and need because this will be defined by the Commission through its Certificate of Need hearing. Adopting a narrow definition of purpose and need in the EIS essentially pre-determines the ultimate issue in this hearing and means that the Commission's evaluation of alternatives will be broader than the EIS's evaluation of alternatives. The result will be that the FEIS will not fully inform the Commission about the environmental impacts of all of the alternatives it must consider under Minn. R. Ch. 7853. Even worse, by limiting information about available alternatives, an excessively narrow statement of purpose and need would steer the Commission's certificate of need analysis away from consideration of a broad selection of possible alternatives and towards Enbridge's preferred alternative – which is contrary to the fundamental purpose of MEPA. When a MEPA analysis is intended to support a determination of need, the RGU must be particularly careful to define the purpose and need for a project broadly to ensure that MEPA's purpose is fully accomplished.

DEIS Section 2.2 fails to include a clear statement of the underlying purpose and need for the Project. Also, Section 2.2 defines project purpose and need overly narrowly and in accordance with Enbridge's narrow and self-serving definition of Project purpose. In fact, DEIS Section 2.2's statements related to purpose are comprised entirely of Enbridge's allegations, and therefore this section is entirely aligned with Enbridge's purpose for the Project. Moreover, this section contains no analysis of the scope of purpose and need or the merits of Enbridge's allegations, which instead are taken at face value. This failure to comply with Minn. R. 4410.2300.G's requirement for a definition of the "underlying" purpose and need for the Project based on independent judgment means that the subsequent analysis in the DEIS related to

2667-9 cont

selection of possible alternatives for further analysis and possible way to limit adverse environmental effects fails to investigate and select from among available alternatives in accordance with MEPA.

2667-9 cont

Section 2.2 does not discuss Project purpose and need in broad terms related to the underlying markets and potential customers for the crude oil that the Project would transport. Further, this section contains no critical analysis or discussion of the appropriate range of Project purpose in this particular circumstance. Instead, Section 2.2 defines purpose and need strictly in accordance with Enbridge's narrow definition of it. In fact, all of the statements about purpose in Section 2.2 are based on Enbridge allegations. The subheadings related to purpose include the following:

- Corrosion and Cracking of the Existing Pipeline Have Reduced Performance;
- Enbridge Believes Replacing the Existing Pipeline Is Less Expensive and Avoids Extensive Inspections;
- Enbridge States that Demand for Canadian Crude Oil Exceeds Current Capacity;
- Enbridge has Indicated that Expanded Capacity Would Reduce Curtailment and Improve Operational Flexibility;
- Expanded Capacity Would Improve Energy Efficiency on Enbridge's System.

Thus three of the five subheadings are simply restatements of Enbridge's purpose for the Project. The first merely states that the capacity of the existing pipeline has been reduced due to weakness in its pipe and notes that the pipe is subject to a consent decree that includes requirements for heightened safety conditions.[12] This is not a statement of purpose, but rather a description of the current situation. The fourth subheading restates Enbridge's allegations about energy efficiency.

The DEIS attempts to create the appearance that it is avoiding predefining project purpose and need in accordance with Enbridge's definition through the artifice of attributing statements to Enbridge. This is mere wordplay. What is important is how DEIS Section 2.2 defines the Project's purpose and need. Attribution of the adopted purpose and need to Enbridge does not change the fact that DEIS Section 2.2 defines project purpose entirely with regard to Enbridge's definition of it. Moreover, attributing statement of purpose to Enbridge cannot cure a failure by DEIS Section 2.2 to properly define the "underlying" purpose and need of the Project.

[12] The Consent Decree in *United States v. Enbridge Energy, Limited Partnership, et al.*, C.A. No. 1:16-cv-914 was approved by the U.S. District Court for the Western District of Michigan on May 23, 2017. This consent decree is evidence that rigorous compliance with the Pipeline Safety Act, 49 U.S.C § 60101 *et seq.* ("PSA") is intended to ensure the continued safe operation of the existing Line 3 Pipeline until it is no longer needed.

All of the substantive statements in DEIS Section 2.2 related to the purpose and need for the Project uncritically accept Enbridge allegations: 2667-9 cont

- With regard to Project expense and inspections, the DEIS uncritically repeats Enbridge allegations regarding the required number of integrity digs, the relative cost of the Project in comparison to maintaining the existing pipeline, the invasiveness of the Project relative to maintaining the existing pipeline, and the annual cost of maintaining the existing pipeline in comparison to maintaining the Project. The DEIS contains absolutely no critical analysis of any of Enbridge's allegation or information relate to the financial merits of the Project relative to the existing pipeline.
- With regard to demand for Canadian crude oil, DEIS Section 2.2 says only, "Enbridge maintains the demand for crude oil feedstock from western Canada is currently greater than the capacity of the Enbridge pipeline system." DEIS Section 2.2 contain zero critical analysis of this statement.
- With regard to curtailment and operational flexibility, DEIS Section 2.2 uncritically accepts Enbridge's allegations with regard to apportionment, future demand for transportation services, and operational flexibility.
- With regard to improvements in efficiency, DEIS Section 2.2 states that "According to Enbridge" the Project would increase efficiency relative to the new pipeline. The DEIS contains no critical analysis of the relative efficiency of pipelines.

Honor the Earth notes that all of the foregoing allegations are subjects that will be scrutinized by the Commission in the Certificate of Need hearing. Therefore, the DEIS should not simply assume that these allegations are correct. Since DEIS Section 2.2 states that all of the descriptions of purpose are those of Enbridge, this section in fact expressly adopts Enbridge's definition of Project purpose. Moreover, it does so without any critical analysis. Thus, the DEIS has in effect adopted Enbridge's purpose for the Project. The DEIS could have simply stated that it adopts Enbridge's purpose for the Project and produced the same result. By adopting Enbridge's purpose for the Project, the DEIS has pre-defined the purpose exactly as does Enbridge and thereby fundamentally limits the scope of the EIS analysis required by MEPA. Moreover, adoption of Enbridge's purpose also limits the scope of the DEIS more narrowly than must be considered by the Commission pursuant to pursuant to Minn. Stat. § 216B.243 and Minn. R. Ch. 7853, such that a Final EIS will not fully support the Commission's required analysis.

The analytical role of DEIS Section 2.2 is to define the scope of the underlying purpose of the Project, but it must do so in a way that allows the Commission to analyze Project purpose as broadly as required by Minn. Stat. § 216B.243 and Minn. R. Ch. 7853. DEIS Section 2.2 could have discussed the customers, markets, and refineries that would be served by the

proposed Project as a means of better understanding its commercial benefits and limitations and the underlying need for the Project. This type of analysis would not predetermine the outcome of the Certificate of Need hearing, because DEIS Section 2.2 could then have used such analysis to define the Project's purpose and need in broad terms rather than in Enbridge's narrow terms. Then, the Commission would be in a position to consider a broad range of environmental impact evidence, rather than only evidence for alternatives that fall within the DEIS's current narrow definition of purpose and need.

2667-9 cont

By adopting a narrow definition of purpose and need, the DEIS limits the alternatives selected to a narrow set that, with the exception of SA-04, are entirely defined in terms of Enbridge's purpose and need. Such narrow definition is illegal. Therefore, the Commission must adopt a legally permissible definition of purpose that is broad enough to encompass the full scope of alternatives allowed by Minn. Stat. § 216B.243 and Minn. R. Ch. 7853.

Because the DEIS relies entirely on statements of purpose provided by Enbridge without any critical analysis of these statements, DEIS Section 2.2 does not a clear statement of purpose and need. Taking DEIS Section 2.2 at face value, it defines the purpose and need of the project as:

- Reducing Enbridge's cost of operation;
- Reducing maintenance and the impact of maintenance on current easement holders of the existing Line 3 Pipeline;
- Meeting current and possibly future demand for crude oil transportation services for Canadian crude oil by refineries apparently in Petroleum Area Defense District II (the Midwest region), which demand is assumed to be greater now and in the future than the current capacity of the Enbridge Mainline System;
- Allowing Enbridge's customers access to crude oil transportation service capacity that exceeds customer demand;
- Restoring the capability of Line 3 to transport heavy crude oil and to increase its capacity in order to reduce limits on customer access to crude oil transportation services and increase the operational flexibility of the Mainline System; and
- Increasing the energy efficiency of transporting crude oil of Enbridge's Mainline System.

The foregoing definition entirely fails to address the "underlying" purpose and need for the Project, and instead defines purpose and need entirely in terms of Enbridge's needs. Enbridge's purpose and need for the Project is not the "underlying" purpose and need for the Project. Most of the foregoing elements are specific to Enbridge and cannot logically be applied when evaluating reasonable alternatives. For example, reducing Enbridge's costs of operation,

providing additional service to Enbridge's customers on the Mainline System, and increasing Enbridge's operational flexibility and energy efficiency, could not be accomplished by alternatives other than those that modify Enbridge's pipeline system. Those elements that could arguably relate to other alternatives, such as the alleged greater demand and restrictions on customer access to crude oil transportation services, are based entirely on allegations made by Enbridge without any critical analysis of how such statements relate to the "underlying" purpose and need for the Project.

2667-9 cont

Thus, the DEIS entirely fails to describe the "underlying" purpose and need for the Project, and instead defines purpose and need with regard only to Enbridge's purpose and need for the Project. This failing has significant implications for all subsequent analysis contained in DEIS Section 4, because it determines the scope of alternatives to the Project that are analyzed in the EIS, as well as the factors that the DEIS considers in the evaluation of an Alternative's ability to accomplish the Project purpose.

By adopting Enbridge's narrow definition of purpose and need, the DEIS fails to provide a clear statement of the underlying purpose and need for the Project. This means that the DEIS fails to provide meaningful analysis of whether or not a proposed alternative could fulfil the underlying purpose and need, and results in selection of only a very narrow range of alternatives.

DEIS Chapter 4 preliminarily considers the following alternatives:

1) The no-action alternative (DEIS Section 4.2.3);
2) Expansion of the existing Line 3 (DEIS Section 4.2.3);
3) Use of other pipelines including the Keystone XL Pipeline, the Energy East Pipeline, the Wood River Pipeline, the Minnesota Pipeline, and existing pipelines in the Enbridge Mainline System including Lines 1, 2A/B, Line 4, and Line 67 (DEIS Section 4.2.4);
4) SA-04 (DEIS Section 4.2.5);
5) Transportation by rail either for the full initial capacity of the Project or the incremental capacity that would be provided by the Project (DEIS Sections 4.2.6 and 4.2.8);
6) Transportation by truck either for the full initial capacity of the Project or the incremental capacity that would be provided by the Project (DEIS Section 4.2.7 and 4.2.9); and
7) Use of a smaller diameter pipeline (DEIS Section 4.2.10).

Of these, Chapter 4 rejects alternatives 2, 3, and 7. As discussed below, rejection of these alternatives is based on flawed reasoning and is biased by the DEIS's adoption of Enbridge's narrow definition of purpose for the Project. In effect, the rejection of these proposed alternatives resulted in the consideration of just four alternatives: the no action alternative, SA-04, transportation by rail, and transportation by truck. As described below, the rail and truck alternatives are patently unreasonable, inappropriate, and specious, such that their consideration

violates the Minn. R. 4410.2300.G requirement that alternatives be "reasonable." The trucking and rail alternatives are nothing more than strawmen set up to be knocked down. This means that the DEIS considered only two reasonable and appropriate alternatives: the no-action alternative, as required by law, and SA-04. This list of alternatives is entirely too limited to fully inform the Commission of the environmental impacts of possible alternatives to the Project that it must consider under the broad alternatives analysis mandated by Minn. Stat. § 216B.243 and Minn. R. Ch. 7853.

Comments on DEIS Section 4.2.3 – No Action Alternative

DEIS Section 4.2.3 starts its analysis by assuming that the purpose of the project is to transport 760,000 bpd of crude oil. It does not evaluate any range of need for capacity that may be needed by the market. It then states that "Because Enbridge has already determined that upgrading the existing line is not feasible, upgrading the existing line to a higher capacity was not considered in the CN evaluation." However, DEIS Section 4.2.3 does not offer any evidence that Enbridge's assertion is correct, nor does it acknowledge that the Commission may consider evidence indicating that upgrading the existing Line 3 to a higher capacity is feasible. This unquestioning adoption of Enbridge's assertions related to feasibility of an alternative is consistent with the unquestioning adoption of Enbridge's allegations of purpose that form the basis for DEIS Section 2.2. It is further evidence that the DEIS fails to contain an independent analysis of alternative selection. 2667-10

It is inappropriate for the DEIS to summarily dismiss an alternative from environmental review based on an unanalyzed statement by a project applicant, without offering any information and data on this alternative whatsoever, particularly when the alternative could eliminate the need for an entirely new pipeline route. For example, the DEIS fails to consider and offers no data on the feasibility and cost of upgrading Line 3 only between the Clearbrook and Superior Terminals, versus upgrading the entire pipeline. Since the DEIS fails to provide any analysis of the feasibility of this alternative, it is not known whether Enbridge's statement regarding feasibility related to the entire pipeline or just the segment between the Clearbrook and Superior Terminals. Also, the DEIS says nothing about <u>why</u> this alternative is not feasible. Enbridge's allegation of infeasibility could be based on engineering grounds or financial grounds, or its assertion could prove to be entirely false. The DEIS provides no reasoned decision for rejecting the possibility of increasing the capacity of the existing Line 3 above 390,000 bpd, and thereby rejects a potentially reasonable alternative without a reasoned basis. Since the Commission will ultimately determine the feasibility of expanding the capacity of existing Line 3, it is inappropriate for the DEIS to summarily dismiss this possible alternative based on a bald-faced allegation by Enbridge. In order for the Commission to fully analyze the possibility of expanding the capacity of the existing Line 3, particularly with regard to its 2667-11

environmental impacts, the DEIS must include expansion of capacity of Line 3, at least between the Clearbrook and Superior Terminals, as an alternative. 2667-11 cont

Also, DEIS Section 4.2.3 – without critical analysis – accepts Enbridge's assertions about the cost of maintenance of existing Line 3, the required number of integrity digs to maintain Line 3's capacity at 390,000 bpd, and the comparative cost of future maintenance of a new pipeline, which would change over time. The DEIS essentially frames the no-action alternative as nonviable, but does so without considering the costs and impacts of constructing an entirely new pipeline. This comparison of the no-action alternative to Enbridge's purposes for the Project, as defined by DEIS Section 2.2, rather than to its underlying purpose and need, results in an obvious bias toward Enbridge's Project.

Comments on DEIS Section 4.2.4 – Use of Other Pipelines

DEIS Section 4.2.4 considers whether other pipelines are reasonable and could accomplish the underlying purpose and need. This section identifies the following pipelines: 2667-12

- TransCanada's existing Keystone Pipeline;
- TransCanada's proposed Keystone XL Pipeline;
- TransCanada's Proposed Energy East Pipeline;
- Koch Industries' existing Wood River Pipeline;
- Koch Industries' existing Minnesota Pipeline; and
- Enbridge's existing Mainline System pipelines, which "consists of Line 3 and other pipelines, including Line 1 (237,000 bpd), Line 2A (442,000 bpd), Line 2B (442,000 bpd), Line 4 (796,000 bpd), and Line 67 (570,000 bpd)."

This being said, Table 4.2-3 does not include the existing Keystone Pipeline, though it is mentioned in the text. Moreover, given that this list includes both existing and proposed pipelines that currently or could in the future transport Canadian crude oil, it is incomplete. Additional existing and proposed pipelines that logically should be part of this list also include:

- Enbridge's existing Express-Platte Pipeline System (recently acquired via the Enbridge-Spectra merger), which runs from Alberta to Wood River, Illinois;
- Kinder Morgan's existing Trans Mountain Pipeline;
- Kinder Morgan's proposed Trans Mountain Expansion Project; and
- Plains Midstream's Rangeland-Glacier Pipeline System that crosses in the US in western Montana.

The DEIS dismisses all of these pipelines as alternatives without individual consideration. It states:

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> Other existing and potential future pipelines with available capacity were considered as alternatives to the Project if they (1) interconnected in the crude oil supply region near Edmonton, Alberta; and (2) served the same Clearbrook and Superior destinations.
>
> * * *
>
> The EIS is not evaluating these alternatives based on whether they meet the need for this proposed Project. Their environmental impacts have been (or would be) evaluated in other jurisdictions. Therefore, the "other pipeline" CN Alternatives are not evaluated in the EIS.

These statements are in accordance with the illegally narrow definition of purpose and need found in DEIS Section 2.2.

DEIS Section 4.2.4 is legally deficient in a number of ways:

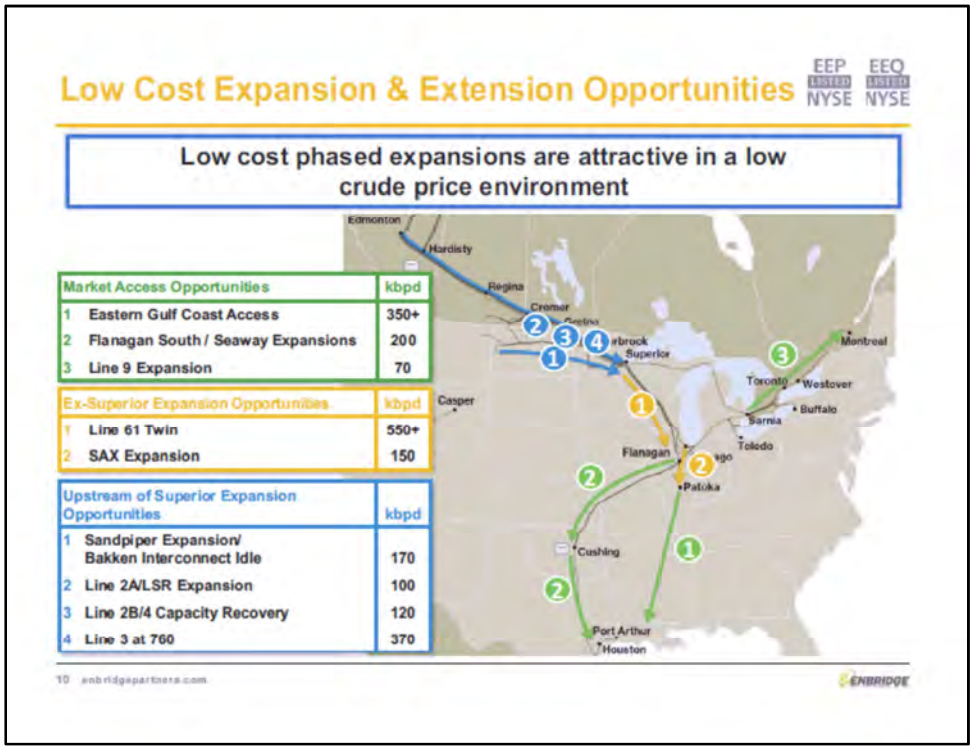
- fails to properly identify and individually consider each pipeline as an alternative;
- provides a blanket rejection with no reasoned discussion and instead essentially asserts without explanation that none of these other pipelines could meet the Project's purpose and need;
- falsely claims that the environmental impacts of use of the Wood River Pipeline have been "evaluated in other jurisdictions;"
- fails to consider unused capacity on the Minnesota and Wood River Pipelines as elements of an alternative;
- fails to consider proposed incremental expansions of the existing Mainline System pipelines as an alternative;
- fails to consider the potential impact of these pipelines on the need for the Project apart from whether or not they serve its underlying purpose.

The lack of reasoned analysis in DEIS Section 2.2 related to the underlying purpose and need means that it does not provide any conceptual framework in which to consider the potential impact of these other pipelines on meeting the purpose and need of the Project. For example, existing and proposed pipelines that serve other markets, such as those owned and proposed by Kinder Morgan, would not serve the same purpose but could impact the need for the Project.

Regardless, it is appropriate and reasonable to consider the purpose and need for the Project in the context of other existing and proposed pipelines.

2667-12 cont

DEIS Section 4.2.4 does not adequately consider the potential to upgrade Enbridge's existing Mainline System pipelines, which Enbridge has already proposed to do since 2015 on multiple occasions. In February of 2015, Enbridge provided the following slide in its Fourth Quarter 2014 Earnings & 2015 Financial Guidance Presentation, which shows a set of "low cost phased expansions that are attractive in a low crude price environment."



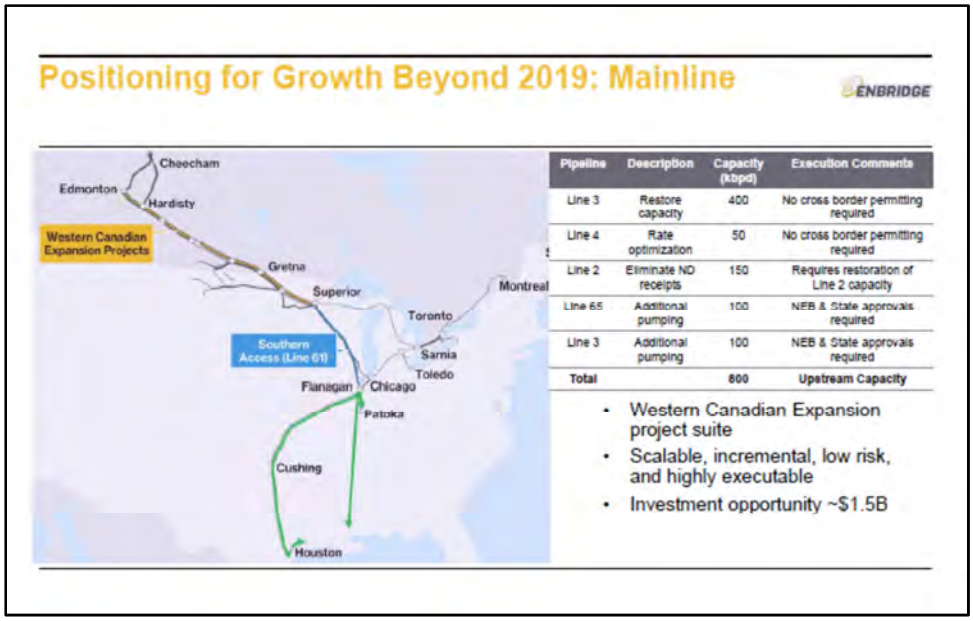
This slide shows that Enbridge identified the following Mainline System projects, other than the Line 3 project.

Expansion Project	**Kbpd**
Sandpiper Expansion/Bakken Interconnect Idle	170
Line 2A/LSR Expansion	100
Line 2B/4 Capacity Recovery	120
Total	**390**

2667-12 cont

Apart from the capacity added by the Line 3 project, these proposed enhancements would increase capacity by 390,000 bpd – more than the proposed Project. Enbridge included this list of projects in investor presentations from March 2015, June 2015, and December 2015, except the December presentation increased the capacity of the "Line 2B/4 Capacity Recovery" project to 150,000 bpd, making the total expansion, apart from Line 3, up to 440,000 bpd.

In July of 2016, Enbridge provided the following slide to its investors:



This slide was also included in Enbridge's September and November 2016, and January 2017 investor presentations. It shows that Enbridge identified the following projects as feasible expansions of the Mainline System that would provide up to an additional 300,000 bpd of capacity.

Expansion Project	**Kbpd**
Line 4	50
Line 2	150
Line 65	100
Total	**300**

Enbridge's February 17, 2017, presentation to the New York Stock Exchange includes the following slide, showing that Enbridge plans to conduct an "Enbridge System Optimization" that would expand the capacity of the Mainline System in both 2017 and 2018 by an amount that appears nearly as large as the Project.

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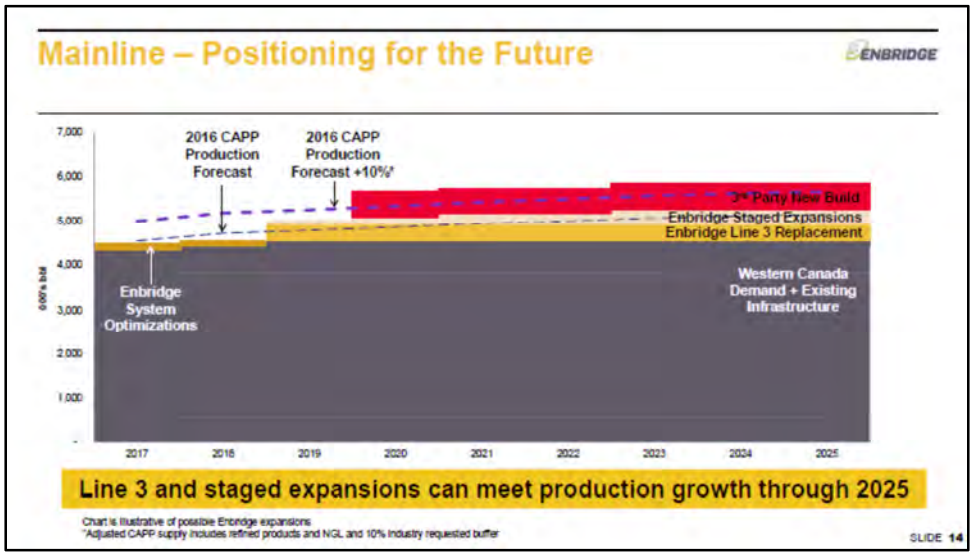
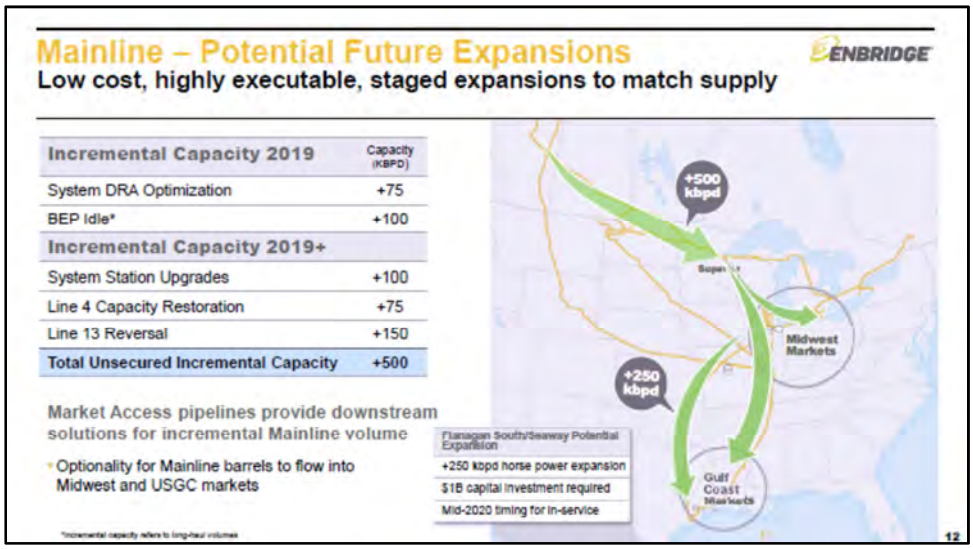


Enbridge's June 2017 investor Presentation includes the following slides, showing a different set of "low cost, highly executable, staged expansions" that total 500,000 bpd in capacity, some of which Enbridge plans to construct in 2019 – the same year in which it hopes to begin operation of the Project.



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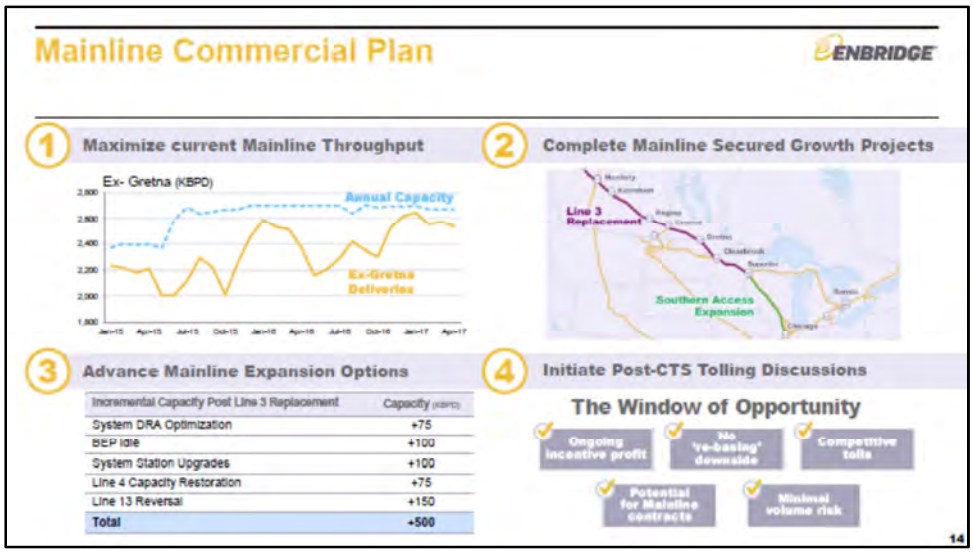
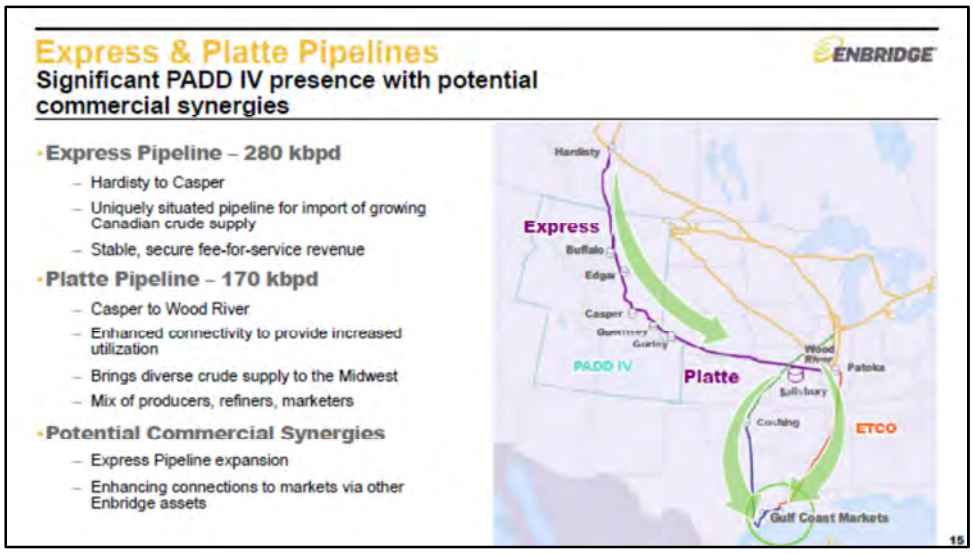


The expansions identify are described as follows:

Expansion Project	**Kbpd**
System DRA[13] Optimization	75
BEP Idle	100
System Station Upgrades	100
Line 4 Capacity Restoration	150
Line 13 Reversal	150
Total	**500**

It should be noted that Enbridge now proposes to reverse the flow of Line 13 (Southern Lights), which currently transports diluent from Illinois to Alberta. In addition, the following slide shows that Enbridge has proposed to expand the Express Pipeline that it now owns, but it does not provide a figure for the amount. Since the Express Pipeline connects to the Platte Pipeline that terminates in Wood River, Illinois, this expansion would serve many of the same markets as the Project.

[13] "DRA" is an acronym for drag reducing agent. Enbridge has not released further information about the other proposed expansion projects.



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What is remarkable is that the DEIS does not identify much less consider any of these Mainline System expansions as an alternative to the Project, even though Enbridge itself has promoted these expansion projects on multiple occasions and described them as "low cost phased expansions that are attractive in a low crude price environment" and "low cost, highly executable, staged expansions." Yet, the existence of these incremental expansion projects has been repeatedly brought to the Department's attention in scoping. Further, it appears that Enbridge has accelerated the timeframe for some of these projects to be online in 2019, the same year that it hopes to bring the Project online.

What is even more remarkable is that since these expansion projects all relate to existing pipelines, implementing them would have significantly lower environmental impacts than the Project, yet the Department has determined that they should not be considered as alternatives in an environmental impact statement – without explanation as required by Minn. R. 4410.2300.G.

More remarkable still is that the DEIS deems the patently specious trucking and railroad alternatives to be "reasonable," yet ignores the obviously feasible and "highly executable" Mainline System incremental expansions that could increase import capacity on the Mainline System to a greater degree than the Project.

It appears that the DEIS adopts such a narrow definition of purpose and need that obviously viable Mainline System expansion projects serving the same terminals as the proposed Project are not within the Project's purpose and need and are deemed to be "unreasonable." The DEIS's rejection of Mainline System expansions also appears to be in conflict with the statement in DEIS Section 4.2.4 that "Other existing and potential future pipelines with available capacity were considered as alternatives to the Project if they: (1) interconnected in the crude oil supply region near Edmonton, Alberta; and (2) served the same Clearbrook and Superior destinations."

Since Mainline System expansions would interconnect with crude oil supply near Edmonton and would serve the Clearbrook and Superior Terminals, the DEIS by its own terms should consider these expansions as an alternative to the Project. 2667-12 cont

The incremental expansions fall squarely within the scope of Minn. Stat. § 216B.243, Subd. 3(6), which expressly mandates that the Commission consider alternatives that would "upgrading of existing . . . transmission facilities . . . ." Moreover, the range of total capacity additions described to investors since February 2015 (between 300,000 bpd and 500,000 bpd) have been approximately the same size as the capacity addition that would be provided by the Project. Enbridge might argue that it has timed these system expansions to come online after the Project, but Minn. R. 7853.0130(B)(1) requires that the Commission consider the "size, the type, and the timing of the proposed facility compared to those of reasonable alternatives." Thus, the DEIS must evaluate the timing and size of the Project relative to the timing of these alternative expansion projects. It is clear that Minn. Stat. § 216B.243 and Minn. R. 7853.0130(B) require that the Commission consider meeting claimed forecast increases in oil transportation service demand through alternatives based on upgrades and more efficient use of existing infrastructure. A failure to consider such alternatives would therefore violate state law. If state law requires such consideration in the evidentiary hearing, then the DEIS must include an assessment of the environmental impacts of a Mainline System expansion alternative. Otherwise, the Commission would not be able to assess the environmental merits of such expansions relative to the Project.

The DEIS's failure to consider expansion of capacity of other Mainline System pipelines is therefore a violation MEPA and must be redressed.

Another possible alternative that is not adequately described yet summarily dismissed is the alternative that would follow the existing Mainline System corridor to Clearbrook, and from there either use unused capacity on the Koch Industries-owned Minnesota Pipeline, or at least follow this pipeline's corridor, to a connection with the Wood River Pipeline, at currently mothballed 250,000 bpd pipeline also owned by Koch Industries that terminate in Wood River, Illinois (the entire route is herein referred to as the "Wood River Alternative"). DEIS Section 4.2.4 fails to adequately describe this alternative. Although it lists the Wood River and Minnesota Pipelines in Table 4.2-3, this table does not connect the dots of the Wood River Alternative Route. Yet, this route was expressly provided to the Commission as an alternative during scoping.

DEIS Section 4.2.4 does not provide an explanation for why the Wood River Alternative was rejected, except that it can be inferred that it was rejected because it did not serve the Superior Terminal. But then, neither does SA-04, yet SA-04 is considered a reasonable alternative. Since the Wood River Alternative would include construction of a new pipeline from Alberta to the Clearbrook Terminal, it both interconnects with crude oil supply in Alberta

and the Clearbrook Terminal. Rejection of the Wood River Pipeline Alternative because it does not connect with the Superior Terminal while allowing consideration of SA-04 is internally inconsistent. The DEIS cannot simply ignore possible alternatives and then reject them without providing any alternative-specific reason.

2667-12 cont

The requirement that all MEPA alternatives (except SA-04) must pass through both the Clearbrook and Superior Terminals is based on the illegally narrow definition of purpose and need contained in DEIS Section 2.2. This section merely adopts Enbridge's definition with regard to starting and ending points and fails to consider the underlying need for the Project, which is ultimately to increase oil transportation services to northern Illinois for subsequent transportation on Enbridge's downstream market access pipelines, including but not limited to the Flanagan South Pipeline, Line 78, and the Southern Access Extension Pipeline. The Wood River Alternative would serve the same or very similar markets.

As recently as 2013, Koch Pipeline Company investigated the possibility of incorporating this Pipeline into a project that would ship 250,000 bpd from North Dakota to Illinois via Clearbrook.[14] Now, FERC records indicate that the Koch Pipeline Company stopped paying taxes on it in Minnesota in 2014, such that this pipeline is just a liability to the state and the landowners who host it. The Commission should not allow a regulated utility to mothball this major asset without explanation. Further, since use of the Wood River Pipeline would require no new construction except at pump stations to allow reversal of its flow, the reuse of the Wood River Pipeline would result in significantly few adverse environmental impacts.

Similarly, there is almost certainly substantial unused capacity on the pipelines between Clearbrook and the Twin Cities. Prior to the operation of the MinnCan Pipeline, the two 16-inch pipelines plus additional segments of 16-inch looping pipeline between Clearbrook and the Twin Cities transported an average of about 280,000 bpd.[15] The MinnCan Pipeline, with a total maximum capacity of 350,000 bpd, started operation in the fourth quarter of 2008. The following chart of data reported to FERC by the Minnesota Pipe Line Company[16] shows the average barrels of oil moved in each quarter from the first quarter of 2004 until the second quarter of 2016.

[14] Reuters, Koch Pipeline seeks shipper Interest in Bakken pipeline (Jun. 18, 2013) http://www.reuters.com/article/2013/06/18/koch-pipeline-bakken-idUSL2N0EU0OK20130618
[15] Data available at https://www.ferc.gov/docs-filing/elibrary.asp.
[16] *Id*.

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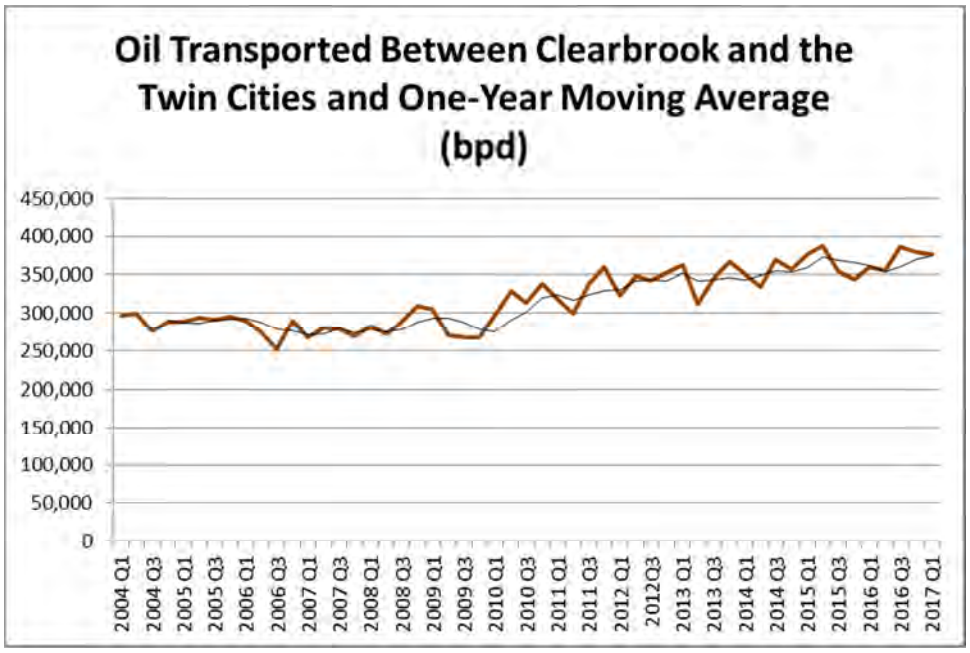


Recent utilization of the pipelines between Clearbrook and the Twin Cities has been just under 380,000 bpd,[17] or about 100,000 bpd more oil than before the start of operation of MinnCan, and less than 30,000 bpd than the maximum capacity of the MinnCan Pipeline. Thus, unless one or more of the older 16-inch pipelines have been abandoned, the pipelines between Clearbrook and the Twin Cities have the capacity to move at least an additional 250,000 bpd, which is line with the Koch Industries 2013 proposal.

This means that the oil industry has the capacity to move about 250,000 bpd oil from Clearbrook all the way to Wood River, Illinois, but refuses to utilize this capacity. The fact that the industry cannot seem to cooperate with amongst themselves is not reason to ignore the possible benefits of using mothballed pipeline capacity. Both Minn. Stat. § 216B.243 and MEPA are intended to explore efficient use of existing resources as an alternative to building new infrastructure. It could be argued that this alternative is not reasonable because it would not transport either 760,000 bpd or the incremental amount of 370,000 bpd. Such argument fails because an alternative under MEPA does not need to be the same size, particularly if it could be combined with other incremental expansions of existing infrastructure to meet a significant amount or even all of proven need. The DEIS must not limit consideration of alternatives to only those that all by themselves can transport at least 370,000 bpd. Instead, the DEIS should carefully investigate whether more efficient use of a combination of existing infrastructure can meet an underlying need.

[17] *Id.*

The fact that the Wood River and Minnesota Pipelines are not owned by Enbridge is not sufficient reason to reject them from analysis in the DEIS, because ownership of infrastructure is not a valid reason under MEPA to refuse to analyze its possible use. Minn. R. 4410.2300.G states, in relevant part:

> An alternative may be excluded from analysis in the EIS if it would not meet the underlying need for or purpose of the project, it would likely not have any 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 impacts.

Since the Wood River Alternative would meet the underlying purpose and need for the project, would have significant environmental benefits compared to the Project, and would have less adverse impact on Native American communities in northern Minnesota, it must be considered by the DEIS,

Therefore, the Wood River Alternative is a viable reasonable alternative such that the DEIS must consider it as an alternative to the Project.

2667-12 cont

Comments on DEIS Section 4.2.6 – Transportation by Rail

DEIS Section 4.2-5 contains the rail transportation alternative for 760,000 bpd. It assumes that rail would be used to deliver 360,000 bpd to Clearbrook, which it asserts is the approximate capacity of the Twin Cities refineries, and 400,000 bpd to Superior, which is the remaining balance. It calculates that these deliveries would require 10 unit trains of 110 cars each per day from Gretna, the last pump station in Canada, to Clearbrook and Superior.

The rail transportation alternative is patently unreasonable and should be removed from the DEIS. It appears to be an artifact of the DEIS's legally defective definition of purpose and need in DEIS Section 2.2. Due to the adoption of a statement of purpose and need based completely on Enbridge's allegations, the DEIS requires that all alternatives (except SA04) pass through Clearbrook and Superior. This requirement summarily eliminated a substantial portion of potential alternatives from consideration and leaves the DEIS with alternatives, such as the rail alternative, that are obviously not viable. Thus, the rail alternative can be seen only as being a strawmen.

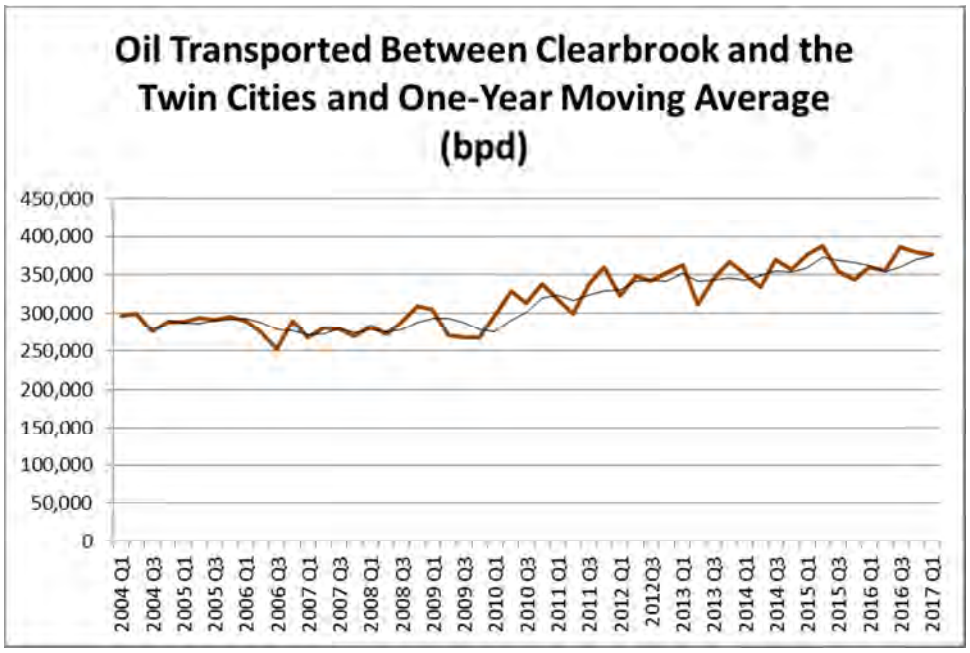
2667-13

It is also unreasonable to consider only this "rail bridge" from Gretna to the Clearbrook and Superior Terminals, rather than rail transportation from Alberta directly to refineries, which is how rail transportation actually functions.

2667-13 cont

In addition, the math in this alternative is out of date and the assumptions are incorrect. This is not to say that correcting the math and assumption would result in a reasonable alternative. Instead, the errors are pointed out to show how little effort and critical analysis was committed to the development of this alternative.

Actual deliveries on the Minnesota Pipeline are readily available on the FERC website in the eLibrary (www.ferc.gov). The following chart show total crude oil deliveries to the Minnesota refineries.



Deliveries to the Minnesota refineries averaged 369,679 bpd in 2016 and 365,406 bpd in 2015. The peak quarterly average in the past two years was 387,621 bpd in the second quarter of 2016. Thus, the DEIS's estimate of needed deliveries to the Twin Cities refineries is low. This being said, since the beginning of 2015, Minnesota's refineries have sourced an average of 19% of their oil, or 71,689 bpd, from Bakken suppliers via Line 81, which delivers into the Minnesota Pipeline. Thus, the Twin Cities refineries have on average sourced 81%, or 295,858 bpd, of their oil demand from Canadian suppliers via the Mainline System.

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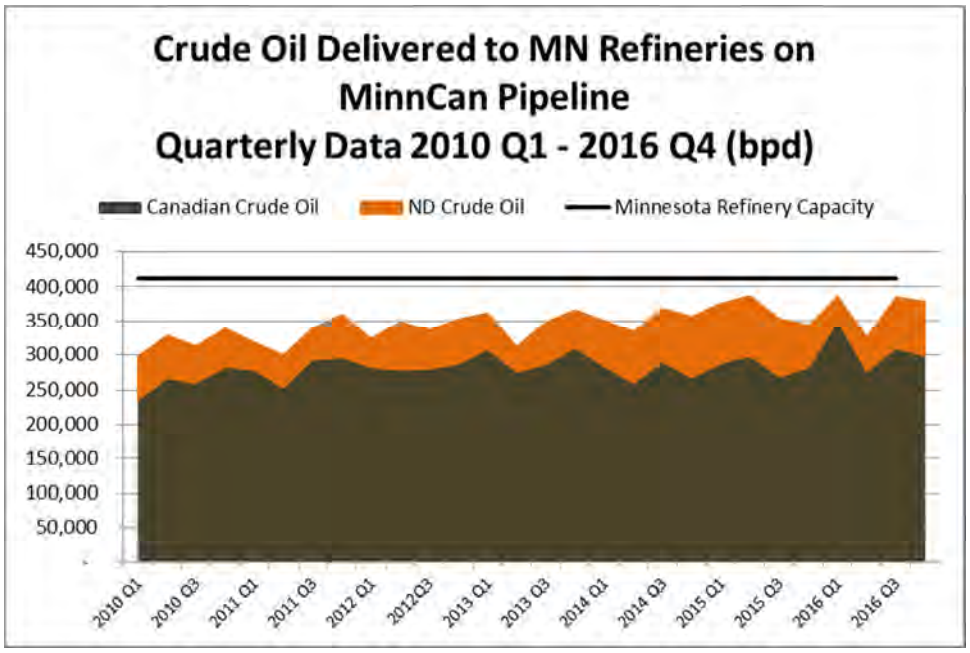

Also, USEIA company level import data from www.eia.gov shows that in 2016 heavy crude oil imports from Canada to Minnesota averaged 258,203 bpd, whereas light crude oil imports from Canada to Minnesota averaged 22,134 bpd. Since Line 3 currently transports light crude oil, as do Lines 1 and 2A/B, it is likely that relatively little oil refined in Minnesota is transported by the existing Line 3 pipeline. Likely, the heavy crude oil delivered to Minnesota is transported on Line 4. Although the Project is intended to operate in mixed service, there is no reason to believe that it would be the only Mainline system pipeline to serve Minnesota refineries.

The assumption that all of the oil supplied to the Twin Cities would be provided by rail is completely unexplained and merely adds to the absurdity of this alternative. Assuming for the sake of argument that Enbridge would build a rail link between Gretna (the most southerly Mainline System pump station in Canada) and Clearbrook and Superior, there would be no reason to assume that all of the Twin Cities refinery demand would be provided by such link, except perhaps as a form of fearmongering to create an argument that Minnesota fuel prices would rise.

The DEIS's estimate of tank car prices is out-of-date because it assumes that new tank cars would be purchased. The following chart shows that total crude oil shipments by rail in the US have dropped from approximately 1.1 million bpd to approximately 0.4 million bpd, a decrease of 59% between 2014 and 2017. This means that over half of all rail tank cars have been idled, such that their acquisition would likely be less than for new rail cars. This is another example of sloppy dated analysis for this specious alternative.

2667-13
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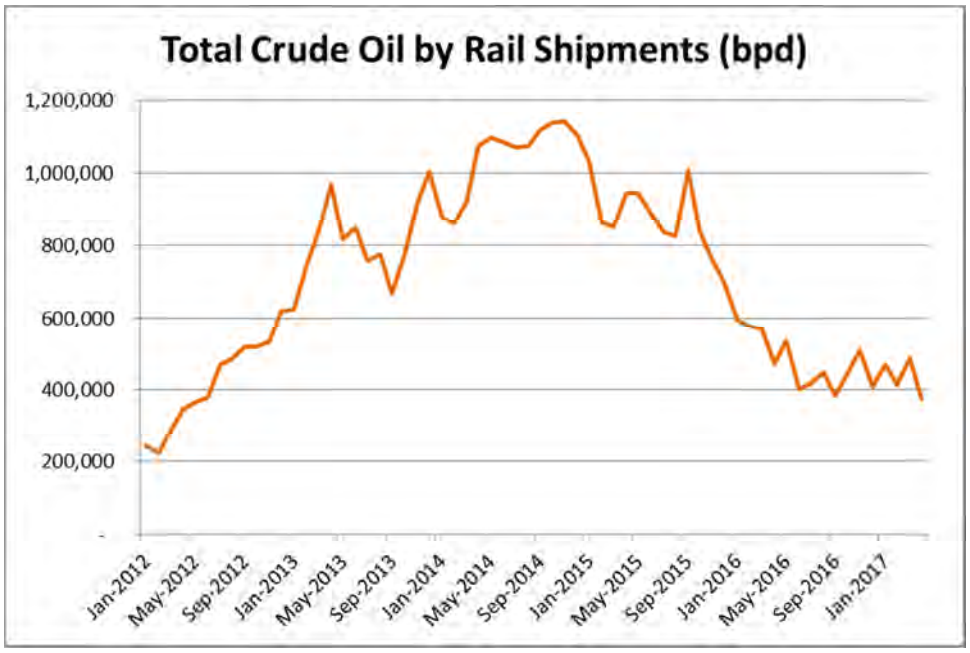


It is abundantly clear that the rail alternative described in DEIS Section 4.2.6 is not reasonable, and apparently it is based on out-of-date information, probably provided by Enbridge in 2015. It represents the worst sort of useless page-filling exercise that is intended to create an appearance of meaningful analysis. Since it is an unreasonable alternative, it must be stricken from the DEIS.

Comments on DEIS Section 4.2.7 – Transportation by Truck

The transportation by truck alternative is even more unreasonable that the rail alternative. It assumes that it is feasible to transport 4,000 tank trucks of crude oil each day between Greta and Clearbrook and Superior. It is a ridiculous and cynical paper exercise undertaken in an effort to create the appearance that the DEIS is has an adequate alternatives analysis. As with the rail analysis, its selection as an alternative is a direct result of the unlawful definition of purpose and need contained in DEIS Section 2.2. Since it is an unreasonable alternative, it must be stricken from the DEIS.

Comments on DEIS Section 4.2.8 – Existing Line 3 Supplemented by Rail

The analysis of the Line 3 supplemented by rail is no less unreasonable than the 100% rail option, and it suffers from the same outdated data and analytical shortcomings. It, too, is a direct product of the DEIS's failure to provide a purpose and need analysis that complies with MEPA. Since it is an unreasonable alternative, it must be stricken from the DEIS.

Comments on DEIS Section 4.2.9 – Existing Line 3 Supplemented by Truck

The analysis of the Line 3 supplemented by truck is no less unreasonable than the 100% truck option. It, too, is a direct product of the DEIS's failure to provide a purpose and need analysis that complies with MEPA. Since it is an unreasonable alternative, it must be stricken from the DEIS.

2667-13 cont

Comments on DEIS Section 4.2.10 – Smaller Diameter Pipeline

DEIS Section 4.2.10 considers whether a smaller diameter pipeline should be used. The DEIS's analysis of this alternative is remarkably one-sided in that if focuses almost exclusively on the similar construction impacts of a different sized pipes, without consideration of their different climate change impacts and different oil spill risks. It concludes: "Because the impacts are generally the same, a smaller diameter pipeline configuration was not evaluated in detail as a Project configuration alternative." This statement is false because (a) the impacts would not be the same; and (b) it is a gross oversimplification of the differing impacts to draw such a generalized conclusion. A compact car and an SUV are both vehicles made in factors that burn gasoline, but it is incorrect to say that they have the same impacts. The same is true of different sized pipelines.

With regard to oil spills, this section states: "The probability of an incident leading to a crude oil release would also be similar for a smaller diameter pipeline." Yet, the analysis completely ignores the fact that the worst case discharge from a smaller diameter pipe would be less. The pumping volume of a spill from a lower capacity pipe would be less in proportion to its lower capacity. For example, the now-defunct Sandpiper Pipeline had an ultimate annual capacity of 365,000 – less than 40% of the ultimate capacity of the Project (915,000 bpd). Thus, the pumping rate for a 24-inch diameter pipeline would be just 40% of that of the Project. The drain down volume would drop by the square of the radius of the pipes, such that a 24-inch pipe would have less than half of the drain down volume as that of a 36-inch diameter pipe. Thus, the maximum spill size from a 24-inch diameter pipe would likely be approximately half as large as that for a 36-inch diameter pipe. As a consequence, the damage from a complete rupture of a 24-inch diameter pipeline would be significantly less than for the Project.

Also, DEIS Section 4.2.10 fails to consider the significantly lower commitment of resources required for a smaller diameter pipe. A 24-inch diameter pipe would be comprised of significantly less steel, would require significantly less energy to transport to construction sites, and would require proportionally smaller ancillary equipment such as valves, PIG launchers, etc. This means that the overall environmental impacts of air emissions required for fabrication, delivery, and construction of a 24-inch pipeline would be much less than for a 36-inch diameter pipe.

Although the DEIS admits that a smaller volume of earth would need to be excavated to bury a 24-inch pipe, since the 288 mile trench would for a 24-inch diameter pipe generally be 1 foot less deep, and since trenching safety requires significantly more excavation as trenches deepen to prevent trench collapse, the volume of earth removed during construction would likely be substantially less than for a 36-inch pipe, such that the soil berms created during construction would be significantly smaller.

As DEIS Section 4.2.10 admits, a smaller diameter pipe would require less pumping horse power and consume less energy than a larger diameter pipe, but the DEIS provides no analysis of the significance of this reduction. It also admits that indirect air emissions from electrical generation would be less, but again makes no effort to quantify this. Similarly, the DEIS says nothing about the relatively smaller direct and indirect climate change emissions associated with a smaller diameter pipe.

The DEIS assumes that the impacts of constructing a 24-inch diameter pipe would be "generally the same" based on cherry picking certain impacts that might be similar while discounting impacts that would clearly be substantially less. To have integrity, the DEIS must provide a more searching analysis of this alternative before dismissing it. Likely, such analysis would find that the environmental footprint of a 24-inch diameter pipe would be less and that its impacts would differ. MEPA does not allow dismissal of an alternative based on sweeping generalizations, nor must alternatives differ dramatically and obviously to justify inclusion of an alternative. The purpose of the EIS is to investigate precisely these sorts of differences, rather than to serve as a platform for sweeping generalizations.

Moreover, the purpose for consideration of a smaller diameter pipe is in the event that the Commission finds that Canadian crude oil supply and/or US crude oil demand is not sufficient to merit a 36-inch diameter pipe. In addition, Minn. R. 7853.0130(B)(1) requires that the Commission compare the Project to alternatives with regard to: "the appropriateness of the size, the type, and the timing . . . ." Therefore, the Commission should be provided with an environmental analysis of the differing impacts of a smaller sized pipeline. Thus, the DEIS should provide an analysis of the impacts of a smaller diameter pipe in order to support such Commission analysis. A failure to consider smaller diameter pipe as an alternative within the DEIS means that the Commission will not be able to fully evaluate the merits of a smaller diameter pipe in the Certificate of Need hearing. If the available evidence supports a need for crude oil transportation capacity that is less than alleged by Enbridge, such that a smaller diameter pipe is justified, in the absence of an EIS analysis of a smaller diameter pipeline the Commission likely could not select this certificate of need alternative without subjecting itself to legal action, because without a MEPA analysis of such alternative the record would be incomplete as regards it.

Therefore, the DEIS must include a smaller diameter pipeline as an alternative.

Comments on DEIS Section 4.3 Description of Alternatives – Route Permit

The routes selected by the scoping process and included in the DEIS fail to comply with the MEPA requirements for selection of alternatives, because the DEIS relies on an illegal definition of purpose and need. The route alternatives analysis is equally distorted by adoption of a unduly narrow definition of alternatives that is excessively based on Enbridge's purpose for the Project, rather than the underlying purpose and need for the Project. Accordingly, the DEIS must provide a proper definition of the underlying purpose and need for the Project and then reevaluate the alternatives chosen for inclusion in the DEIS.

COMMENTS ON DEIS CHAPTER 5 – CERTIFICATE OF NEED EXISTING CONDITIONS, IMPACTS AND MITIGATION

Honor the Earth requests that the DEIS include a table of contents at the beginning of very long chapters, such as this one. Reference back to the overall table of contents is awkward.

Comments on DEIS Section 5.2.1.1.3

The DEIS states: "The potential exists for an inadvertent rupture of the bore hole or "frac-out" and release of the drilling fluid. Such events can occur when pressurization of the drill hole increases beyond the containment capability of the overburden soil material, which allows the drilling fluid to flow to the ground surface. The general risks to groundwater associated with HDD construction methods include loss of drilling mud into surficial aquifers, which could lead to turbidity in nearby aquifers and wells."…. "If a frac-out occurred and went undetected or was not quickly contained, impacts on groundwater quality could be long term and major." The DEIS should describe the probability of frac-out, provide an example of where it has happened, as well as a statement about Enbridge's history of frac-outs, and describe the potential impacts of frac-out in more detail

Comments on DEIS Section 5.2.4.3

Enbridge stated that the existing operations staff would be able to operate the Project and that few additional employees would be hired to assist the staff. As a result, operation of the pipeline would have no measureable impact on local employment, per capita household income, median household income, or unemployment in the ROI. The DEIS should clarify the impact of the Project on permanent long-term employment.

Comments on DEIS Section 5.3.4.1.2

It appears that the potential direct and indirect impacts on the economic baselines in the ROI were determined using employment numbers and construction related expenditures provided by Enbridge without independent critical analysis. The DEIS should provide an independent report on employment and direct and indirect economic impacts. Such report should compare Enbridge's estimates to those prepared by independent analysts for other projects. Further, the DEIS should estimate the number of Minnesotans that would likely be employed in construction as well as the number from other states.

With regard to property tax payments, the DEIS should note that Enbridge has appealed its property tax assessments for the Mainline System back to 2012. The DEIS should evaluate the likely taxes going forward in the event that Enbridge is successful with this appeal, and any liability that is imposed on Minnesota's counties should be offset against future estimated tax payments.

The DEIS should also include a per-county tax estimate for the existing Line 3 since it is already in place, and information about the current level of income taxes generated by the pipeline are not readily available to the public. This is necessary because the property tax estimates must offset the loss of tax payments should Line 3 be abandoned.

Comments on DEIS Section 5.3.4.3.1

Enbridge estimates that the material costs for construction of its preferred route in Minnesota to be $438.9 million. These expenditures during construction would result in temporary and negligible to minor indirect, positive impacts on those industries, particularly within the counties along the route, but the magnitude of the impact on the industries would depend on the size of the industries and the portion of the expenditures. The DEIS should estimate the proportion of the $438.9 that would go to Minnesota suppliers.

The DEIS fails to discuss the potential economic benefits to Minnesota of abandonment, which would be labor intensive. Although it would be difficult to determine the total length of pipe that would be subject to different levels of mitigation, it is possible to estimate the labor hours and therefore jobs required to perform the various forms of mitigation (removal, grouting, etc.) on a per mile basis.

Comments on DEIS Section 5.4.

The DEIS should fully account for all cultural resources including archaeological resources (e.g., sites and isolated finds), historic resources (*e.g.*, buildings and structures), and sacred places (including traditional cultural properties and traditional cultural landscapes). Cultural resources also include tribal, usufructuary rights resources both within reservation

boundaries and ceded lands by treaty (*e.g.,* traditional hunting and fishing areas) and treaty areas, which are discussed in detail in Chapter 9. The cultural resources addressed in this section are limited to direct and indirect impacts on archaeological and historic resources. This section should integrate tribal resources information from the tribal resources discussion.

Comments on DEIS Section 5.4.1.2

The DEIS says that DOC-EERA's consultation with SHPOs is ongoing, and the results of the consultation concerning determinations of eligibility, Project's effects, and any necessary treatment for impacts are not yet available. The results of DOC-EERA's consultation with Minnesota's SHPO should be included in a supplemented DEIS rather than wait until the FEIS. Otherwise, tribal peoples and tribal governments will not have an opportunity to correct any description of this consultation and to supplement missing information.

Comments on Section 5.4.2.1

The DEIS should recognize that all federally recognized tribes have a Tribal Historic Preservation Officer (THPO). The THPOs have assumed Section 106 responsibilities for archaeological sites and TCPs, as well as other duties; however, the state SHPO has retained Section 106 responsibility for buildings, structures, and landscapes within these reservations. Thus, Minnesota's agencies and contractors need to consult both the THPOs and the SHPO about federal undertakings within these reservations. The DEIS should include information from the THPOs. Also, the DEIS does not identify any TCPs and does not discuss the MIAC archeological regulations.

COMMENTS ON DEIS CHAPTER 8 – ABANDONMENT AND REMOVAL

As an initial observation, the DEIS contains no discussion of the roles and rights of landowners with regard to the mitigation required for abandonment of Line 3, nor does it address potential impacts to property values resulting from the risks of abandonment over time. The DEIS should recognize that landowners should have the primary determination in what happens on their lands – not the state and certainly not Enbridge. Although there would be circumstances in which mitigation activities on a property would impact neighboring properties such that these mitigation activities should be coordinated, as a general rule landowners should have the final say in what happens to abandoned pipes on their land. Otherwise, the determination will be left to Enbridge, which can be expected to serve its own interests. It would be imprudent and create a conflict of interest to allow Enbridge to decide mitigation conditions for any property not owned by it. Enbridge should not be placed in the position of deciding the mitigation decisions for landowners.

Comments on DEIS Section 8.2

DEIS Section 8.2 incorrectly describes federal law. All federal regulations related to the abandonment of interstate hazardous liquids pipelines, including crude oil pipelines, are provided below.

> 49 C.F.R. § 195.2 Definitions.
>
> As used in this part—
>
> Abandoned means permanently removed from service.
>
> 49 C.F.R. § 195.59 Abandonment or deactivation of facilities.
>
> For each abandoned offshore pipeline facility or each abandoned onshore pipeline facility that crosses over, under or through a commercially navigable waterway, the last operator of that facility must file a report upon abandonment of that facility.
>
> (a) The preferred method to submit data on pipeline facilities abandoned after October 10, 2000 is to the National Pipeline Mapping System (NPMS) in accordance with the NPMS ‘‘Standards for Pipeline and Liquefied Natural Gas Operator Submissions.’’ To obtain a copy of the NPMS Standards, please refer to the NPMS homepage at http:// www.npms.phmsa.dot.gov or contact the NPMS National Repository at 703–317– 3073. A digital data format is preferred, but hard copy submissions are acceptable if they comply with the NPMS Standards. In addition to the NPMS-required attributes, operators must submit the date of abandonment, diameter, method of abandonment, and certification that, to the best of the operator’s knowledge, all of the reasonably available information requested was provided and, to the best of the operator’s knowledge, the abandonment was completed in accordance with applicable laws. Refer to the NPMS Standards for details in preparing your data for submission. The NPMS Standards also include details of how to submit data. Alternatively, operators may submit reports by mail, fax or e-mail to the Office of Pipeline Safety, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, Information Resources Manager, PHP–10, 1200 New Jersey Avenue, SE.,

> Washington, DC 20590-0001; fax (202) 366–4566; e-mail, ‘‘InformationResourcesManager@phmsa. dot.gov. The information in the report must contain all reasonably available information related to the facility, including information in the possession of a third party. The report must contain the location, size, date, method of abandonment, and a certification that the facility has been abandoned in accordance with all applicable laws.
>
> (b) [Reserved]
>
> * * *
>
> 49 C.F.R. § 195.402
>
> Procedural manual for operations, maintenance, and emergencies.
>
> * * *
>
> (c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:
>
> (10) Abandoning pipeline facilities, including safe disconnection from an operating pipeline system, purging of combustibles, and sealing abandoned facilities left in place to minimize safety and environmental hazards. For each abandoned offshore pipeline facility or each abandoned onshore pipeline facility that crosses over, under or through commercially navigable waterways the last operator of that facility must file a report upon abandonment of that facility in accordance with § 195.59 of this part.

These regulations do not contain any requirements for what happens to a pipeline after it has been abandoned. Since the federal Pipeline Safety Act (PSA)applies only to operating pipelines, the abandonment requirements in federal law are intended to define when a pipeline ceases operation and therefore is no longer subject to the PSA. Put another way, the abandonment requirements in 49 C.F.R Part 195 describe the events which once accomplished determine the time that PSA no longer applies to a pipeline.

The PSA regulates the existing Line 3 because it is a “hazardous liquid pipeline facility” as defined by 49 U.S.C. § 60101(a)(5): “’hazardous liquid pipeline facility’ includes a pipeline, a

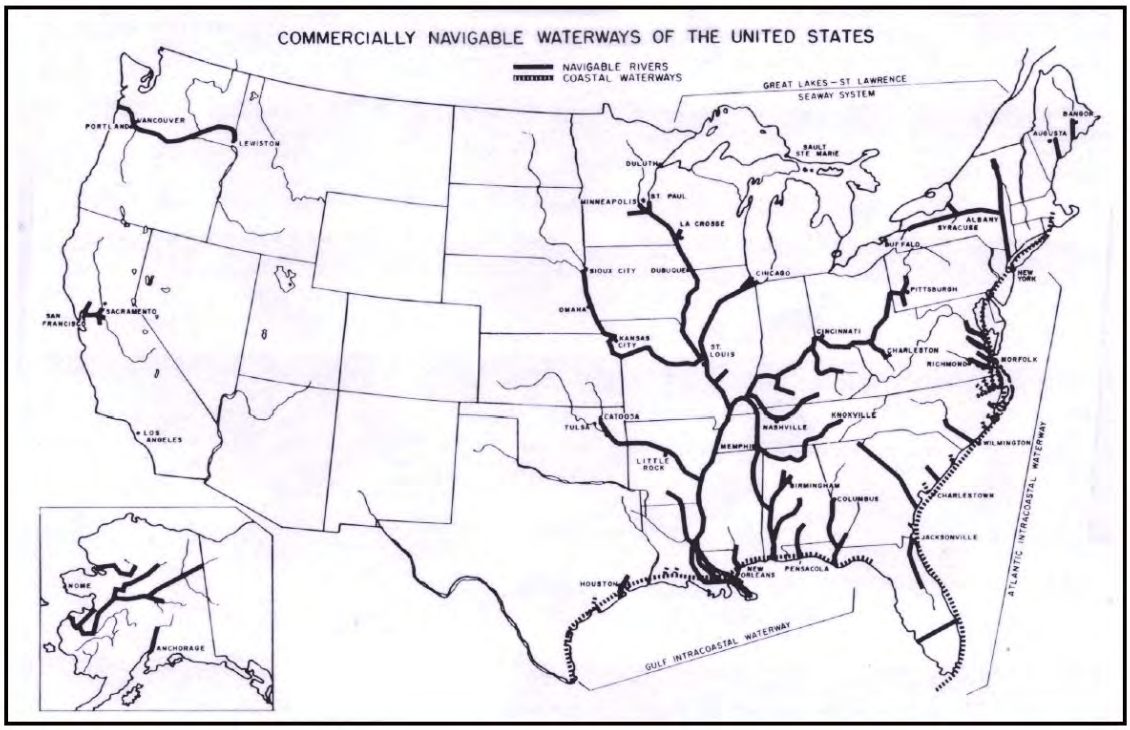
right of way, a facility, a building, or equipment used or intended to be used in transporting hazardous liquid." In turn, the term "transporting hazardous liquid" is defined by 49 U.S.C. § 60101(a)(22) as follows:

> ``transporting hazardous liquid"--
>
> (A) means the movement of hazardous liquid by pipeline, or the storage of hazardous liquid incidental to the movement of hazardous liquid by pipeline, in or affecting interstate or foreign commerce; but
>
> (B) does not include moving hazardous liquid through--
>
> (i) gathering lines in a rural area;
>
> (ii) onshore production, refining, or manufacturing facilities; or
>
> (iii) storage or in-plant piping systems associated with onshore production, refining, or manufacturing facilities;

A "hazardous liquid pipeline facility" is one type of "pipeline facility," as defined by 49 U.S.C. § 60101(a)(18): "'pipeline facility' means a gas pipeline facility and a hazardous liquid pipeline facility." Also, 49 U.S.C. § 60101(a)(19) defines "pipeline transportation" as follows: "'pipeline transportation' means transporting gas and transporting hazardous liquid." In turn, the PSA's purpose statement in 49 U.S.C. § 60102(a) authorizes the establishment of safety standards that apply only to "pipeline transportation and pipeline facilities,' meaning facilities that are used or intended to be used to move hazardous liquids. Once a facility is no longer used or intended to be used to move hazardous liquid, it is no longer a "hazardous liquid pipeline facility" subject to regulation under the PSA or its regulations in 49 CFR Part 195. Accordingly, the PSA give the federal government no power to regulate a pipeline once it is abandoned. As such, federal law does not and cannot require that Enbridge prepare a plan for what happens to a pipeline after it ceases operation, because Congress has not authorized any federal agency to do so under the PSA. This being said, the federal government does regulate the disposition of abandoned pipelines on federal lands pursuant to its granting of federal rights of way permits, but no law authorizes a federal agency to regulate the disposition of an abandoned pipeline on private or state land.

Also, Enbridge is not required to submit an abandonment report for the existing Line 3 under federal law, because it does not cross a "commercially navigable waterway." "Commercially navigable waterways" are shown at the National Pipeline Mapping System website, which is maintained by the Pipeline and Hazardous Materials Safety Administration

(PHMSA): https://www.npms.phmsa.dot.gov/CNWData.aspx. This website references the Bureau of Transportation Statistics National Waterways Network database at: https://www.bts.gov/, which in turn provides GIS shape files for the locations of commercially navigable waterways in the US. More easily accessible is a map of the commercially navigable waters in a Minnesota provided by a 2001 Minnesota Department of Transportation report entitled River Transportation in Minnesota.[18]



Map 2.1 Commercially Navigable Waterways of the United States

The federal data and state map show that the Mississippi River north of the Twin Cities is not a "commercially navigable waterway."

In addition, 49 C.F.R. § 195.450 includes the following definition of "commercially navigable waterway" as it relates to the definition of high consequence areas:

> A commercially navigable waterway, which means a waterway where a substantial likelihood of commercial navigation exists . . .

[18] Report available at: http://www.dot.state.mn.us/ofrw/PDF/2001RiverTransportationMN.pdf

(Emhasis added.) Thus, "commerically navigable waterways does not mean the entire extent of a waterway on which navigation exists, but rather only those parts of a waterway on which commercial navigation occurs.

Since the Mississippi River north of Minneapolis north of the Twin Cities is not commercially navigable, the existing Line 3 Pipeline does not cross "over, under or through a commercially navigable waterway." Therefore, the requirements in 195.59 related to reporting do not apply to abandonment of Line 3. The DEIS should be corrected to reflect that § 195.59 does not apply to the abandonment of existing Line 3.

The federal regulations do not "require that the pipeline owner prepare a plan that details how the basic requirements of the regulation will be met." The regulations contain no mention of a "plan." Instead, they require that Enbridge have a procedural manual for operations, maintenance, and emergencies. 49 C.F.R. § 195.402. This operations manual does not apply to a pipeline once it has been abandoned.

Accordingly, the following sentence in 49 C.F.R. § 195.402(c)(10) contains the sum total of all federal regulations in 49 C.F.R. Part 195 related to abandonment that apply to the existing Line 3 Pipeline:

> (c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:
>
> * * *
>
> (1) Abandoning pipeline facilities, including safe disconnection from an operating pipeline system, purging of combustibles, and sealing abandoned facilities left in place to minimize safety and environmental hazards.

This sentence describes the steps that must be taken to convert an operating "hazardous liquid pipeline facility" from being a facility that is moving or intended to move hazardous liquids, and therefore subject to federal regulation, to a facility that is no longer moving oil or intended to move oil in the future, such that it is not subject to the PSA or any of its requirements. This regulation contains no mention of an abandonment plan. That idea appears to be an effort by Enbridge to make it appear that regulation of abandoned pipeline is controlled by federal law, when it is not. It contains no specific requirements related to the disposition of a facility once the above steps are taken.

Therefore, all statements in the DEIS that indicate that federal law contains any requirement related to the disposition of an abandoned pipeline are legally incorrect, misleading, and must be stricken.

DEIS Section 8.2 contains the following statements that are incorrect and must be amended or removed:

- "These regulations prescribe certain steps for formal abandonment of oil pipelines, including the disconnection, purging, and sealing of abandoned pipelines left in place,3 but require that the pipeline owner prepare a plan that details how the basic requirements of the regulation will be met." –This statement should be modified to state that federal law applies only to operating pipelines, such that it does not apply to the disposition of a pipeline once it is no longer in operation. Also, footnote 3 references 49 C.F.R. Part 192, but this part applies only to natural gas pipelines.
- "In addition, federal regulations require operators to file an abandonment report for each abandoned facility that crosses a navigable waterway." – The regulations require such report on for pipelines that cross a "commercially navigable waterway." This is a different legal status from a "navigable waterway." Thus, this sentence must be amended to reflect the correct federal term.

DEIS Section 8.3 contains the following statements that are incorrect and must be amended or removed:

- "Enbridge Has Filed a Proposed Abandonment Plan per PHMSA Regulations" and "Subsequently, Enbridge filed with the Minnesota Public Utilities Commission (Commission) a draft of the required plan that details how the basic requirements of the PHMSA abandonment regulations will be met (Appendix B)." – PHMSA regulations do not require an abandonment plan, but rather only that Enbridge's operations manual contain procedures for how it will disconnect Line 3 from an operating pipeline system, purge Line 3 of combustibles, and seal Line 3 to limit hazards. Characterizing this as a "plan" is misleading. Implying that the entire plan provided in Appendix B is required by federal law is misleading and incorrect. Appendix B contains many more terms and requirements than disconnection, purging, and sealing Line 3. Everything else in Appendix B , such as segmenting Line 3 , maintaining cathodic protection for Line 3, and monitoring Line 3,is not required by federal law, nor could PHMSA approve such terms because it has no legal authority to do so and no federal standards to apply to such plan components.
- "Enbridge would continue to monitor and maintain the abandoned Line 3 right-of-way in accordance with PHMSA regulations indefinitely." – Nothing in federal law requires that

Enbridge monitor and maintain Line 3 itself indefinitely. Since the right of way is used by other pipelines, then the right of way would need to be maintained to allow monitoring of the existing pipelines until they are also abandoned, at which time Enbridge or its successors would have no obligation under federal law to maintain the right of way.

Comments on DEIS Section 8.3.1

The DEIS states that leaving the pipeline in place would minimize the risk to operating pipelines. While there may be some risk, Enbridge conducts integrity digs and other maintenance activities on a regular basis. Federal law and Enbridge's own construction standards are sufficient to minimize the risk of harm to other pipelines.

Comments on DEIS Section 8.2.1.1.1

The DEIS fails to contain any data about the extent of existing contaminants outside of the existing Line 3 pipeline, such that the actual impact of such contamination is not assessed or known. Merely stating that such contamination might exist does not in any way assess the extent or amount of contamination, such that the DEIS does not in fact contain any information on the extent of this environmental impact. Merely noting that an impact could exist is not the same thing as describing the actual extent of the impact. Therefore, the DEIS should include a survey for existing contamination from Line 3. This section states that Enbridge "would develop a contaminated sites management plan to identify, manage, and mitigate historically contaminated soils and waters. Such a plan would require them to identify potential contamination sources along abandoned Line 3 and coordinate with resource agencies and authorities to determine appropriate mitigation measures." Such plan should be included in the DEIS as a mitigation measure so that it may be commented on by interested persons, and so that the Commission may approve it as modified by the Commission as a mitigation measure. It is disrespectful and condescending to landowners to allow development of this plan only between Enbridge and "resource agencies and authorities," particularly because the vast majority of such plan would apply to private property. As a mitigation measure, such plan must be included in the DEIS. Enbridge has the resources to prepare this plan now and should not be allowed to delay its development and approval until after a Commission decision.

The DEIS notes that Enbridge by itself has determined that segmentation is appropriate at 47 location and three other locations requiring study. Since the existing Line 3 is comprised of 282 miles of pipeline, this means that Enbridge intends to segment it into 6 miles segments (282/47=6.0). Appendix B provides a list of Enbridge's proposed segmentation locations, but it does not identify the parcels that would be impacted. The DEIS should contain enough information that property owners are aware of this potential impact.

Comments on Appendix B

Enbridge has submitted a "Line 3 Permanent Deactivation Plan". This plan has many deficiencies, including the following.

The plan fails to let landowners have any say in what happens to the pipe after abandonment – The plan says that, except with regard to road, rail, and waterbody crossings controlled by railroad companies and government entities, Enbridge will consult with landowners only where and when Line 3 starts to emerge from the ground. Plan at Section 4.3.2.3.1, Exposed Pipe, page 56. Even then, it does not give landowners any rights, and instead discusses Enbridge's internal decision making process. Otherwise, the Plan completely ignores landowner rights. Enbridge states a number of times that what's best for landowners is to leave the pipeline in the ground, but nowhere does the plan propose a process for Enbridge to even discuss what happens to the pipe much less allow landowners to decide what happens on their land. This "pipeline company knows best" approach is controlling and dismissive of landowners. The plan must grant landowners the right to determine what happens to an abandoned pipeline on their land.

The Plan presents false choice between complete removal and complete abandonment in place – Enbridge presents the straw man of complete removal on page 1: "Removing the 282 miles of existing Line 3 would create a significant risk to other operating pipelines and additional impacts to the environment, land use, and public safety similar to and exceeding those related to constructing a new pipeline project." Honor the Earth does not propose that the pipe should be completely removed, because this decision should be primarily determined by landowners. In some places removal may cause more damage, and in other places it would be appropriate. When a landowner decides that leaving a pipe in the ground is appropriate, then Enbridge should discuss options other than segmentation, such as filling a pipeline with grout to keep it submerged and prevent water transportation. By framing the decision as one of complete removal versus complete abandonment, Enbridge fails to acknowledge that there are a number of mitigation techniques and frames the options available to landowners and the Commission in inappropriately absolute terms. Mitigation should be determined on a property-by-property basis, which is how Enbridge acquired easements, engineered and constructed Line 3 in the first place.

The Plan does not consider potential for existing contamination or address how to mitigate it – The Plan considers contamination only from oil left in the pipe after deactivation and not the possibility of existing contamination caused during active operation of the pipeline. Plan Section 4.1 is entitled "Minimizing the Risk of Soil and Water Contamination" and states: "One identified risk is that soil and water contamination could occur from hydrocarbons remaining in the pipeline after it is removed from service. In order to minimize this risk,

Enbridge will purge the pipeline of crude oil and implement a cleaning program to remove remaining hydrocarbons from the pipeline." The plan says nothing about surveying the route for existing contamination. Thus, in this plan Enbridge does not even admit that existing contamination might exist, much less propose a plan to survey for it or remove it. Although Enbridge has made representations to the Department that it would develop a contaminated sites management plan to identify, manage, and mitigate historically contaminated soils and waters, and this possible future action is included in the DEIS (see, e.g., DEIS Section 8.4.1), the DEIS must actually include such plan. Since Enbridge has the resources to prepare its Line 3 Permanent Deactivation Plan, it also has the resources to prepare and submit into the record a contaminated sites management plan, so that the Commission can know and approve or modify such plan, and so that the landowners who are affected most by it have an opportunity to comment on it.

The Plan assumes that Enbridge maintain its electrical cathodic protection system for Line 3 for many decades and even hundreds of years – The plan proposes that Enbridge maintain the pipeline using cathodic protection ("CP" - an electric current that slows the corrosion process) "until such time that it is ineffective or otherwise detrimental." But, the Plan does not say what happens next. Table 1-1 of the Plan (page 2) states "With the application of CP, the first single points of through wall corrosion are not expected to occur for 25 to 50 years. Note that a single point of through wall corrosion would not cause the pipe to collapse. The structural integrity of the pipe is expected to remain intact for hundreds of years. Given these estimates, it is anticipated that the pipe will likely be filled with soil by the time it has corroded to a point of collapse, which will minimize subsidence." It should not be assumed that Enbridge or its successor and assigns will properly maintain such system. Instead, the DEIS should propose that the Commission require a financial assurance mechanism that would require funding sufficient to ensure continued maintenance should Enbridge, its successors or assigns fail to do so. Plan Section 4.3.2.4.2, Monitoring of CP System, makes clear that substantial effort is required to monitor the components of a CP system. This section does not describe the ongoing maintenance required to keep CP systems in operation. Should Enbridge fail to maintain its CP system, Figure 4-8 indicates that National Association of Corrosion Engineers (NACE) assumptions indicate that the pipeline could corrode through in less than 20 years. In this same table, Enbridge also states: "This ROW monitoring program will inspect for any signs of subsidence on the ROW and develop plans to address the issue if it arises." The Plan does not address what will happen after Enbridge leaves and terminates its ROW monitoring program. Enbridge claims it will maintain cathodic protection for abandoned Line 3 to slow its corrosion for decades and even centuries, when there is a very great risk that it will not do so or even will not exist over this period.

The plan fails to provide any financial commitment (bonding, state fund, etc.) to ensure that resources will be available should Enbridge cease to exist or transfer its interests to an underfunding successor – The plan assumes that Enbridge and its potential successor and assigns will maintain the CP system and monitor Line 3 for many decades if not hundreds of years, and generally asserts that Enbridge will address problems as they arise, including contamination. However, Enbridge does not propose any financial assurance mechanism that would protect landowners in the event that it ceases to exist or transfers its interest in the Mainline System to a company without the financial resources needed to redress problems caused by the abandoned pipeline. Honor the Earth note that the Canadian government after a lengthy regulator process determined that there is a significant risk that pipeline owners and operator would not follow through on their financial commitments, such that the Canadian government did establish a financial assurance mechanism to ensure that funding is available. There is a risk that Enbridge will be able to offload its liability onto landowners when doing so becomes financially necessary. This is the exact type of risk that is recognized by leaking underground storage tank laws and the federal Superfund law, both of which exempt crude oil pipelines from coverage. Enbridge essentially asks that landowners and the state simply trust that it will do the right thing for decades and centuries into the future, when in fact it should be expected to minimize its liabilities and maximize its return to its investors.

The Plan overstates Risk of Pipe Removal – Plan Section 3.1 states: "One of the greatest risks of removing a Permanently Deactivated pipeline is the risk of damaging adjacent pipelines or infrastructure, which can lead to significant public, environment, and operational impacts." Yet, Enbridge regularly undertakes integrity digs and other maintenance and has constructed entirely new pipelines adjacent to existing pipelines, in some places very closely adjacent to each other (and even over/under each other) apparently without incident. Therefore, it should be assumed that Enbridge has the capacity to safely remove the old pipe. Enbridge describes a number of construction challenges, but assumes the worst at all locations rather than acknowledge that construction challenges will be site-specific and can be considered by individual landowners on a property-by-property basis. Further, Enbridge assumes that removing the pipe would require the exact opposite process as installing it, including lifting the entire pipeline out of the trench and then cutting it apart (Figure 3-1), when it is obvious that the pipe could be cut apart in the trench. Since removal of a major pipeline has never happened, it seems likely that new demolition techniques and machinery may be required, just as specialized machinery is required for the construction of a new pipeline. The industry, including Enbridge, would appear to prefer to give the impression that removing a pipeline is too difficult and walk away without taking a hard look at how this can be done efficiently and safely.

COMMENTS ON DEIS CHAPTER 9 – TRIBAL RESOURCES

The summary of the Draft Environmental Impact ("DEIS") section addressing tribal resources begins with the assertion that it is not possible to "determine which alternative is better when each alternative affects tribal resources, tribal identity, and tribal health." This assertion does not account for a no build alternative, nor does it provide a detailed table outlining differences between the two, despite numerous tables throughout the document.

Numerous tribal concerns are identified in the DEIS, which the drafters placed in the Appendices, instead of in the body of the document. Impacts to tribal resources are not clearly defined under the "Cumulative Impacts" section, It is unclear how much substantive weight and consideration is being given to tribal nations that will be directly and irreparably impacted by the proposed Line 3 corridor.

Like many extractive industry projects, Line 3's preferred route carefully avoids existing tribal reservations, while sending the project as close as possible to reservation boundaries and often through ceded treaty territory that directly impacts tribal treaty rights.

The DEIS concludes its assessment of tribal resources by stating that any construction would have an unquantifiable impacts on tribal members and tribal resources. It makes no attempt to substantively compare the tribal-specific concerns associated with each alternative, instead stating it is "not possible to determine which alternative is better when each alternative affects tribal resources, tribal identity, and tribal health." Tribal members, tribal governments, organizations, and Minnesota citizens have provided extensive commentary as to the concerns of tribal nations, going so far as to provide a supplemental impact statement to inform the approval or denial of the preferred route.

While the DEIS quickly summarizes tribal resources into just a few categories, it is clear that tribal concerns go beyond archaeological resources (e.g., sites and isolated finds), historic resources (e.g., buildings and structures), and brief mention of sacred places (including traditional cultural properties and traditional cultural landscapes). 'Sacred places' are not included or examined anywhere in the DEIS aside from the tribal resources section. These are irreplaceable sites that hold deep significance to tribal nations and must be fully evaluated in coordination with a Tribal Historic Preservation Officer ("THPO") and impacted tribal members. While the state has recognized the need to include this information in the Final Environmental Impact Statement, it is concerning that none of these resources are being considered in the initial document put forth by the state. No data provided by THPO's is included in this massive document, despite ready access to such information. Federal law acknowledges and codifies consideration of culture, sacred sites, and traditional tribal resources in the National Historic Preservation Act as well as the National Environmental Policy Act.

Other resources listed by the DEIS include usufructuary rights resources both within reservation boundaries and ceded lands by treaty (e.g., traditional hunting and fishing rights). Cultural knowledge and resources such as the critically important practice of harvesting wild rice and traditional medicines must also be examined, documented, and studied for impacts to meet the requirements of an Environmental Impact Statement.

The federal and state governments have a long history of disregarding and disrespecting the rights of tribal nations that have been in North America prior to the formation of the United States. Simply disregarding tribal interests as unquantifiable rather than careful examination and development of appropriate mechanisms to weigh tribal interests continues this sordid legacy. Westernized systems of legal process can be adapted or amended to better consider the concerns of indigenous peoples.

The proposed project holds serious risks of potentially obliterating tribal culture and practices, particularly around the harvesting of wild rice -- it is therefore morally reprehensible to not collaborate and work with tribal nations, scholars, and minds to ensure that the state's regulatory system fully incorporates tribal interests and does not perpetuate the structural racism that systematically ignores, discards, and compounds the many struggles faced by Native American communities.

Further, the DEIS fails to consider the effect of a no build alternative on tribal members and resources. Instead, the tribal resources disregards complex testimony and concerns by stating no construction is the only tribally approved alternative, without fully examining what a no build option would mean.

COMMENTS ON DEIS CHAPTER 10 – ACCIDENTAL CRUDE OIL RELEASE

Honor the Earth has attached the "Comments on the Stantec Pinhole Release Assessment" prepared by CJE Consulting. Attachment B.

COMMENTS ON DEIS CHAPTER 11 – ENVIRONMENTAL JUSTICE

This chapter is wholly inadequate. It is inappropriately narrow in scope, methodologically unsound, and analytically shallow. Specific problems include the following topics, each of which is discussed in detail below. In addition, Honor the Earth provides the comments of

- Incorrect and unjustified use of county-level data as unit of benchmark comparison to define and identify minority communities

- Incorrect and unjustified use of county-level data as unit of benchmark comparison to define and identify low-income communities
- Inappropriate definition of a "region of interest" for the analysis, including the lack of a "regional setting"
- Lack of consideration of Health Professional Shortage Areas and Medically Underserved Areas/Populations
- Lack of consideration of exposure to existing contamination
- Inadequate assessment of the specific resources to be impacted
- Incorrect and unjustified use of county-level data as unit of benchmark comparison to define and identify minority communities
- inadequate assessment of the community's characteristics that shape potential impacts on them
- Inadequate consideration of the distribution of impacts within affected communities
- Lack of integration of traditional ecological knowledge
- Lack of consideration of Free, Prior, and Informed Consent or the United Nations Declaration on the Rights of Indigenous Peoples
- Inadequate analysis of human trafficking and associated impacts
- Lack of analysis of drug trafficking
- Inadequate discussion of spill impacts
- Inadequate analysis of health impacts
- Inappropriate attribution of facts to "an Ojibwe perspective" in order to discount them
- Disproportionate impact on Native populations is concluded but not documented or analyzed
- Lack of analytical depth allows for inaccurate conclusion that any of the alternatives would be equally bad
- Inadequate consideration of potential mitigation measures or process for selecting and implementing them
- Inadequate social impact assessment

Incorrect and unjustified use of county-level data as unit of benchmark comparison to define and identify minority communities

The DOC defines a minority area in the following way: "Low-income and minority populations were determined to be present in an area when the percentage of minority group or low-income population exceeded 50 percent of the county population, or was "meaningfully greater" than the general population of the county," and goes on to define *meaningfully greater* in the following way: "A difference of 10 percentage points or more was used to determine

whether the percentage of a minority or low-income group in a census tract in the ROI was "meaningfully greater" than that group's percentage in the respective county" (DEIS 11-2).

However, the DOC provides no justification for the methodological choice to aggregate benchmark data at the county level in order to identify EJ communities. The DOC explains in plain language why it thinks a statewide benchmark is not appropriate but it does not cite any policy guidance document, case law, regulatory precedent, or credible statistician or other academic source to justify that opinion:

"The metric used to identify EJ populations in this EIS is the comparison of census tracts to the whole of a county, which allows comparison of population groups within the same general vicinity. This provides the best comparison of proportional impact. The EIS uses a comparison against county data rather than statewide data because the statewide data combine data from widely varying areas and are not representative of any particular area. Additionally, the state is a dichotomy of urban and rural communities. In general, urban areas have higher percentages of minority populations, while rural areas have lower average incomes. Combining those data does not provide a clear comparison to establish levels of economic justice at a local level" (DEIS 11-2).

Honor the Earth disagrees with the methodological choice to aggregate benchmark data at the county level. The goal is to identify the existence of population groups that may be disproportionately impacted. The question is not whether one rural census tract contains concentrations of Native or low-income people relative to the other tracts in its rural county. That is a very twisted way of defining the research question. Benchmark aggregation at county level may be an effective method in an urban context, but not in this rural one. Nor is it effective with regard to Native American populations, which have unfortunately suffered drastic population loss from the well-concerted effort to systematically and structurally eradicate this demographic. Native American populations holding land bases are often located in rural areas, with checkerboarded lands that There is no law requiring that energy infrastructure be located in rural areas, and no justification for the implied premise that the level of risk to which the project would subject all rural people is somehow an acceptable baseline to which we can compare disproportionate impact.

The CEQ Guidance on Environmental Justice provides the following insight: "Minority populations should be identified where either: (a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis. In identifying minority communities, agencies may consider as a community either a group of individuals living in geographic proximity to one another, or a geographically dispersed/transient set of individuals (such as migrant workers or Native

American), where either type of group experiences common conditions of environmental exposure or effect. The selection of the appropriate unit of geographic analysis may be a governing body's jurisdiction, a neighborhood, census tract, or other similar unit that is to be chosen so as to not artificially dilute or inflate the affected minority population. A minority population also exists if there is more than one minority group present and the minority percentage, as calculated by aggregating all minority persons, meets one of the above-stated thresholds" (CEQ 25).[19]

It is worth noting that the CEQ Guidance document goes out of its way here to authorize and encourage agencies conducting environmental review not to restrict themselves to geographic definitions of "communities," especially Native American communities. It also goes out of its way to warn against and prevent *exactly* the kind of analytical error that the DOC is guilty of here, by choosing a unit of comparative analysis that "artificially dilutes" the affected minority population. Unsurprisingly, the DOC's method fails to identify the concentrations of Native and low-income people that indeed live in close proximity to the corridor. The only thing the analysis does show us is that in rural areas, there are typically not dramatic demographic differences between census tracts. But this is neither an interesting finding, nor is it relevant to the question at hand. The DEIS acknowledges that "13 of the 21 counties [along the APR] have a greater percentage of Native American populations than at the state level" (DEIS 11-4), but that simple truth is excluded from the methodological basis and therefore avoided in the analysis. In other words, the chapter acknowledges that the APR is home to concentrations of Native people, but manipulates the scale of geospatial data analysis in order to understate the problem.

In contrast, the US State Department's Supplemental EIS for the Alberta Clipper Expansion project carefully explains its "either or" approach to the use of state or county level benchmark comparisons, so as to always err on the side of inclusion: "The use of a conservative approach ensured that the analysis did not artificially dilute or inflate minority and low-income populations identified in respective small geographic areas. This SEIS identifies a block group or census tract as subject to environmental justice if, when compared to the state compositions, it has a meaningfully greater percentage of minority or low-income population, even if the percentage is not meaningfully greater than in the respective county. This SEIS also identifies a block group or census tract as subject to environmental justice if, when compared to the composition in the respective county, it has a meaningfully greater percentage of minority or

[19] Council of Environmental Quality (CEQ). 1997. Environmental Justice, Guidance under the National Environmental Policy Act. Executive Office of the President. Washington, DC.

low-income population, even if the percentages are not meaningfully greater than in the state" (SEIS 3.7-5).[20]

Incorrect and unjustified use of county-level data as unit of benchmark comparison to define and identify low-income communities

The DOC makes the same error when defining the threshold for a *low-income* area: "Based on recommendations from Minnesota PCA, low-income populations are those individuals with income below 185 percent of the poverty level. While Minnesota PCA generally uses a metric of 40 percent of population below 185 percent of poverty to establish EJ status, this analysis uses a difference of 10 percentage points or more to establish the 'meaningfully greater' measure consistent with the comparison of minority populations. As outlined above, the metric used to identify EJ populations in this EIS is the comparison of census tracts to the whole of a county..." (DEIS 11-2).

In this case, the DOC even acknowledges that the choice to compare to county statistics is a significant deviation from the standard methodology outlined in the MPCA's 2017 Environmental Justice Framework Implementation Report, which is the closest thing Minnesota has to an Environmental Justice policy or relevant guidance document: "The MPCA considers a census tract to be an area of concern for environmental justice if...more than 40% of the households have a household income of less than 185% of the federal poverty level" (MPCA 2017 13).[21]

As rationale for this methodological deviation, the DOC merely states the need for "consistency" with the way minority population is being defined. While the logic of staying consistent with one's previous mistakes may make intuitive sense to an agency that's never been asked to conduct an EIS before, unfortunately it fails to hold water as a scientifically acceptable methodological choice, and again the DOC provides no reference to a policy guidance document, case law, regulatory precedent, or credible statistician or other academic source to justify that choice.

The end result is a similar distortion of the truth. The DEIS acknowledges that "in 20 of those 21 counties [along the APR], the percentage of the population below 185 percent of the poverty level is greater than for the state as a whole" (DEIS 11-4). But once again, that simple truth is excluded from the methodological basis and therefore avoided in the analysis. The conclusion of the low-income area identification process is simply that "None of the census

[20] US State Department, Draft Supplemental EIS for the Line 67 Expansion Project, https://www.state.gov/documents/organization/267747.pdf
[21] MPCA Environmental Justice Framework Implementation Report, April 26, 2017. https://www.pca.state mn.us/sites/default/files/p-gen5-32.pdf

tracts crossed by Enbridge's preferred route has a meaningfully greater proportion of the population with income less than 185 percent of the poverty level compared to their respective county level" (DEIS 11-7).

Once again, the concentration of low-income people along the APR is both acknowledged and promptly dismissed in the same 16 page chapter!

Inappropriate definition of a "region of interest" for the analysis, including the lack of a "regional setting"

The ROI for this analysis is defined incorrectly: "The region of interest (ROI) for this analysis includes the census tracts within the counties crossed by Enbridge's preferred route and the route alternatives. The census tracts intersected by the right-of-way for Enbridge's preferred route and route alternatives constitute the geographic area within which potential disproportionate adverse impacts from the proposed Project are likely to occur. Data for the counties and the remaining census tracts within the counties were also compiled to provide a representation of the general population in the area surrounding the proposed Project, against which demographic and poverty data can be compared" (DEIS 11-2).

This is an inappropriately narrow and methodologically lazy definition of the project ROI. Why would we use county lines to define a region of interest for a linear project whose impacts follow ecological logics and not political ones? If a concentration of minority people lives near the pipeline but just across a county line, do we not want to include them in this analysis?

In contrast, the US State Department's Supplemental EIS for the Alberta Clipper Expansion project defined its geographic scope for environmental justice analysis very differently: "The regional setting, which includes the area within 10 miles of the pipeline, encompasses the Line 67 setting. The regional setting also includes the areas that directly border the extended distance (i.e., 40 river-miles downstream) along certain waterways to support the analysis of potential impacts from an accidental release of crude oil" (SEIS 3.7-1).

That SEIS identified 40/280 block groups and 40/109 tracts in the Regional Setting that qualify as "enviro justice" areas (SEIS 3.7-6). For context, through a combination of bad methodology and narrow geographic scope, the DEIS for Line 3 identified just ONE SINGLE census tract along the entire APR that meets the definition of an environmental justice area: "Enbridge's preferred route bisects and RA-03AM crosses the edge of Census Tract 002 in Clearwater County, where the minority population of 25.3 percent exceeds the county level by more than 10 percentage points" (DEIS 11-4).

Lack of consideration of Health Professional Shortage Areas and Medically Underserved Areas/Populations

The DEIS does not identify Health Professional Shortage Areas and Medically Underserved Areas/Populations in order to more accurately assess disproportionate human health impacts. The US State Department's SEIS for the Alberta Clipper Expansion Project identified these areas: "many of the designated Health Professional Shortage Areas and Medically Underserved Areas/Populations include low-income populations, tribal populations and Indian Health Service facilities" (SEIS 3.6-9).

Lack of consideration of exposure to existing contamination

The DEIS does not consider exposure to existing contamination and how that will affect the cumulative impacts to which the project would contribute. Many other environmental justice studies include this analysis. Many studies use the USEPA's EJSCREEN model. "The EJSCREEN model serves as a screening-level tool to identify areas that may have a higher susceptibility to environmental justice impacts because of their demographic composition and existing exposure to contaminants or proximity to facilities. The model uses environmental indicators to quantify susceptibility to exposure, including data related to proximity to hazardous chemical facilities or waste sites (e.g., National Priorities List sites), traffic volume, ambient levels of air pollution and lead paint prevalence" (SEIS 3.7-5).

The US State Department's SEIS for the Alberta Clipper Expansion Project used EJSCREEN to identify 2 sites of existing contamination along the Enbridge mainline corridor: "The Department used the U.S. Environmental Protection Agency's (USEPA's) EJSCREEN model to evaluate potential cumulative impacts to environmental justice populations from National Priorities List sites. The USEPA has identified uncontrolled hazardous waste sites throughout the country that pose the greatest risk to human health and the environment; these sites are placed on the National Priorities List, and the USEPA works with state and local agencies to establish and implement appropriate cleanup plans for the sites. This includes the U.S. Steel Superfund Site and the St. Louis River/Interlake/Duluth Tar Site (USEPA ID# MND039045430) located at the mouth of the St. Louis River, near Duluth, Minnesota" (SEIS 6-29).

The SEIS then integrates this information into its environmental justice conclusions: "An accidental release affecting these census tracts could have adverse cumulative human health impacts on environmental justice populations given existing exposure to environmental contaminants" (SEIS 6-29).

The MPCA Environmental Justice Framework confirms this as one of its recommended strategies: "Develop data-driven screening methodology. Identify data sources and procedures to provide information about possible environmental justice concerns in a geographical area using demographic and environmental variables. Variables provide information on race and income levels, potential environmental exposures, number of facilities and contamination sites in the surrounding area, and other factors to characterize the potential burdens and vulnerabilities faced by residents. Data sources should include other state agency data, county and city data, and EPA-developed tools such as EJSCREEN" (MPCA 12).

Inadequate assessment of the specific resources to be impacted

Chapter 11 provides no comprehensive list or account of the specific resources threatened in tribal communities that will face "disproportionate and adverse impacts." This list should be added. The separate chapter on "Tribal Resources" should be integrated into this Chapter on Environmental Justice in order to outline exactly what is at stake. By quarantining the tribal impacts into their own silo, and repeatedly qualifying that chapter as written "from an Ojibwe perspective," the DEIS is structured to allow those tribal impacts to be ignored. They are not incorporated into the MEPA-required analyses and used to inform conclusions in the main chapters on Impact and Environmental Justice. They are isolated and excluded. It's similar to a university offering a few Black History and Ethnic Studies elective classes as a way of checking the racial equity box without having to meaningfully incorporate Black history and ethnic studies in the primary curriculum. The chapter on environental justice should discuss the tribal resources that are threatened.

The section on Tribal Lands provides a partial list of the critical tribal resources on ceded territory and potentially impacted by the pipeline: "All routes, including Enbridge's preferred route, would cross treaty lands that are off-reservation; these lands may be used for traditional tribal uses such as fishing, hunting and trapping, and/or agricultural activities (as described in Chapter 9). Reserved treaty rights include access to traditional fishing areas. Tribal resources include walleye and trout fisheries, which are predominately used for subsistence. Traditional terrestrial game and waterfowl hunting grounds are habitat for a variety of subsistence resources, including deer, elk, ducks, geese, and turkey. Several federal treaties have reserved wild rice lakes for use by Indian tribes, some of which are also considered Traditional Cultural Properties (Technical Assistance Services for Communities 2016). Wild rice is both a source of income and subsistence for the tribes in the area. These treaty rights and tribal resources are important to the Indian tribes as both natural and cultural resources and reinforce their cultural identity. Additionally, the mental well-being of Indian tribal members is linked to their tribal resources and access to their treaty rights"(11-7).

What about ceremonial uses of land? What about ceremonial uses of plants and animals? What about plant medicines? What about other types of fish? What about leeches sold for bait? What about mushrooms? What about timber resources? What about sacred sites? What exactly are the potential impacts on mental health? How would an oil spill affect these things differently?

The "Health Impacts" section talks about wild parsnip (DEIS 11-10) but no other health impacts. The "Operations Impacts" section talks about the importance of walleyed pike (DEIS 11-10) but no other animals. Who is writing this stuff? The document is encyclopedic and overwhelmingly long and yet not analytically substantive in any way. Please make one centralized, comprehensive list and assess the resources and potential impacts systematically.

Inadequate assessment of the community's characteristics that shape potential impacts on them

An environmental justice analysis cannot simply identify minority and low-income populations and then guess the impacts on them. It must also collect data about characteristics of the community itself that shape the ways in which they will be impacted. For example, one of the most important empirical questions unanswered in the DEIS in this regard is, "what are the levels and patterns of consumption and use of potentially impacted resources in tribal communities?

Not once does this chapter mention the primary federal law on Environmental Justice, without which, the chapter would likely not exist, but is it President Clinton's 1994 Executive Order (EO) 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." This EO should be referenced in the document. The EO explicitly provides for agencies to "collect, maintain, and analyze information on patterns of subsistence consumption of fish, vegetation, or wildlife. Where an agency 8 action may affect fish, vegetation, or wildlife, that agency action may also affect subsistence patterns of consumption and indicate the potential for disproportionately high and adverse human health or environmental effects on low-income populations, minority populations, and Indian tribes."

The CEQ Guidance document also encourages this inquiry: "Agencies should recognize that the impacts within minority populations, low-income populations, or Indian tribes may be different from impacts on the general population due to a community's distinct cultural practices. For example, data on different patterns of living, such as subsistence fish, vegetation, or wildlife consumption and the use of well water in rural communities may be relevant to the analysis" (CEQ 14).

The US State Department's Supplemental EIS for the Alberta Clipper Expansion project demonstrates this deeper, more nuanced approach in its Environmental Justice analysis:

"Although it is not possible to predict the location of an accidental release, if a release of crude oil were to occur on lands used for hunting, fishing and harvesting of wild rice, a disproportionately high and adverse impacts to tribal populations may occur as these heritage resources are important aspects of the traditional way of life for local Indian tribes...The remoteness of tribal lands, the more limited local response capabilities and the difficulty of access to the ROW, particularly in wetland areas, would compound the potential for adverse impacts...In addition, because members of Indian tribes living on reservations are culturally tied to these geographically and politically discrete areas, a significant release incident on tribal lands could have disproportionately high and adverse effects compared to a release on non-tribal lands. Such an incident that would require the temporary or permanent relocation of Indian tribal members away from a reservation would affect these minority populations adversely and more substantially when compared to relocation of residents not living on Indian tribal reservations" (SEIS 5-80).

That study also takes into account that the community's barriers to health care will intensify the health impacts of the project on them: "Depending on the location and extent of a spill or incident, minority or low income populations could be more vulnerable to health impacts associated with a crude oil release because of reduced access to health care services. This factor could result in disproportionately high and adverse impacts to minority and low-income populations in the event of a significant release" (SEIS 5-80). In contrast, DEIS Chapter 11 acknowledges that "the impacts associated with the proposed Project and its alternatives would be an additional health stressor on tribal communities that already face overwhelming health disparities and inequities" (DEIS 11-11), but does not use this information to better describe the impacts or inform potential mitigation efforts. And by defining project impacts as simply an "additional health stressor," it denies the truth of the concept highlighted in the Clipper SEIS above - that existing disparities will make the new impacts worse.

Inadequate consideration of the distribution of impacts within affected communities

Very little information is offered about the distribution of impacts the project will have on the low-income tribal communities along the corridor.

The CEQ Guidance document explains: "When a disproportionately high and adverse human health or environmental effect on a low-income population, minority population, or Indian tribe has been identified, agencies should analyze how environmental and health effects are distributed within the affected community...the distribution as well as the magnitude of the disproportionate impacts in these communities should be a factor in determining the environmentally preferable alternative. In weighing this factor, the agency should consider the views it has received from the affected communities, and the magnitude of environmental

impacts associated with alternatives that have a less disproportionate and adverse effect on low-income populations, minority populations, or Indian tribes" (CEQ 14-15).

Lack of integration of traditional ecological knowledge

This chapter includes no reference to the US EPA Policy on Environmental Justice for Working with Federally Recognized Tribes and Indigenous Peoples. That document provides guidelines that would be useful to the DOC's efforts in this EIS. For example, it calls for integration of traditional ecological knowledge into all aspects of the review process: "The EPA encourages, as appropriate and to the extent practicable and permitted by law, the integration of Traditional Ecological Knowledge into the Agency's environmental science, policy, and decision-making processes, to understand and address environmental justice concerns and facilitate program implementation" (EPA 3).[22] Some of this knowledge is captured in Chapter 9, Tribal Resources, but is siloed off and not integrated into the analysis.

The MPCA Environmental Justice Framework affirms this as recommended strategy: "include community engagement in the screening process to gather community knowledge. Seek out information from community members about conditions in their community, including nonchemical stressors. Use this information to verify and supplement data-driven sources. Discuss what additional sources of information could help to characterize the community" (MPCA 12).

Lack of consideration of Free, Prior, and Informed Consent or the United Nations Declaration on the Rights of Indigenous Peoples

This chapter includes no reference to the international standard framework for Indigenous rights considerations, the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).

In its Policy on Environmental Justice for Working with Federally Recognized Tribes and Indigenous Peoples, the EPA explicitly "recognizes the importance of the United Nations Declaration on the Rights of Indigenous Peoples" and cites the Announcement of U.S. Support of the Declaration in 2010.[23]

The key principle outlined by UNDRIP and relative to this project, yet ignored by this DEIS, is the need to obtain the Free, Prior, and Informed Consent (FPIC) of the Indigenous communities impacted by the project. In some ways, this is a very simple concept - No Means

[22] https://www.epa.gov/sites/production/files/2015-02/documents/ej-indigenous-policy.pdf
[23] UNDRIP, Announcement of U.S. Support on December 16, 2010, U.S. Department of State. http://www.state.gov/documents/organization/184099.pdf

No. The impacted Ojibwe bands are united in opposition to the Project, with support and solidarity from hundreds of other tribes and First Nations, as well as the association of tribal governments, the National Congress of American Indians. Nowhere is this mentioned in the DEIS. This omission supports and perpetuates centuries of dispossession, violence, and attempted genocide of Indigenous people.

Inadequate analysis of human trafficking and associated impacts

"Other concerns during construction are the influx of temporary workers and associated impacts, such as sex trafficking and sexual abuse in local communities. Increases in sex trafficking, particularly among Native populations, are well documented (National Congress of American Indians Policy Research Center 2016). American Indian and minority populations are often at higher risk if they are low-income, homeless, have a lack of resources, addiction, and other factors often found in tribal communities (Minnesota Department of Health [Minnesota DH] 2014). The addition of a temporary, cash-rich workforce increases the likelihood that sex trafficking or sexual abuse will occur. Additionally, rural areas often do not have the resources necessary to detect and prevent these activities. However, Enbridge can prepare and implement an education plan or awareness campaign around this issue with the companies and subcontractors that construct, restore, and operate the pipeline, as well as by working with local communities and tribal communities to raise awareness and provide resources to address the issue" (DEIS 11-10).

It is outrageous that this very serious concern is immediately dismissed with an easy solution. Why is this problem not analyzed in any way? How much trafficking? What kind? Who is responsible? Who are the victims and survivors? How are they abducted or introduced? What is their experience? What have others done in other places to respond? Whas has worked and what hasn't worked?

Where is the data showing the effectiveness of such an education campaign in the past? What resources will they provide to address the issue? Did the local communities consent to working with Enbridge to address the issue together? Have you considered that maybe they would refuse to do so?

Lack of analysis of drug trafficking

Where is the analysis of drug trafficking caused and increased by the temporary influx of workers? These man camps will bring more drugs into communities already devastated by drug epidemics and losing lives weekly. What will happen? How does it happen? How much? Who will be impacted? How are they impacted? What is their experience? What have others done in other places to respond? What has worked and what hasn't worked?

Inadequate discussion of spill impacts

"The largest potential impact on low-income and minority populations, particularly those within the reservations that would be crossed, is from a pipeline failure incident that resulted in the accidental release of oil. For a detailed discussion of accidental releases, refer to Chapter 10. In the event of an accidental release of oil, the severity of impacts would depend on the location and type of resources within the area of the release. However, an accidental release of oil within the boundary of the Leech Lake Reservation or the Fond du Lac Reservation, or a release affecting resources used by the tribes, would disproportionately adversely affect these communities and could affect culturally significant resources depending on the location and magnitude of the release" (DEIS 11-11).

The purpose of this paragraph is unclear, except perhaps to reiterate the point that the route alternatives would pass through reservations, and punt any genuine discussion of disproportionate spill impacts on tribal people by referencing a separate chapter, which discusses spill impacts but not their disproportionate concentration on tribal people. It says that impacts would depend on location and magnitude, but then does not discuss what different impacts would be in different locations and at different magnitudes of release. It is a scoping sentence outlining the need for an EIS chapter on Environmental Justice, rather than part of an EIS chapter on Environmental Justice.

Inadequate analysis of health impacts

The DEIS states that "American Indian communities and individuals have unique health issues associated with historical trauma and structural racism. Data from the Minnesota DH indicate that American Indians in Minnesota have greater health disparities and poorer health outcomes compared to other racial and ethnic groups in Minnesota" (DEIS 11-11). But the DEIS does not even provide a list of these health disparities and outcomes, or an analysis of the magnitude of the disparities, or a description of how the poor outcomes will compound or be compounded by any impacts from the pipeline.

Inappropriate attribution of facts to "an Ojibwe perspective" in order to discount them

"From an Ojibwe perspective, waterbodies at risk from the proposed pipeline include any water directly downstream from a pipeline crossing. Pollution of these waters from a petroleum spill would create a significant hardship to traditional lifeways and spiritual and religious needs of the people" (11.4.2).

Why is the fact that downstream waterbodies are potentially impacted by the pipeline, qualified as being "from an Ojibwe perspective?" What Ojibwe perspective is this from? Did an

Ojibwe person tell the DOC this fact? What is that person's name and what are their credentials? Because no name is included, the fact is presented as hearsay or folklore instead of fact, as if it were a cultural belief and not a hydrological law.

Disproportionate impact on Native populations is concluded but not documented or analyzed

The chapter summary concludes that "Disproportionate and adverse impacts would occur to American Indian populations in the vicinity of the proposed Project." But it is unclear where in the data this conclusion is coming from. Honor the Earth does not dispute its truth, as indeed we have been providing oral and written testimony to document it for several years now. But it is a puzzling conclusion to draw from the chapter's elaborate analysis of census data that, by incorrectly comparing each census tract to its county, only identifies one census tract with a meaningful population of Native people.

It appears that this conclusion is offered not because it was revealed analytically in the Environmental Justice research, but because of its power, as a sweeping unsubstantiated generalization, to allow the corresponding conclusion that any of the alternatives would be just as bad. The DEIS asks the reader to simply toss up their hands and admit the futility of the whole EJ effort, as "any of the routes, route segments, and system alternatives would have a long-term detrimental effect on tribal members as a result of crossing treaty lands," and "any of the routes selected would negatively affect tribal resources and tribal members" (DEIS 11-13).

The conclusion of the EJ chapter should stem directly from the data provided in the EJ chapter and the analysis of that data. The CEQ Guidance provides a very clear framework for defining disproportionate impact so that it may be scientifically identified. This chapter should follow these guidelines and build an empirical record that shows how the answers to these questions are derived from the data chosen and methods used to analyze it:

"When determining whether human health effects are disproportionately high and adverse, agencies are to consider the following three factors to the extent practicable: (a) Whether the health effects, which may be measured in risks and rates, are significant (as employed by NEPA), or above generally accepted norms. Adverse health effects may include bodily impairment, infirmity, illness, or death; and (b) Whether the risk or rate of hazard exposure by a minority population, low-income population, or Indian tribe to an environmental hazard is significant (as employed by NEPA) and appreciably exceeds or is likely to appreciably exceed the risk or rate to the general population or other appropriate comparison group; and (c) Whether health effects occur in a minority population, low-income population, or Indian tribe affected by cumulative or multiple adverse exposures from environmental hazards" (CEQ 26).

"When determining whether environmental effects are disproportionately high and adverse, agencies are to consider the following three factors to the extent practicable: (a) Whether there is or will be an impact on the natural or physical environment that significantly (as employed by NEPA) and adversely affects a minority population, low-income population, or Indian tribe. Such effects may include ecological, cultural, human health, economic, or social impacts on minority communities, low-income communities, or Indian tribes when those impacts are interrelated to impacts on the natural or physical environment; and (b) Whether environmental effects are significant (as employed by NEPA) and are or may be having an adverse impact on minority populations, low-income populations, or Indian tribes that appreciably exceeds or is likely to appreciably exceed those on the general population or other appropriate comparison group; and (c) Whether the environmental effects occur or would occur in a minority population, low-income population, or Indian tribe affected by cumulative or multiple adverse exposures from environmental hazards" (CEQ 26).

Lack of analytical depth allows for inaccurate conclusion that any of the alternatives would be equally bad

This chapter's unsound methodology and lack of analytical depth allow "Based on the discussion of tribal resources in Chapter 9, any of the routes, route segments, and system alternatives would have a long-term detrimental effect on tribal members as a result of crossing treaty lands. As summarized in Chapter 9, from a tribal perspective, the impacts cannot be categorized by duration (short term or permanent) or by extent (ROI, construction work area, permanent right-of-way). It is also not possible to determine which route alternative is better from an EJ perspective when each alternative affects tribal resources, tribal identity, and tribal health. Any of the routes selected would negatively affect tribal resources and tribal members"

Inadequate consideration of potential mitigation measures or process for selecting and implementing them

The DEIS is quick to point out that "a finding of disproportionate and adverse impacts does not preclude selection of any given alternative" (DEIS 11-13) and offers a list of potential mitigation strategies (DEIS 11-14). However, in doing so, it does not incorporate the views of the impacted communities or reflect their needs and preferences. It cites the CEQ's Guidance Document outlining the need to do so, but it does not do it:

"The CEQ recommends evaluating mitigation options by eliciting "the views of the affected populations on measures to mitigate a disproportionately high and adverse human health or environmental effect on a low-income population, minority population, or Indian Tribe and should carefully consider community views in developing and implementing mitigation

strategies." Furthermore, mitigation measures Chapter 11 Environmental Justice 11-14 Line 3 Replacement Project Draft Environmental Impact Statement identified in an EIS "should reflect the needs and preferences of affected low-income populations, minority populations, or Indian tribes to the extent practicable" (DEIS 11-14).

Instead, the DEIS merely deflects responsibility onto the PUC: "these measures can be evaluated in the final Certificate of Need or route permit decision. This provides an additional avenue for public notice and involvement" (DEIS 11-14).

Inadequate Social Impact Assessment (SIA)

The DEIS's social impacts assessment (SIA) should be improved in the following ways:

- Identifying stakeholder groups. There has clearly been an extensive effort to identify tribes living nearby as well as those with treaty rights, which is laudable. However, an SIA also should solicit input from local NGOs with an interest in the area, including conservationist groups.
- The task of an SI is to establish a "baseline" with data on where the community is right now, before the project, and then construct a "forward scenario" – what is likely to happen in the absence of any project. This should then be compared to projections of what is likely to happen under various project alternatives. The way to do this involves collecting data on socioeconomic indicators. This can be done through household surveys (asking families about their income sources & amount, typical household structure, assets, home ownership vs. rental, etc.), as well as through assessment of the community infrastructure (community centers, social services, main employers, proximity to hospitals, education levels & access to education, etc.).
- There should also be an opinion survey with a large enough sample to be statistically significant. The survey should be designed and conducted by trained and experienced social scientists.
- There is a need to recognize diversity within stakeholder groups – e.g. young vs. old, women vs. men. For the communities, this could be captured in a survey that separates responses and analyses them by gender, age group, socio-economic status, etc.
- It would be interesting to include, as part of the survey, a "risk rating" – essentially, a table in which people list the risks they foresee and rate them according to both likelihood and severity.
- The SIA needs to consider, separately, both the construction and the operations phases.
- The construction phase should consider the following issues:

    - Will there be local recruitment or will the company temporarily bring workers from outside? If local recruitment, what skills/education are needed? What communities are workers likely to be recruited from?
    - If external recruitment, where will construction workers be housed? How will the company address a potential increase in sexual violence and trafficking associated with the "man camps" that come with construction?
- Construction could also impact archeological sites. So, there should be an archeological survey conducted by trained professionals in collaboration with local knowledgeable community members. This has been called for on several occasions, as documented in Appendix P:
    - A Traditional Cultural Places inventory was called for by Jim Jones, Cultural Resources Director of MIAC in a letter to DoC on 3/31/17.
    - A letter from Honor the Earth states that at least 280 "significant areas of traditional cultural use and sacred sites" were identified through an EPA Technical Assistance for Communities contract. This letter also calls for an evaluation by MIA archeologists.
    - A letter from the Mille Lacs Band calls for the EIS to describe how cultural items, if discovered during construction, will be preserved and repatriated as per the Native American Graves Protection and Repatriation Act.
- For the operations phase, the main concern is potential impacts from a spill, particularly:
    - human health consequences of a spill;
    - who would pay for treatment;
    - an inventory of locally accessible health care facilities and their capacity to treat health issues stemming from exposure to, e.g., benzene from a spill;
    - impacts on fish & wild rice & hunting of a spill – this should involve an inventory of how much of people's diet those wild resources compose (there are ethnographic techniques to measure this);
    - projection of economic impacts of a spill, e.g. on fishing, hunting, tourism, agriculture.
- For both phases, an important way to project impacts is to look at other, similar projects. This information can be hard to find, but can come from a thorough review of published and, to the extent accessible, unpublished literature.
- Many of the tribes brought up climate change as an associated issue of concern. One way to factor this in is through an estimation of the social cost of the carbon the pipeline would generate. Currently, the estimate is about $40 / ton (although this is widely seen as an underestimate).
- The SIA mentions, but does not fully account for, cumulative impacts. For instance, wild rice beds could be examined for current levels of various pollutants, which would allow

for a projection of whether the release of additional pollutants, such as through construction or a spill, would cause those levels to surpass acceptable thresholds.

- The SIA should not be thought of as a one-off but as an ongoing process, continually revisited and re-assessed periodically. As part of that process, the communities should help to develop a Participatory Monitoring Plan. Apparently this is being negotiated for Line 3 in Canada, so there is no reason not to do so here as well. There should also be a Social Impact Management Plan in which tribal members and other community members help to decide how, whether from construction or in the event of a spill, the resultant social impacts would be managed.
- There should also be consideration given to community grievance mechanisms. In other words, if there is a dispute between company and community, how will this be addressed? How will the company address complaints, and how will third-party arbitration be carried out? What is the community's option for legal recourse?
- It would be good to see some consideration of the concept of Free, Prior, and Informed Consent in the SIA, given that this is an internationally recognized (and UN-endorsed) best-practice approach when working with Indigenous communities.
- There should also be some consideration given to the possibility of the community negotiating an Impact & Benefit Agreement with the company. There is a lot of precedent for this, too much to go into here. I can send guidance documents if people are interested.
- Having an explicit Environmental Justice component to an SIA per se is, to my knowledge, rather unusual. I am checking with a colleague who is an expert in EJ and will hopefully be able to get more information on this soon.

COMMENTS ON DEIS CHAPTER 12 – CUMULATIVE POTENTIAL EFFECTS

DEIS Chapter 12 excludes the two most obvious sources of cumulative potential effects related to the Project:

- the likely expansion of the Project to a capacity 915,000 bpd; and
- the need for additional pipeline capacity downstream from the Superior Terminal.

Both the expansion of the Project and the need for additional downstream pipeline capacity in Wisconsin are reasonably foreseeable, and should be regarded as inevitable.

Expansion of Project Capacity to 915,000 bpd

DEIS Chapter 12 fails to discuss the cumulative potential effects of expansion of the Project to 915,000 bpd. This error appears to be consistent with the following statement in DEIS Section 2.10, which states:

> Any future actions associated with additional increases in throughput on the proposed Line 3 Replacement would require a new application for a Certificate of Need from the Commission and a review of the need for the requested increase. Enbridge has not indicated any plans for future increases in throughput at this time and hypothetical future increases in throughput have not been evaluated as part of this EIS.

The fact that an expansion of capacity of the Project beyond 760,000 bpd would require a certificate of need from the Commission is irrelevant to the need for the DEIS to analyze the cumulative potential effects of such expansion.

According to page 8-3 of Enbridge's CON Application, the Project has an ultimate capacity of 915,000 bpd:

> Pursuant to the requirement of Minn. R. 7853.0530, Enbridge is providing for the Commission's information the ultimate design capacity for the pipeline considering its diameter, wall thickness, steel grade, and crude slate (irrespective of the number of pump stations proposed for the Project), which is 1,016 kbpd. This figure in turn, yields an ultimate annual average capacity of 915 kbpd. Further engineering design studies would be required to determine the number of pump stations needed to achieve the ultimate design capacity level, but that is not the level sought in this Appliction [stet.].

Operation of the Project at its ultimate capacity represents a net capacity expansion of 525,000 bpd over the capacity of the existing Line 3 Pipeline, and an expansion over the Project of 155,000 bpd, which is itself a substantial volume of oil. Expansion of the Project from 760,000 bpd to 915,000 bpd would increase its capacity by 20.4%.

The DEIS does not describe the physical changes that would be required to increase capacity of the Project from 760,000 bpd to 915,000 bpd. Therefore, it is not possible to know whether such subsequent changes would require any substantial construction effort or environmental review. It could be that the expansion would require only the installation of new pumps without the construction of any new pump stations or construction of other facilities. This

could limit the impacts of an expansion below the threshold where the Commission would conduct any substantial future environmental review.

In contrast, the vast majority of the construction activity and resource commitment needed to allow operation at 915,000 bpd would be performed as part of the initial construction of the Project, including installation of higher capacity pipe and construction of all other pressurized components of the pipeline, including valve, PIG launchers, manifolds, etc. to allow operation of the Project at 915,000 bpd. Such construction represents a massive initial investment of resources and money, and constructing the Project with higher pressure components would increase the environmental impacts of construction now. Yet, the DEIS does not evaluate the construction that would be undertaken following the initial phase of construction, and then compare this to the construction that would be undertaken as part of the first phase of the Project that is necessary to allow the expansion. Instead, DEIS Section 2.10 merely states: "Enbridge has not indicated any plans for future increases in throughput at this time and hypothetical future increases in throughput have not been evaluated as part of this EIS." This statement is specious. It is irrational to conclude that Enbridge would invest at least hundreds of millions of dollars now in substantially thicker pipe and higher pressure pipeline components to allow operation of Line 3 at 915,000 bpd and state that Enbridge has no plans future increases in throughput at this time. Such statement is contradicted by all available evidence. Enbridge may not have chosen an exact date when it would increase the capacity of the Project, but the great weight of evidence shows that it is almost certain that Enbridge will expand the capacity of the Project during the timeframe of impacts considered by the DEIS. It is reversible error for the DEIS to accept a bald-faced statement about the likelihood of future expansions that is contradicted by a project applicant's own design, commitment of physical and financial resources, and statements to investors.

Construction of the Project with pipe that is sufficient to transport up to 915,000 bpd, requires that the pipe be constructed now using thicker steel. Page 8-5 of the CON Application contains Table 8.1.E.2-1:

Table 8.1.E.2-1 Mainline Pipe Design Parameters	
Design Parameter	**Specification**
Pipe Size (Diameter)	36-inch outside diameter (NPS 36)
Estimated Length	337 miles
Wall Thickness	
Nominal	0.515 inch
Road Bore	0.600 inch
Cased Railroad	0.600 inch
Uncased Railroad	0.750 inch
Horizontal Directional Drill (HDD)	0.750 inch
Coating, mainline	14 mils Epoxy Bonding
Coating, trenchless	40 mils Epoxy Bonding ABR
Grade (Pipe Type)	X70 carbon steel pipe manufactured according to API Specifications 5L PS2
Maximum Operating Pressure[3]	1440 psig

Thus, the steel wall thickness will range from 0.515 inch to 0.750 inch. This page also states that the Project will be constructed from X70 carbon steel manufactured according to API Specifications 5L PS2.

In contrast, the existing Line 3 Pipeline is a 34-inch diameter pipe comprised of steel with a thickness of 0.375 inches.[24] Enbridge's original application letter for a Presidential Permit for Line 3 states:

> The facilities in respect of the proposed 34 inch pipe line at the international boundary are as follows:
>
> A pipe line of the pipe manufactured to American Petroleum Institute specification 5LX, with an outside diameter of 34 inches, a wall thickness of .375 inches, minimum yield strength of 52,000 pounds per square inch, proposed test pressure after installation of 1028 pounds per square inch . . . .

Thus, construction of a pipeline to move just 760,000 bpd would require a smaller diameter pipe with thinner steel.

[24] Letter, Lakehead Pipe Line Company to U.S. Secretary of State (August 31, 1967) (application for a Presidential Permit for Line 3 Pipeline).

In comparison, the Line 67 Project approved by the Commission in 2008[25] has an ultimate capacity of 800,000 bpd[26] and Enbridge's application for that pipeline contains the following pipe specification[27]:

> Pipe will be 36-inch outside diameter, 0.375 to 0.469 inch wall thickness, API 5L Grade X70, double submerged are (DSAW) steel pipe. The maximum allowable operating pressure will be 1050 to 1313 psig.

This means that the Project will be constructed from pipe with a pipe wall thickness greater than necessary to transport 760,000 bpd. Both the existing Line 3 and Line 67 pipe were constructed using pipe that is 73% thinner than the Project. Put another way, based on pipe wall thickness alone, the Project will be built using at least 27% more steel than is necessary to transport 760,000 bpd. But, this percentage does not account for the greater amount of steel needed to fabric a 36-inch diameter pipe as compared to a 34-inch diameter pipe. Further, all other pressurized components would also be constructed using greater amounts of steel than for a pipeline designed to transport up to 760,000 bpd. Therefore, construction of the Project as designed will require significantly greater amounts of steel than required to transport 760,000 bpd, which is the purported purpose of the Project contained in DEIS Section 2.1.

Construction of the Project with pipe that is larger diameter and has thicker pipe walls than required to transport the capacity proposed by the Project means that each pipe segment's weight is greater than necessary for the Project and will result in greater road wear, energy consumption, and pollution impacts to transport and construct the pipeline than is required for the Project's capacity. Further, the use of thicker steel also results in thicker welds and greater use of welding materials and greater air impacts resulting from welding activities. In contrast, it is likely that the only major equipment remaining to be installed to allow operation at 915,000 bpd would be additional pumps, which may be installed only in the pump stations that would be modified or constructed for the Project.

Enbridge states: "Further engineering design studies would be required to determine the number of pump stations needed to achieve the ultimate design capacity level . . . ." It seems

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[25] In the Matter of the Application of Enbridge Energy, Limited Partnership, and Enbridge Pipelines (Southern Lights) LLC for a Certificate of Need for the Alberta Clipper Pipeline Project and the Southern Lights Diluent Project, DOCKET NO. PL-9/CN-07-465, Order Granting Certificate of Need (Dec. 29, 2008).

[26] 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. PL9/CN-13-153, Application for a Certificate of Need
for a Crude Oil Pipeline, Section 7853.0230, Page 12.

[27] Application for Certificate of Need for a Crude Oil Pipeline, Docket No. PL9/CN-07-465, Alberta Clipper and Southern Lights Diluent Projects, June, 2007Section 7853.0530, Page 5.

doubtful that Enbridge is clueless about the likely number and locations of new pumps. The fact that additional engineering studies would be needed does not mean that an expansion is not possible or difficult, it just means that Enbridge would need to confirm the engineering for an expansion given operational data. Even if a limited number of pump stations are needed, their construction and the impacts of their construction would not be substantial relative to the impacts of constructing the Project now to allow higher capacity operation. Likely, even the foundations and locations for the additional pumps are included in the designs for the Project's pump stations, such that the only remaining work to increase the capacity of the Project at these pump stations would be to ship the pumps to the pump stations and install them. Compared to the costs, effort, and impacts associated with constructing the Project to operate at higher pressure, the costs, effort, and impacts of installing the pumps would *de minimis*. Consequently, most of the impacts of expanding capacity to 915,000 bpd will be created during construction of the Project, such that the expansion must be seen as being reasonably foreseeable, if not inevitable.

Construction of the Project to allow future expansion to 915,000 bpd and future operation at such capacity would have "cumulative potential effects," as this term is defined by Minn. R. 4410.0200, Subp. 11a, which includes consideration of the effects of "future projects actually planned or for which a basis of expectation has been laid." With regard to whether an expectation has been laid, this definition states:

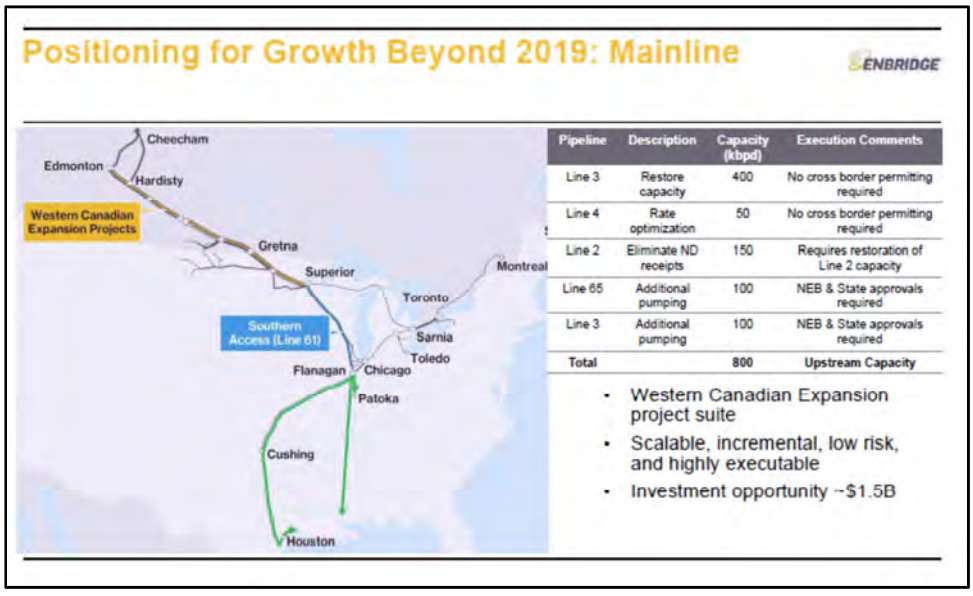
> In determining if a basis of expectation has been laid for a project, an RGU must determine whether a project is reasonably likely to occur and, if so, whether sufficiently detailed information is available about the project to contribute to the understanding of cumulative potential effects. In making these determinations, the RGU must consider: whether any applications for permits have been filed with any units of government; whether detailed plans and specifications have been prepared for the project; whether future development is indicated by adopted comprehensive plans or zoning or other ordinances; whether future development is indicated by historic or forecasted trends; and any other factors determined to be relevant by the RGU.

A review of available facts demonstrates that the Commission must find that expansion of Project capacity to 915,000 bpd is reasonably likely to occur and that sufficient detailed information about the expansion is available.

With regard to whether sufficiently detailed information is available, Enbridge does in fact have detailed plans and specification for expansion of the Project, an example of which is the specification for thicker walled, higher pressure steel pipe. Other examples include the

specifications for all other pressurized components, such as valves, which specifications are matched to the pipe steel specification. Likely, the specifications for the pump stations have reserved locations for the installation of additional pumps. Together, all of these specifications provide enough information to confirm that the Project could be made to operate at 915,000 bpd.

With regard to whether Enbridge plans to expand Project capacity, it has stated in multiple investor presentations that it plans to do. In its July, September, and November 2016 and January 2017 Investor Presentation Enbridge provided the following slide that shows that Enbridge has told its investors that it intends to expand the Project sometime after 2019. Since Enbridge plans to start operation of the Project in 2019, this means that expansion of the Project within the timeframe analyzed by the DEIS is foreseeable and very likely to occur. With regard to the fact that Enbridge notes that this expansion would be only 100,000 bpd, instead of the 155,000 bpd expansion noted in its CON Application, this slide also states that the net capacity increase provided by the Project would be 400,000 bpd instead of 390,000 bpd, even though Enbridge submitted the CON Application long before it issued this investor presentation. Similar slides are included in Enbridge's September 2016, November 2016, and January 2017 investor presentations. The fact that Enbridge is identifying the expansion of Line 3 to its ultimate capacity to its investors is also evidence that the expansion project is "substantially certain to be undertaken sequentially over a limited period of time." Minn. R. 4410.0200, Subp. 60.



With regard to "whether future development is indicated by historic or forecasted trends," Enbridge's forecast of demand for crude oil transportation services assumes that future capacity expansion of the Mainline System will be necessary. Further, Enbridge took a similar approach

of incremental expansion with regard to the Line 67 (Alberta Clipper) Pipeline, which had an initial capacity of 450,000 bpd and was expanded in two phases to 800,000 bpd of operation in Minnesota. Thus, historic examples and Enbridge's own forecasted trends make expansion of the Project "reasonably likely to occur."

Expansion of the Project is a phased action under MEPA. The law does not require that a "phased action" have a date certain for when it would be constructed. Instead, it requires only that a project be "substantially certain" to happen. Enbridge's significant commitment of material and financial resources to allow expansion of the Project, in combination with its statements to its investors that it is planning to expand the Project, make the expansion "substantially certain" to happen. In light of the evidence, the DEIS Section 2.10 statement that "Enbridge has not indicated any plans for future increases in throughput at this time" is false, because it has in fact indicated plans for future increases.

Minn. R. 4410.2300(H) requires that "for the proposed project and each major alternative there shall be a thorough but succinct discussion of potentially significant adverse or beneficial effects generated, be they direct, indirect, or cumulative." Since design of the pipe in the Project to transport up to 915,000 bpd creates an expectation of a future expansion of the Project, the effects of operating a future expansion at up to 915,000 bpd are cumulative potential effects and must be analyzed by the DEIS.

Expansion of the Project to a capacity of 915,000 bpd is a phased action pursuant to Minn. R. 4410.0200, Subp. 60, because expansion of the Project would have "environmental effects on the same geographic area" and would be "substantially certain to be undertaken sequentially over a limited period of time." As a phased project, the expansion "must be considered in total when determining the need for an EIS and in preparing an EIS." Minn. R. 4410.2100, Subp. 4 (emphasis added). Although this subpart also allows the Commission to "treat the present proposal as the total proposal," it may also "select only some of the future elements for present consideration in the threshold determination and EIS."

With regard to its exercise of discretion of this phased action under Minn. R. 4410.0200, the DEIS contains no information about the potential scope of construction required for this subsequent phase. As such, it is impossible for the Commission to rationally evaluate whether this expansion will create significant independent impacts, or whether instead the impacts of the subsequent phase would be *de minimis*. For example, expansion of capacity to 915,000 bpd could include only the installation of additional pumps at existing pump stations, and not include any new impacts to land or the construction of any new facilities. Should the impacts of the subsequent phase be *de minimis*, it would be irrational for the Commission to evaluate such impacts as a later phased action because doing so would be inefficient and result in unnecessary segmentation of environmental review. In any case, the EIS should contain sufficient

information for the Commission to make a rational decision on whether or not to treat the Project as the "total proposal" or to exercise its discretion to "select only some of the future elements for present consideration in the . . . EIS", but at present the DEIS is completely silent about the potential for a subsequent phase.

The Commission should consider the 915,000 bpd ultimate capacity with regard to those elements of construction that would be impacted now by virtue of use of thicker steel, because these impacts will occur during construction and would be a moot point in any subsequent environmental review. For example, the use of 27% heavier pipe for the same segment length would have a correspondingly greater impact on road wear and tear during transport of the pipe to construction sites. Use of thicker pipe steel would also irretrievably commit substantially greater amounts of iron and other metals (27% more) to the Project than are necessary to transport 760,000 bpd. It would also commit greater amount of fuel to the project to transport the steel to Minnesota and then to construction sites. It would also commit greater amounts of fuel to construction of the project, due to the greater power need to lift and place the steel in the ground. It would also result in greater air impacts caused by welding thicker steel. Such impacts must be evaluated before approval of use of the thicker steel pipe to be used in the Project.

Unlike expansion of a road project either in terms of distance or lanes, creating the potential to expand the capacity of an existing crude oil pipeline segment in the future requires an irretrievable commitment of physical and financial resources now. Further, most of the impacts of building a higher capacity pipeline occur before its expansion. The Commission must make a reasoned judgement about which elements of a proposed future phase must be evaluated in the initial phase. It would be irrational to ignore the impacts related to construction of a higher capacity pipeline when such impacts occur during the initial construction of the pipeline. It would also not be rational to fail to evaluate whether the impacts of a subsequent expansion of a pipeline would be *de minimis* relative to the impacts of constructing the pipeline so that it could be expanded, so that a rational decision can be made on whether to simply evaluate the impacts of an expansion in an initial environmental review. Where some or all of the "future elements" of a phased project relate closely to construction activities that would be analyzed in an initial environmental review, an RGU must consider which elements of the subsequent phase must be considered in the initial environmental review. The fact that Enbridge intends to commit substantial resources and effort in its construction of the Project to allow its expansion is evidence that the expansion project is "substantially certain to be undertaken sequentially over a limited period of time." Minn. R. 4410.0200, Subp. 60.

The Commission should also use the Project's ultimate capacity with regard to consideration of alternatives, because it would be unreasonable to not consider alternatives in light of the Project's ultimate capacity. The use of thicker steel increases the future utility of the

pipeline relative to alternatives, because expansion through the use of additional pumping horsepower might require fewer resources and have lower impacts that expansion of alternatives. Moreover, consideration of a lower capacity alternative to the Project would result in the use of thinner steel, and this should be compared to the use of Enbridge's proposed steel thickness of the Project.

The Commission should also evaluate the potential impacts of oil spills from the Project based on its ultimate capacity, because it is likely that the Commission will not conduct new spill modeling and oil spill impact analysis in any subsequent application for expansion of the Project to 915,000 bpd. Also, the Commission, the parties, and Minnesota's citizens should know now what the likely spill impacts would be from operation at 915,000 bpd, because this is the likely foreseeable capacity for the majority of the life of the Project, such that construction of the Project would likely result in foreseeable oil spills larger than those that would result from operation at 760,000 bpd.

Further, the expansion of the Project is not "hypothetical." The word "hypothetical" is defined as: "involving or being based on a suggested idea or theory : being or involving a hypothesis : conjectural." Mirriam-Webster Online Dictionary. The expansion of the Project is not based on mere conjecture and not a mere whimsical idea or theoretical. Instead, the evidence available to the Commission shows that the expansion is "substantially certain" to happen. Minn. R. 4410,0200, Subp. 60.

The expansion is also not "hypothetical" because Enbridge has described the expansion of the Project to its investors. Enbridge does not describe its future expansion plans to its investors as "hypothetical" plans. Instead, they are plans presented to investors that attempt to show that Enbridge will take actions in the future that would increase the value of investments. The information provided to investors about the expansion of Line 3 is provided to aid them in decisions about committing financial resources to Enbridge. Accordingly, even though the information is about Enbridge's future plans, it is clear that Enbridge intends that this information be relied upon in real-world financial decisions. Enbridge's statements aobut its plans to expand the capacity of the Project in combination with its proposed commitment to construct the project with thicker and stronger steel pipe and other components, make the expansion project a phased action that is "substantially" certain to happen. Accordingly, the Commission must evaluate the potential cumulative effects of the expansion of the Project to 915,000 bpd.

Construction of a Downstream Pipeline in Wisconsin and Illinois

DEIS Chapter 12 fails to identify construction of a pipeline in Wisconsin as a potential connected action that would have cumulative potential effects. The following table shows that it

is physically impossible to use all of the net Mainline System capacity increase that would be provided by the Project without constructing additional pipeline capacity from the Superior Terminal through Wisconsin.

Capacity Into Superior Terminal		**Capacity Out of Superior Terminal**		**Capacity in minus Capacity Out (bpd)**
Pipeline	**Capacity In (bpd)**	**Pipeline**	**Capacity Out (bpd)**	
Line 1	237,000	Line 5	540,000	
Line2B	442,000	Line 6	667,000	
Line 3	390,000	Line 14	318,000	
Line 4	796,000	Line 61	1,200,000[28]	
Line 67	800,000	Calumet Refinery[29]	45,000	
Total Pipeline Capacity Into Superior Terminal	2,665,000	Total Pipeline Capacity Out of Superior Terminal	2,770,000	-105,000
Line 3 Replacement Project Initial Capacity Net Increase	370,000	Assume No Additional Capacity Constructed Out of Superior Terminal	0	+370,000
Mainline Capacity Into Superior Terminal With Line 3 Replacement Project at Initial Capacity	3,035,000	Total Pipeline Capacity Out of Superior Terminal	2,770,000	+265,000
Line 3 Replacement Project Ultimate Capacity Net Increase above Initial	155,000	Assume No Additional Capacity Constructed Out of Superior Terminal	0	+155,000
Mainline Capacity Into Superior Terminal With Line 3 Replacement Project at Ultimate Capacity	3,190,000	Total Pipeline Capacity Out of Superior Terminal	2,770,000	+420,000

There is currently up to 105,000 bpd more capacity out of Superior Terminal than there is into it; therefore, it would be possible to use the Project's capacity up to this amount without

[28] Since the pump stations in Wisconsin have received all permits, and it is Honor the Earth's understanding that their construction is essentially complete, it is reasonable to assume that Enbridge will expand Line 61's capacity to 1,200,000.

[29] The Calumet Refinery does not operate at 100% of its capacity on a sustained basis, so its average demand would be less than 45,000 bpd.

constructing a pipeline in Wisconsin. This would still leave up to 265,000 bpd of the Project's capacity stranded at the Superior Terminal. Thus, absent construction of a pipeline in Wisconsin, it would be impossible for Enbridge to use 72% of the Project's initial net capacity increase. It is irrational to expect that Enbridge would build the Project for the purpose of increasing the capacity of the Mainline System and not build sufficient downstream capacity to transport the full volume of crude oil that could be transported by the Project.

Since Section 2.5 considers the cost of building a pipeline in Canada and North Dakota that would connect to the pipeline built in Minnesota, it must also consider the cost of constructing a pipeline that would be needed in Wisconsin and Illinois. Such cost is relevant and necessary when comparing the cost of the Project to System Alternative SA-04, which would deliver crude oil to Illinois. Absent such cost estimate, it would not be possible to compare the socioeconomic impacts of SA-04 to the Project and logically required pipeline capacity in Wisconsin. Enbridge has provided a cost estimate of $3.5 to $4 billion, as discussed below.

The DEIS must also consider construction of additional pipeline capacity in Wisconsin to be a connected project under Minn. R. 4410.0200, Subp. 9c, which defines a "connected action" as follows:

> Two projects are "connected actions" if a responsible governmental unit determines they are related in any of the following ways:
>
> A. one project would directly induce the other;
>
> B. one project is a prerequisite for the other and the prerequisite project is not justified by itself; or
>
> C. neither project is justified by itself.

Since it would be impossible for Enbridge to use all of the net increase in the Mainline System capacity that would be provided by the Project without constructing additional pipeline capacity out of the Superior Terminal, the Project would: (a) directly induce construction of an additional pipeline in Wisconsin; (b) be a prerequisite for an additional pipeline in Wisconsin; and (c) not be justified without construction of additional pipeline capacity in Wisconsin. As regards potential impacts, MEPA does not distinguish between impacts that would be caused by a connected project within the State of Minnesota versus the impacts to State interests that would be caused by a connected action located outside of Minnesota. Therefore, a pipeline in Wisconsin is a connected action as defined by Minn. R. 4410.0200, Subp. 9c.

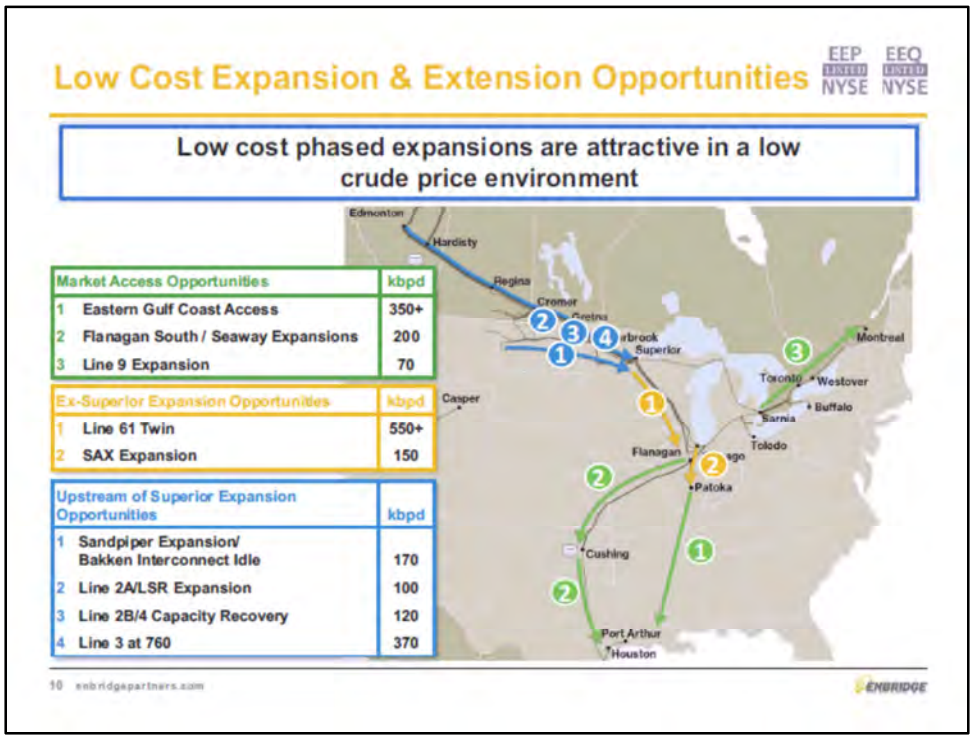
Minn. R. 4410.2100, Subp. 4, states: "Multiple projects and multiple stages of a single project that are connected actions . . . must be considered in total . . . in preparing the EIS." Although construction of a pipeline in Wisconsin would obviously not be within Minnesota's permitting jurisdiction, such construction would nonetheless impact and have cumulative potential effects related to Minnesota's environment because it would create a greater risk of oil spills into the Nemadji River and Lake Superior, which could threaten Minnesota's interests in Lake Superior aquatic resources. Also, a pipeline out of the Superior Terminal would cross the St. Croix River watershed and thereby threaten Minnesota's interests in this river's aquatic resources. Therefore, construction of a pipeline in Wisconsin would be a reasonably foreseeable future project that would have cumulative potential effects on Minnesota's environment, such that its cumulative potential effects on Minnesota must be evaluated by the DEIS.

A pipeline in Wisconsin would have cumulative potential effects as this term is defined by Minn. R. 4410.0200, Subp. 11a, because it is a project that would affect the some of the same environmental resources as the Project and a reasonable expectation has been laid for an additional Wisconsin pipeline, because it would be impossible to use 72% of the Project's capacity absent construction of an additional pipeline in Wisconsin, such that construction of a pipeline in Wisconsin is reasonably likely to occur. Further, it is Honor the Earth's understanding that Enbridge has conducted significant right of way analysis for a new pipeline corridor in Wisconsin, as well as engineering related to a new pipeline in this corridor. Thus, Enbridge has available to it "sufficiently detailed information . . . about the project to contribute to the understanding of cumulative potential effects."

Moreover, the Commission may not simply ignore construction of a pipeline in Wisconsin without investigating:

> whether any applications for permits have been filed with any units of government; whether detailed plans and specifications have been prepared for the project; whether future development is indicated by adopted comprehensive plans or zoning or other ordinances; whether future development is indicated by historic or forecasted trends; and any other factors determined to be relevant by the RGU.

Enbridge has proposed to construct a pipeline through Wisconsin called the "Line 61 Twin." For example, Enbridge presented the following slide to its investors in its Fourth Quarter 2014 Earnings & 2015 Financial Guidance Presentation on February 19, 2015, showing that it planned to construct a "Line 61 Twin" pipeline from Superior, Wisconsin, to Flanagan, Illinois, which would have an initial capacity of 550,000 bpd:

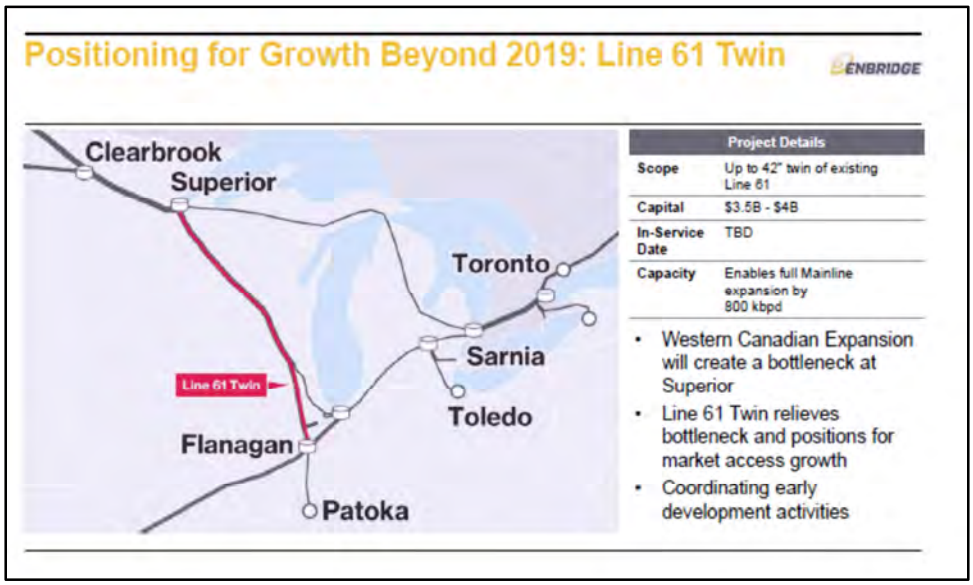


Enbridge presented this same slide in the following presentations:

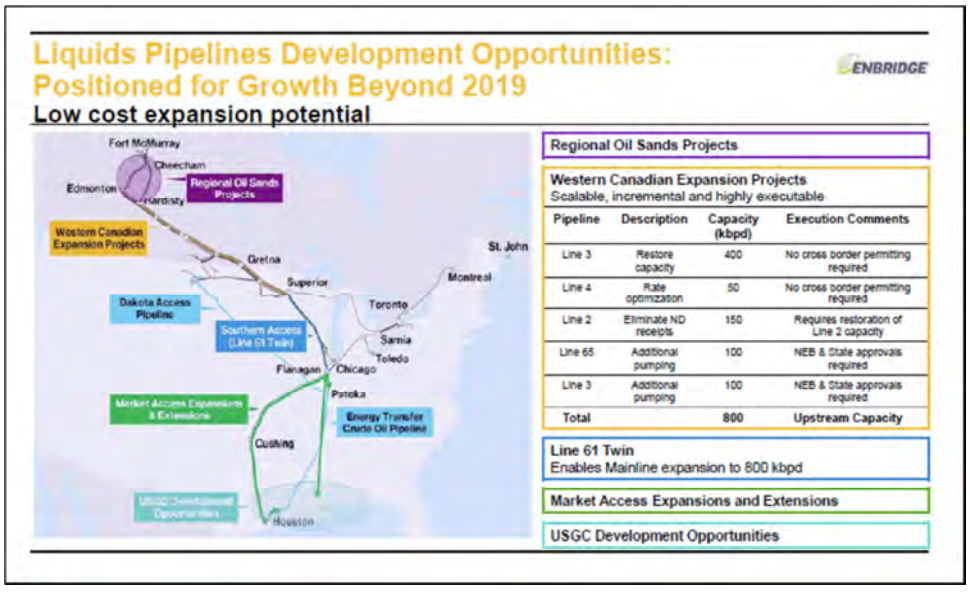
- March 2015 Investment Community Presentation;
- June 23-24, 2015, Credit Suisse MLP & Energy Logistics Conference; and
- December 2015 Investment Community Presentation.

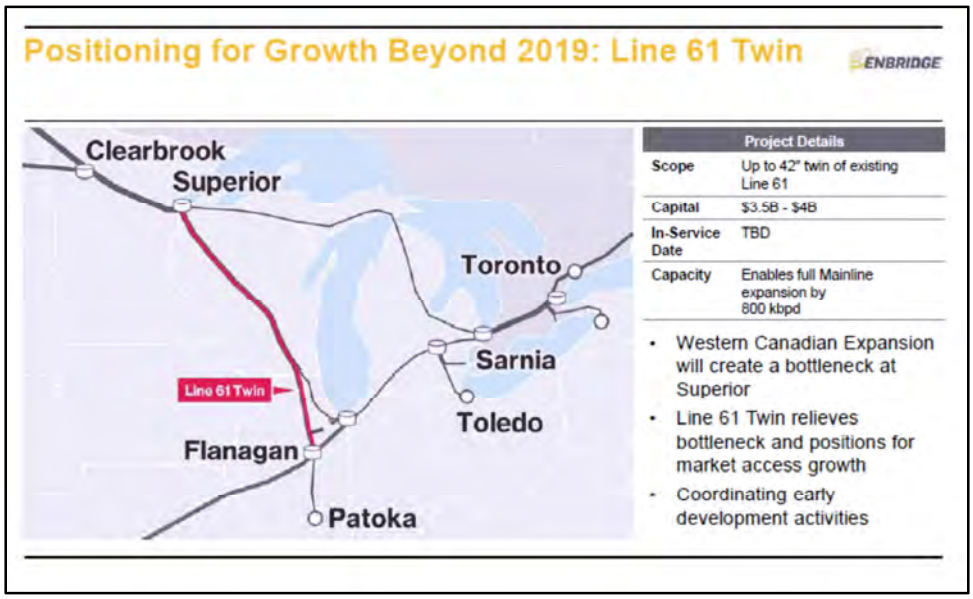
Similarly, Enbridge included the following slide on page 30 of its July 2016 Investment Community Presentation, which for the "Line 61 Twin" project provides:

- a capital cost estimate of $3.5 to $4 billion;
- an estimated capacity of 800,000 bpd; and
- an admission that the "Line 61 Twin" will be necessary to relieve a bottleneck at Superior caused by Enbridge's planned western Canadian pipeline expansion, which includes the Project as well as other system expansions.



Enbridge included the following slides on page 31 of its September 2016 Investment Community Presentation, on pages 39 and 40 of its November 2016 Investment Community Presentation, and on pages 40 and 41 of its January 2017 Investment Community Presentation, which continue to show a commitment to build the "Line 61 Twin" project:





Since January of 2017, Enbridge's presentations have avoided any mention of the additional capacity needed to fully utilize the Project's capacity. Instead, Enbridge has claimed that full expansion of Line 61 "connects restored Line 3 volumes to Market Access pipelines," which is possible for up to 105,000 bpd (28%) of the Project's initial capacity, but not possible for the remaining 72% of the Project's capacity. Enbridge's obfuscation aside, the foregoing slides provide ample evidence that Enbridge plans to construct the Line 61 Twin Project and that the Project is inextricably linked to construction of a pipeline in Wisconsin, because otherwise a bottleneck will exist that would prevent use of 72% of the capacity that would be provided by the Project.

Thus, the DEIS must evaluate the cumulative potential effects of constructing the downstream pipeline (Line 61 Twin) needed to allow utilization of the net capacity increase that would be provided by the Project to the Mainline System and its customers.

OTHER COMMENTS

Honor the Earth also provides the attached documents as comments:

- "Review of Enbridge Line 3 Draft Environmental Impact Statement" by Robert Merritt, P.G. Attachment C.

SUMMARY

Honor the Earth believes that the DEIS is fundamentally and illegally flawed. Further, many of these flaws may only be redressed through a substantial re-write of the DEIS, which

new material must be the subject of a subsequent public comment period. Therefore, the Department must prepare a supplemental DEIS that complies fully with MEPA and provide for a public comment period on it.

Thank you for providing this opportunity to comment on the DEIS. We look forward to reviewing a revised DEIS.

Very truly yours,

/s Winona LaDuke
Executive Director
Honor the Earth