STATE OF MINNESOTA
PUBLIC UTILITIES COMMISSION

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In the Matter of the Application of North Dakota Pipeline Company LLC for a Certificate of Need for the Sandpiper Pipeline Project in Minnesota	OAH Docket No. 8-2500-31259 PUC Docket No. PL-6668/CN-13-473
In the Matter of the Application of North Dakota Pipeline Company LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project in Minnesota	OAH Docket No. 8-2500-31260 PUC Docket No. PL-6668 / PPL-13-474

FRIENDS OF THE HEADWATERS COMMENTS ON CONSIDERATION OF SYSTEM ALTERNATIVES AND THE LEGAL BASIS FOR CONSIDERATION OF SYSTEM ALTERNATIVES IN THE NEED AND ROUTING PROCEEDINGS

Friends of the Headwaters ("FOH") hereby provides its comments in response to the Minnesota Public Utilities Commission ("Commission") Notice of Comment Period dated August 12, 2014. This notice identified the following topics for comment:

- What if any of the eight system alternatives identified in the Department of Commerce Alternative Routes Summary Report should be considered further in these proceedings?
- What is the legal basis for determining whether a system alternative should be considered in the certificate of need proceeding?

- What is the legal basis for determining whether a system alternative should be considered in the route permit proceeding?

In response, FOH provides the following comments and also incorporates by reference its August 5, 2014, Reply Comments on the Comments and Recommendations of the Minnesota Department of Commerce on Selection of Alternative Routes ("FOH August 5 Comments").

I. CONSIDERATION OF SYSTEM ALTERNATIVES

Selection of so called "system alternatives" by the Commission under Minn. Stat. Ch. 216G ("Routing Law") and Minn. Stat. Ch. 116D, the Minnesota Environmental Policy Act ("MEPA"), must take into consideration the "underlying" need for the Project, the potential for an alternative to reduce environmental impacts, and an alternative's apparent feasibility with regard to this need. The factors that should be considered in the Commission's consideration are discussed in the FOH August 5 Comments at 24-27, 37-39.

A. The Alleged Underlying Need for the Project

FOH contests the overall need for the Project and intends to present evidence that the Commission must deny NDPC a Certificate of Need for failing to meet its burden of proof under Minn. Stat. § 216B.243 and Minn. R. Ch. 7853. This being said, NDPC has alleged a number of facts in its Application for a Certificate of Need ("CON Application") related to commercial demand for the Project and its plan to upgrade its infrastructure to meet this alleged demand. As described in detail in the FOH August 5 Comments at 6-8, NDPC has described the commercial purpose of the Project as follows:

> The Project's purpose is to transport the growing production of domestic crude oil from the Bakken and Three Forks formations in the Williston Basin of eastern Montana and western North Dakota to meet the increased demands of refineries and markets in the Midwest and the East Coast.

NDPC Environmental Impact Report ("EIR") at 1-2 (footnote omitted). In its CON Application, NDPC describes this purpose similarly:

> Enbridge's shippers will use the pipeline for the transportation of crude oil to Enbridge's breakout tankage facilities at Clearbrook, Minnesota or Superior, Wisconsin. At Clearbrook, the crude oil will be delivered to interconnected facilities operated by Minnesota Pipe Line Company for delivery to Minnesota refineries. At Superior, the crude oil will be delivered into the Enbridge Mainline System and other third-party pipelines for delivery to refineries in the Midwest and the East Coast.

CON Application at Section 7853.0230 at 5 (footnotes omitted.) Thus, NDPC has described three potential markets for the transportation services to be offered by the Project:

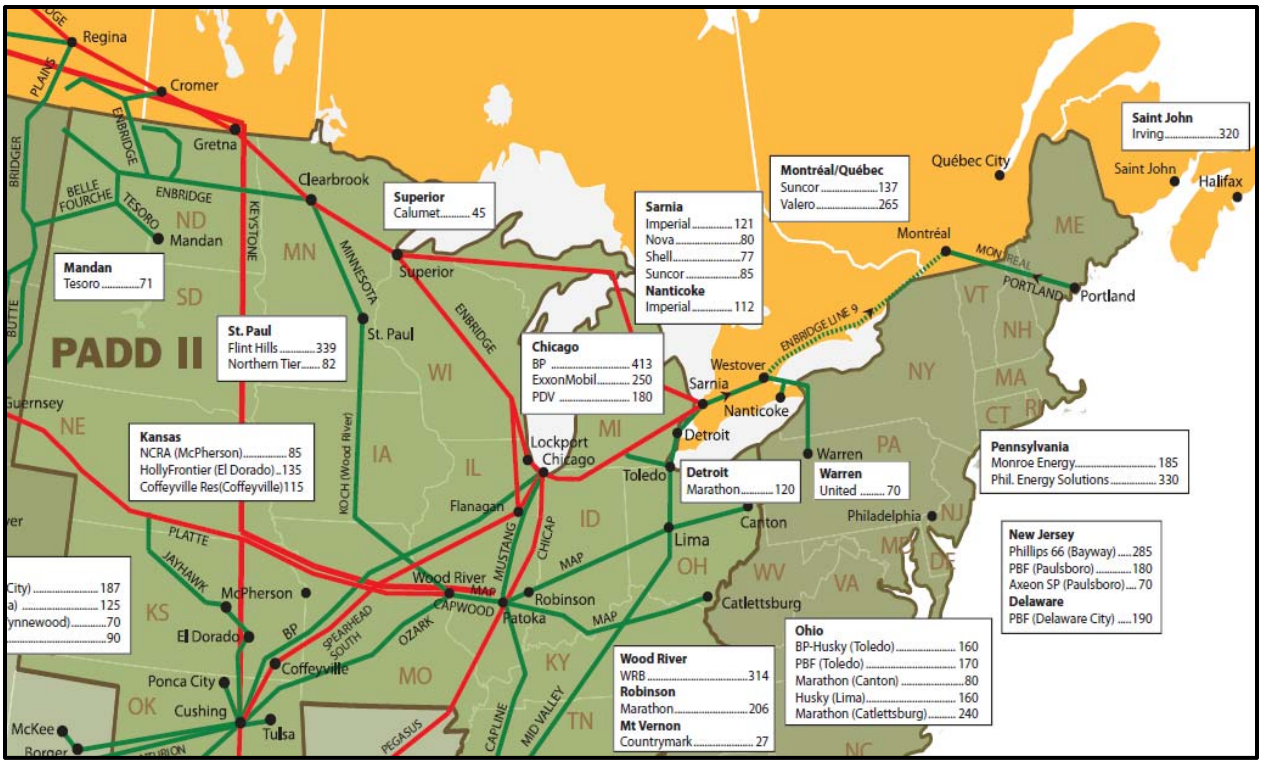
- Minnesota refineries;
- Midwestern refineries; and
- East Coast refineries.

NDPC has also claimed that serving these refinery markets require that the Project connect to its Clearbrook and Superior Terminals.

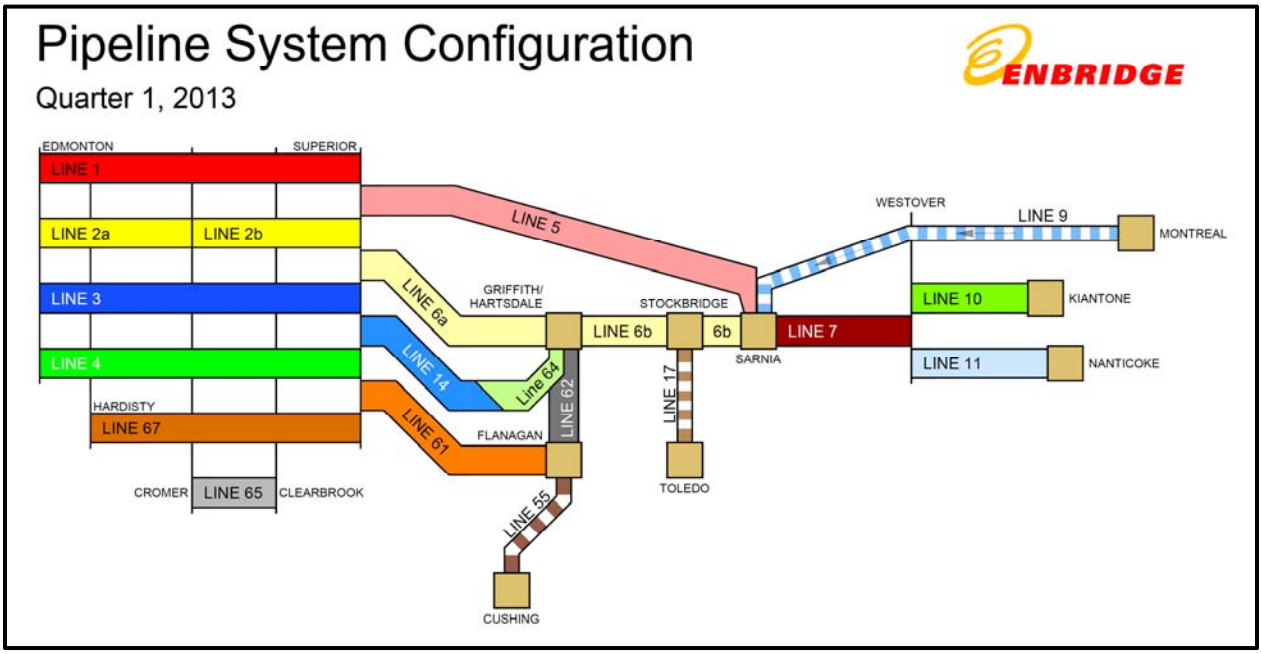
The following discusses the NDPC and Enbridge pipelines systems at issue, the alleged demand for the transportation services to be provided by the Project, and the need for NDPC to ship crude oil on the Project to this demand via the Clearbrook and Superior Terminals.

1. Description of Pipeline Systems at Issue

The following map provides a simplified view of the pipeline systems at issue in this proceeding.



In addition, Enbridge has published the following System Configuration graphic that schematically describes its Mainline System. (A complete map and system configuration graphic are included as Attachment A).



Together, the foregoing map and graphic show that the Clearbrook Terminal serves two structural purposes:

1) to transfer crude oil to the Minnesota Pipeline for delivery to Minnesota refineries; and
2) to accept oil from the North Dakota Pipeline for delivery to the Superior Terminal.

They also show that the Superior Terminal has four structural purposes:

1) delivery of crude oil via local pipeline to the Calumet Refinery in Superior, Wisconsin;
2) delivery of crude oil via Line 5 to the Sarnia Terminal in Ontario;
3) delivery of crude oil via Lines 6a, 14, and 64 to the Lockport Terminal in northern Illinois;
4) delivery of crude oil via Line 61 to the Flanagan Terminal in northern Illinois.

FOH notes that no U.S. East Coast refineries are served by pipelines, nor are the Canadian East Coast refineries in Quebec City, Quebec, and St. John, New Brunswick.

To understand the possible need for the Project to pass through the Clearbrook and Superior Terminals, it is necessary to determine the potential customer demand for service through these terminals. The following analyzes potential customer demand for U.S. Bakken Formation crude oil in U.S. and Canadian markets in relation to the specific functional purposes of the Clearbrook and Superior Terminals. This analysis shows that there is absolutely no need for additional crude oil pipeline service to the Clearbrook Terminal, and that what need exists related to the Superior Terminal is for transportation service to the Flanagan Terminal in

Northern Illinois, such that direct service to the Flanagan Terminal would meet most if not all of Enbridge's predicted customer need.

2. The Alleged Need for a Route Connection to Clearbrook and for Additional Pipeline Capacity to Ship Oil to Minnesota Refineries

Although Enbridge does not include service to Minnesota refineries in its statements of purpose, it nonetheless implies that part of the purpose for the Project is to provide service to these refineries. The Commission should understand that available evidence unequivocally shows that there is no need for additional crude oil pipeline deliveries from North Dakota to Minnesota through the Clearbrook Terminal.

On March 14, 2014, the St. Paul Park Refining Company ("SPPRC"), which owns the 89,000 bpd St. Paul Park Refinery, filed a Protest at the Federal Energy Regulatory Commission (Attachment B) in which it states, *inter alia*:

> this Protest demonstrates that the proposed expansion pipeline and expansion surcharge (a) are not needed, (b) do not have broad shipper support, [and] (c) will provide no benefit to shippers taking delivery at Clearbrook . . . .[1]
>
> * * *
>
> SPPRC does not believe the expansion pipeline proposed by NDP is necessary or desirable to meet the transportation needs of SPPRC.[2]
>
> * * *
>
> the purported shipper benefits cited by NDP have no value to SPPRC."[3]

In addition, the SPPRC Protest contains substantial evidence in the form of 104 pages of expert affidavits and documentation in support of SPPRC's position.[4] It also severely criticizes a

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[1], *Petition for Declaratory Order of North Dakota Pipeline Company*, FERC Docket No. OR14-21-000. PROTEST OF ST. PAUL PARK REFINING CO. LLC (March 13, 2014) at 1.
[2] *Id.* at 4.
[3] *Id.*
[4] *Id.* at s.

NDPC study that alleges need for the Project.[5] Thus, the SPPRC has stated in unequivocal terms that there is no need for the Project to connect to the Clearbrook Terminal for ultimate delivery to the St. Paul Park Refinery, or for that matter to the Flint Hills Refinery.

Although FERC denied this Protest, it did so on procedural grounds and did not review SPPRC's factual claims.[6] FERC stated:

> More importantly, and especially pertinent to the instant petition, because the Commission does not regulate the entry14 or exit15 into the oil pipeline business as it does with natural gas pipelines, there is nothing preventing an oil pipeline from building or expanding a pipeline on a traditional common carrier cost-of-service basis and making the required initial rate filing thirty days prior to the requested effective date. Therefore, while the protesters criticize North Dakota Pipeline's study and assert there is no need for the proposed expansion and extension of the system, the arguments have no bearing on our determination here. <u>Since the Commission does not have jurisdiction to grant certificates to oil pipelines or otherwise authorize or prevent construction, determining whether a pipeline is needed is not within its authority.</u> Therefore, the Commission denies the protesters' requests to reject this petition based upon an alleged lack of need for the new construction or that issues concerning the justification for expanding the pipeline require examination at a hearing, before a declaratory order approving the general framework for the project is granted.

(Emphasis added, footnotes omitted.) FERC did not explain how an unneeded pipeline can ever have reasonable rates, nor did it discuss the fact that pre-approval of a tariff structure tends to promote pipeline development because there is almost no risk that FERC will impose a tariff that does not allow a return on investment. In contrast to FERC, the Commission has "jurisdiction to grant certificates [of need] to oil pipelines or otherwise authorize or prevent construction, determining whether a pipeline is needed . . . ." Thus, the claims of SPPRC are relevant to this proceeding.

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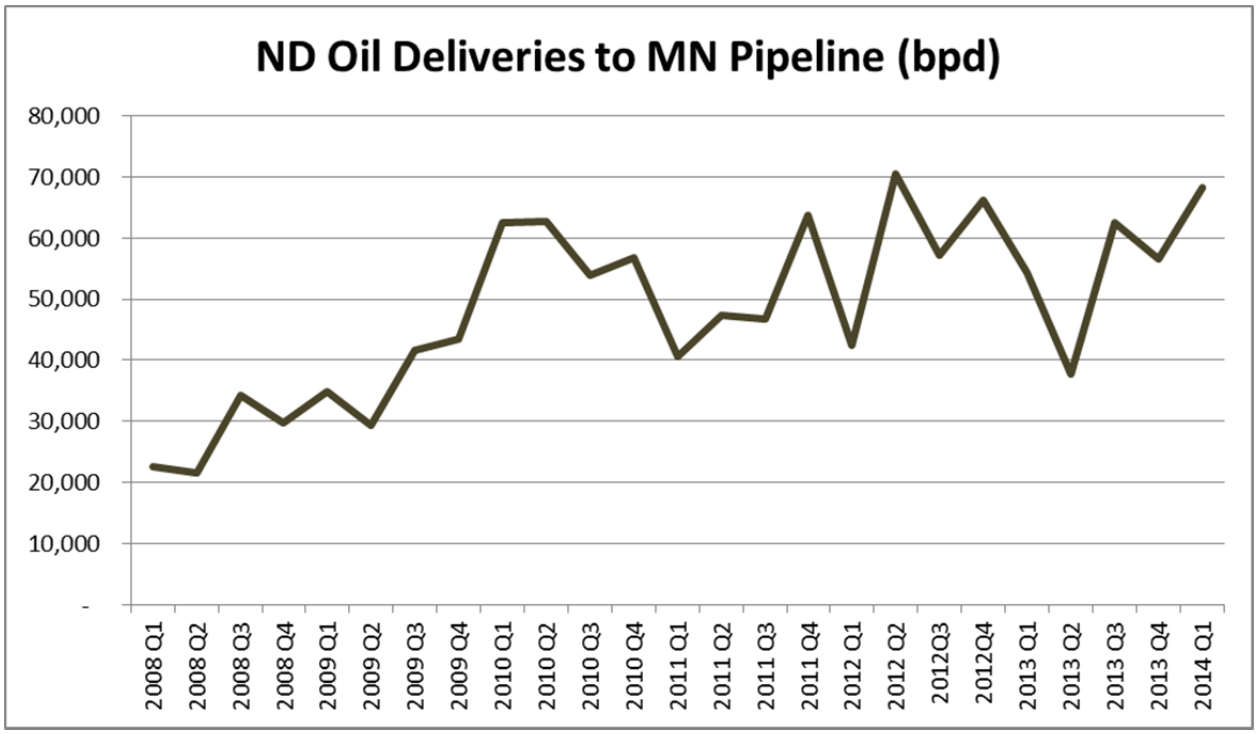
[5] *Id.* at 7-9.

[6] Petition for Declaratory Order of North Dakota Pipeline Company, FERC Docket No. OR14-21-000. Order on Petition for Declaratory Order (May 15, 2014) at 9.

Flint Hills Resources, LP, ("Flint Hills"), which owns the 339,000 bpd Flint Hills Refinery in Rosemount, Minnesota, also filed comments in the same FERC docket (Attachment C).[7] While Flint Hills did not directly challenge the need for the Project, it did argue that it and other uncommitted shippers should "not bear financial responsibility for underutilization of the Sandpiper Project should shipper demand be less than NDPC anticipates . . . ."[8] Much of Flint Hill's comments relate to the financial risk resulting from underutilization of the Project. It seems unlikely that Flint Hills would focus on underutilization unless it anticipated a significant risk of it.

With regard to historical deliveries of U.S. Bakken Formation crude oil to Minnesota refineries by Line 81, FERC data filed by NDPC (and its predecessor) and the Minnesota Pipeline Company show the following quarterly deliveries[9]:



[7] *Petition for Declaratory Order of North Dakota Pipeline Company*, FERC Docket No. OR14-21-000. Comments of Flint Hills Resources, LP.
[8] *Id.* at 11
[9] This data is available at ferc.gov and comprises a substantial volume of material and therefore has not been attached hereto.

The data also shows that deliveries from North Dakota have been relatively stable for the past four years, ranging between approximately 50,000 bpd and 60,000 bpd, compared to a total refining capacity in the Twin Cities of 428,000 bpd. Assuming that Minnesota's refineries are operating at about 90% capacity, approximately 14% of the crude oil refined in Minnesota comes by pipeline from North Dakota. The average annual deliveries are shown below:

Year	BPD
Average 2010	58,993
Average 2011	49,650
Average 2012	59,087
Average 2013	51,569

The data filed at FERC by NDPC and the Minnesota Pipeline Company indicate that:

(1) the current capacity of the North Dakota Pipeline System (210,000 bpd) far exceeds historical deliveries to Minnesota refineries from North Dakota; and

(2) deliveries of North Dakota oil by pipeline to Minnesota are stable and show no sign of increasing.

NDPC has claimed that the Project will benefit Minnesota by providing redundant service to Clearbrook,[10] but the value, if any, of such redundant service appears low given that Minnesota's refineries have relied on the existing pipeline service from North Dakota for years and have not found it unreliable. FOH asserts that the benefit of such redundant service should not outweigh the risks to Minnesota's environment caused by the Project, and should not itself require service to the Clearbrook Terminal.

Taken together, the Protest filed by SPPRC and the FERC data indicate that Minnesota refineries do not need the Project such that connecting the Project to the Clearbrook Terminal is unnecessary. Although the Flint Hills refinery did not make as clear statements as SPPRC, it did

[10] CON Application, Section 7853.0230 at 5.

voice concerns about the risk of underutilization of the Project, including the risk that construction of the Project could unnecessarily increase Minnesota refinery costs. Such concern indicates that Flint Hills is likewise concerned about the future need for the Project. This position also suggests that there is no need for the Project route to pass through Clearbrook.

Moreover, NDPC has proposed to configure the Project so that no oil can be introduced into it from the Enbridge's Mainline System at Clearbrook. In the absence of a need to deliver crude oil to or receive oil at Clearbrook, there is no reason at all for the Project route to go through Clearbrook, except to the extent it might provide redundant service, which likely is of little to no value.

Given this information, the Commission should find that for the purposes of selecting alternative routes for further study, there is no need for such routes to connect to the Clearbrook Terminal. In fact, the evidence presented herein indicates that the Project could not be built at all or could bypass the Clearbrook Terminal without having any adverse impacts on Minnesota's refineries or Enbridge's downstream operations. Therefore, the Commission should find that connection to the Clearbrook Terminal and deliveries to Minnesota refineries are not a necessary component of the Project, such that it must consider "system alternatives" that do not include a connection to Clearbrook.

3. The Alleged Need for a Route Connection to the Superior Terminal

Evaluating the alleged need for the Project to end at the Superior Terminal is somewhat more complex, but can be understood through a systematic analysis of each of the downstream markets served by this terminal. The following provides a preliminary analysis. Although a full analysis of need will depend on completion of the contested case hearing under Minn. Stat. Ch. 216G, the purpose of the following analysis is to help the Commission gain an adequate

understanding of the customer needs alleged by NDPC in relation to the Superior Terminal, so that it can better understand why it must consider "system alternatives" that could feasibly meet Enbridge's alleged underlying purpose and need for the Project by connecting to other Mainline System terminals.

As noted, Enbridge can ship oil from the Superior Terminal directly to one refinery and three other terminals that serve differing refinery market. Specifically, from the Superior Terminal, Enbridge can ship crude oil:

1) via local pipeline to the Calumet Refinery in Superior, Wisconsin;
2) via Line 5 to the Sarnia Terminal in Ontario, which terminal serves a number of refineries in Sarnia, as well as refineries downstream in Detroit, Michigan, Warren, Pennsylvania, Nanticoke, Ontario, and Montreal, Quebec;
3) via Lines 6a, 14, and 64 to the Lockport Terminal in northern Illinois, that transfers oil for delivery to refineries in Illinois, Detroit, Ohio, the Sarnia Terminal and all the refineries served by it, as well as refineries in the Midwest and Gulf Coast; and
4) via Line 61 to the Flanagan Terminal in Illinois, which can serve essentially the same refineries as Lines 6a, 14, and 64, but which also has a higher capacity connection to the U.S. Gulf Coast.

The question before the Commission with regard to the Superior Terminal is whether this is the only delivery point on the Enbridge Mainline System that could feasibly serve the customer needs alleged by Enbridge. Each of the foregoing delivery options is discussed below, in turn.

Deliveries to the Calumet Refinery

The Calumet Refinery, which refines primary light crude oil, is one of the smallest in the U.S., with a rated capacity of only 45,000 bpd.[11] This capacity is dwarfed by the Mainline System's current light crude oil capacity of 1,254,300 bpd.[12] Thus, the Calumet Refinery is adequately served by existing light oil pipeline capacity to the Superior Terminal and does not itself justify a routing requirement that the Project terminate at the Superior Terminal.

Deliveries Via Line 5 to Sarnia, Ontario, and Downstream Refineries

Line 5 begins at the Superior Terminal and ends at the Sarnia Terminal in Ontario, Canada. However, Line 5 is not the only Enbridge pipeline to Sarnia, because Line 6b also terminates at Sarnia. Thus, it is possible to ship light crude oil to northern Illinois and then on to Sarnia.

It is not possible to ship crude oil from Sarnia further south than perhaps Toledo, Ohio, though it is not clear that all of the refineries in Toledo have access to this crude oil. Thus, Line 5 at most serves only three U.S. Midwestern refineries: the Detroit Marathon Refinery and the PBF and BP-Husky Refineries in Toledo, Ohio. To FOH's knowledge, none of these refineries has announced plans to refine greater amounts of light sweet crude oil, or to increase their overall capacity. Also, all of these refineries are also served by spurs off of Line 6b. and the Toledo refineries are also served by the Mid-Valley Pipeline from the south, such that the pipeline infrastructure that currently serves them is adequate to meet their needs. Thus, the evidence indicates that these refineries will have no increased demand for U.S. Bakken Formation crude oil, and to the extent that marginal increases might be needed, they are currently served by two other pipelines in addition to Line 5. As such, demand from these three

[11] CAPP North American Pipeline Map, Attachment A.
[12] Enbridge System Configuration, Attachment A.

Midwestern U.S. refineries does not justify increased shipments of U.S. Bakken Formation crude oil through the Superior Terminal on Line 5.

Crude oil shipped on Line 5 can also reach the small United Refining Refinery in Warren, Pennsylvania, but this refinery consumes mostly heavy crude oil and has no expansion plans. Therefore, this refinery, too, provides no justification to ship increased amounts of Bakken Formation crude oil to the Superior Terminal for transportation on Line 5.

Other than the foregoing U.S. refineries, Line 5 serves only eastern Canadian refineries. With regard to the need for increased shipments of Bakken Formation crude oil to eastern Canada, a group of NDPC's customers also filed a protest in Enbridge's FERC tariff case ("Shipper Protest") (Attachment D), in which they alleged that this need was specious.[13] The Shipper Protest includes the following statement about NDPC's claim that the Project serves refinery needs in eastern Canada:

> [NDPC's] suggestion that Bakken crude can break into the Eastern Canadian market is also fanciful. This region receives large quantities of its pipeline crude oil supplies from Western Canadian producers and Canadian producers view this area as a target market for their growing production. It is faulty economic logic to assume that those producers will permit their markets to be eroded by Bakken crude oil without taking responsive action. Furthermore, 330,000 bpd of Eastern Canadian refining capacity is not even connected to pipelines.[14]

(Emphasis added.) The Shipper Protest also states:

> there is no economic basis to [NDPC's] conclusion that the construction of the Sandpiper pipeline will permit Bakken crude oil to replace existing crude oil supplies to U.S. Mid-Continent and Eastern Canadian refineries. . . . these refineries are currently buying Western Canadian crude oil and Canadian producers will

[13] Petition for Declaratory Order of North Dakota Pipeline Company, FERC Docket No. OR14-21-000, Protest and Opposition and Renewed Motion to Intervene of Concord Energy LLC, Enserco Energy LLC, Enwest Marketing LLC and WPX Energy Marketing, LLC in Response to North Dakota Pipeline Company LLC Petition for Declaratory Order (March 14, 2014).
[14] *Id.* at 21.

> certainly not permit American Bakken crude deliveries to undercut their markets. In fact, . . . when faced with price competition in the past, Canadian producers have taken whatever measures they believed necessary to preserve their market. There is every reason to believe that they will continue to do so in the future, particularly in view of the long distance pipelines that TransCanada and Enbridge are building from Western Canadian crude oil fields to Eastern Canadian refineries.[15]

(Footnotes omitted.) In short, it is very unlikely that eastern Canadian refineries will demand U.S. Bakken Formation crude oil because they are already supplied by domestic Canadian crude oil producers. Moreover, all of the refineries served by pipeline in eastern Canada are owned by companies (Imperial Oil, Nova, Shell, and Suncor) that also own crude oil extraction facilities in the Tar Sands Region, such that they can buy crude oil from themselves. Therefore, it appears very unlikely that these eastern Canadian refineries will demand Bakken Formation crude oil deliveries through the Superior Terminal via Line 5.

With regard to Enbridge's alleged need to transport oil by pipeline to U.S. East Coast refineries, which are in New Jersey, Pennsylvania, and Delaware, this is not currently physically possible because none of these refineries are served by pipelines. The same is true for Canada's coastal refineries in Quebec City and St. John. Thus, it appears that deliveries to these refineries do not create a need to ship Bakken Formation crude oil through the Superior Terminal to Line 5.

Therefore, available evidence indicates that NDPC and Enbridge have no need to ship oil to the Superior Terminal for delivery via Line 5 to Sarnia, because none of the refineries served by Line 5 are likely to demand more or even any U.S. Bakken Formation crude oil. As such, the Commission should not assume that deliveries to the Superior Terminal for transportation on Line 5 are a substantial purpose of the Project.

[15] *Id.* at 35-36.

Deliveries Via Lines 6a, 14, and 64 to the Lockport Terminal in Northern Illinois

Shipments to the Superior Terminal can also be forwarded to the Lockport Terminal in northern Illinois via Lines 6a, 14, and 64, and from there on to refineries in the Chicago area. From the Chicago area, there are connections east on Line 6b to Toledo, Detroit, Sarnia, Warren, Pennsylvania, and eastern Canada; and connections south to Patoka, Illinois, from where pipelines continue to refineries in Toledo, Lima, Canton, and Catlettsburg, Ohio, Cushing, Oklahoma, and the U.S. Gulf Coast.

As previously discussed, the likelihood of increased demand for U.S. Bakken Formation crude oil shipments via the Lockport Terminal by refineries in Toledo, Detroit, or Sarnia, or in refineries downstream from Sarnia, is a best limited, if not "fanciful." Thus, these refineries do not provide a need for increased Bakken Formation crude oil deliveries to the Superior Terminal for delivery to the Lockport Terminal.

The other refineries directly served by the Lockport Terminal are three Chicago area refineries:

(1) BP's 413,000 bpd Whiting Refinery, which recently completed a major modification to allow it to process primarily heavy sour crude oil, such that it will likely demand much less light crude oil;

(2) Exxon Mobil's 250,000 bpd Joliet Refinery, which is configured to process primarily heavy sour crude oil; and

(3) PDV/CITGO's 180,000 bpd Lemont Refinery in Lemont, Illinois; which is also configured to process primarily heavy sour crude oil, originally from its parent corporation in Venezuela.

Due to the configuration of these refineries, it is doubtful that they will demand greater supplies of U.S. Bakken Formation crude oil. Thus, it is unlikely that Enbridge can show a need to ship U.S. Bakken Formation crude oil via the Superior and Lockport Terminals to these refineries.

It is also possible to ship crude oil from Chicago to the Patoka Terminal in southern Illinois on the 100,000 bpd Mustang Pipeline, for delivery to refineries in Ohio, the southern Midwest, and the U.S. Gulf Coast. However, the small size of the Mustang Pipeline means that relatively little crude oil can flow through the Superior and Lockwood Terminals to these more distant markets. Instead, it appears that Enbridge intends to serve these more distant markets via Line 61 and the Flanagan Terminal.

Therefore, service through the Superior Terminal on Lines 6a, 14, and 64 to the Lockwood Terminal, is mostly confined to refineries in the Chicago area, Toledo, Detroit, Sarnia, and refineries downstream from Sarnia. As previously discussed, none of these refineries are likely to demand greater quantities of light sweet U.S. Bakken Formation crude oil. Therefore, there appears to be little reason for Enbridge to need additional pipeline capacity from North Dakota to the Superior Terminal for service to these refineries. This conclusion is also supported by the opinion of an expert who provided a sworn declaration included in the Shipper Protest, which declaration states:

> As far as the U.S. Midwest– *i.e.*, Eastern PADD II – is concerned, there are 13 refineries located in Michigan, Illinois, Indiana, Kentucky, Tennessee and Ohio. These refineries collectively use approximately 2.5 million bpd of crude oil. In 2012, these refineries imported over 1.2 million bpd of crude oil. Ninety-seven percent of these imports were from Western Canada. Canadian crude oil producers delivered a total of approximately 1.7 million bpd into the entire American Midwest region in 2012. <u>I do not believe that there is any real possibility that Western Canadian producers will permit North Dakota Bakken crude oil to replace any of the crude oil Mid-Continent refiners are now receiving from</u>

> Western Canada. In fact, if anything, Western Canadian crude oil will occupy an increasing portion of this PADD II market.[16]

(Emphasis added, footnotes omitted.) Thus, a number of Enbridge's shippers also believe that demand in the eastern Midwest for U.S. Bakken Formation crude oil will at best remain stagnant, but will more like drop due to increased pressure from Canadian crude oil imports.

Therefore, the Commission should not assume that the Project needs to connect to the Superior Terminal to allow increased quantities of light sweet U.S. Bakken Formation crude oil to flow via Lines 6a, 14, and 64 and the Lockport Terminal to downstream refineries. Since the need for increased service to the Lockport Terminal is at best limited and at worst non-existent, the Commission should not require alternative routes to terminate at the Superior Terminal based on a need to provide service to the Lockport Terminal.

Deliveries Via Line 61 to the Flanagan Terminal in Northern Illinois

The largest potential new pathways for oil from the Superior Terminal are on either:

- Line 61 to the Flanagan Terminal, which has a maximum capacity of 1,200,000 bpd, but currently is rated at only 400,000 bpd; or
- the yet to be announced Line 66 project to the Flanagan Terminal, which will likely be an 800,000 bpd pipeline.

From the Flanagan Terminal, Enbridge can at present, or plans via expansions, to ship crude oil to:

1) the Chicago area and markets downstream from Chicago on Line 6b or the Mustang Pipeline;

[16] Shipper Protest, Exhibit D, Sworn Declaration of Robert P. Garner in Support of Enwest Marketing Llc's Protest and Opposition to North Dakota Pipeline Company LLC's Petition for Declaratory Order and Enwest's Motion to Intervene at 13.

2) the Patoka Terminal, which has connections to Ohio refineries, Wood River, and possibly the U.S. Gulf Coast (if Marathon reverses its Capline Pipeline); and

3) the Cushing Terminal, which has connections to a number of refineries in southern states, as well as to U.S. Gulf Coast refineries via the Seaway Pipeline.

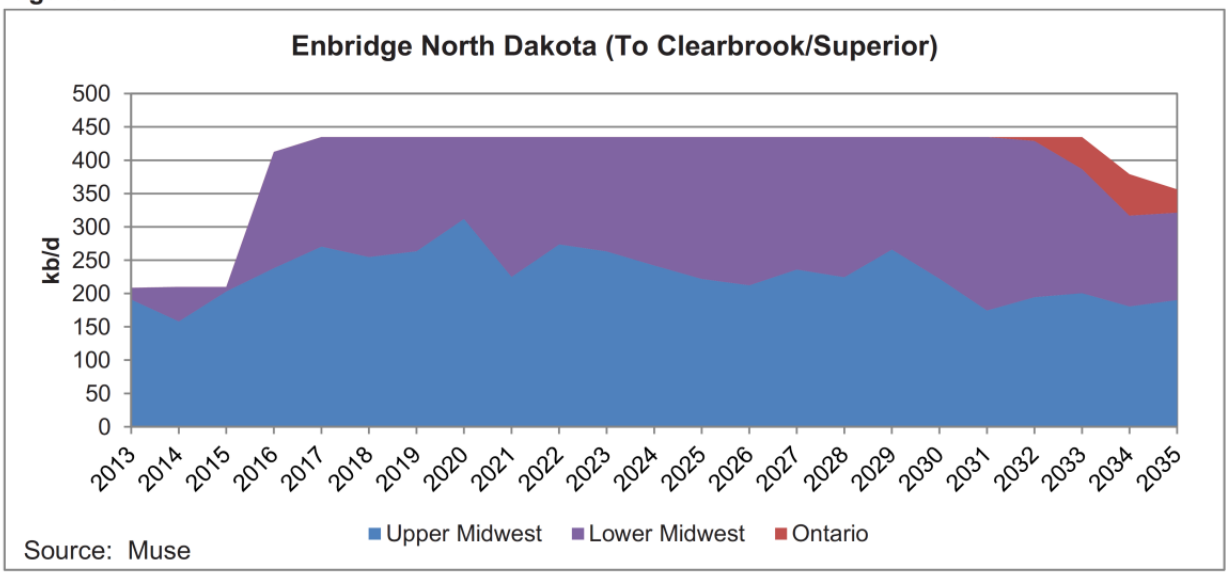
Each of the foregoing shipping options is discussed below.

Although crude oil can or will be able to flow from the Flanagan Terminal to the Chicago area via Enbridge's planned Line 78, as previously discussed, the likelihood of increased shipments of U.S. Bakken Formation crude oil to these markets is limited or even non-existent. There are no pipelines from Chicago to the U.S. East Coast refineries, increased demand by eastern Canadian refineries for U.S. Bakken crude oil appears "fanciful," and the refineries in the upper and eastern Midwest are primarily configured to refine heavy crude oil, which is provided by competing Canadian crude oil suppliers, and these refineries have not announced any significant expansions of light sweet crude oil refining capacity.

In contrast, Enbridge's planned pipeline expansions from the Flanagan Terminal south on the Southern Access Extension or Flanagan South Pipeline suggest that Enbridge's primary target market for the Project is the lower Midwest or U.S. Gulf Coast. From the Flanagan Terminal, Enbridge plans to ship oil via the Southern Access Extension to the Patoka Terminal and from there to Ohio refineries on Marathon's MAP Pipeline, and possibly to the U.S. Gulf Coast should Marathon reverse its Capline Pipeline to Louisiana. It also plans to ship crude oil on the Flanagan South Pipeline to Cushing, Oklahoma, which has connections to a number of southern refineries and the U.S. Gulf Coast. Thus, the primary new crude oil pathways planned or being built by Enbridge all pass through the Flanagan Terminal, which is intended to serve refineries in Ohio, a number of southern states, and the U.S. Gulf Coast.

This conclusion is also supported by the recently filed Direct Testimony of Neil Earnest, which provides the following chart on page 48 of the attached Schedule 2 Report.

Figure 18



While FOH does not agree that the historical or forecast data on which this chart is based are accurate, it does show that almost all of the new markets that Enbridge hopes will use the Project are in the "Lower Midwest." It shows that currently Enbridge is shipping between 150,000 to 200,000 bpd of U.S. Bakken Formation crude oil to the "Upper Midwest" and almost none of this oil to the "Lower Midwest." This forecast predicts that shipments to the "Upper Midwest" will increase to an average of approximately 250,000 bpd and then decline. In contrast, it predicts that shipments of U.S. Bakken Formation crude oil to the "Lower Midwest" will increase from current levels of 25,000 bpd or less to about 225,000 bpd. Thus, this chart reinforces FOH's contention that <u>the primary purpose for the Project anticipated by NDPC and Enbridge is to ship more Bakken Formation crude oil to the Flanagan Terminal for shipment south</u>.

This chart also confirms the contention in the SPPRC and Shipper Protests that shipments to eastern Canadian refineries are unlikely, because it shows no forecasted shipments to Ontario refineries until about 2032, which is far enough in the future to make such shipments entirely speculative.

To the extent that Enbridge hopes to ship crude oil to Ohio refineries, its best route is not through the Lockport Terminal and Chicago, but via the Flanagan Terminal and the planned Southern Access Extension to Patoka and then on Marathon's MAP Pipeline System to the Ohio Refineries.

Thus, the underlying need hoped for by NDPC and Enbridge is not primarily to deliver more oil through Lines, 5, 6a, 14, and 64 to the Sarnia, Lockwood and Chicago area Terminals, but rather on Lines 61 and 66 to the Flanagan Terminal for delivery through the Patoka and Cushing Terminals to markets to the south.

Given this underlying alleged need to move oil to the Flanagan Terminal, it is reasonable for the Commission to investigate "system alternative" options that serve the Flanagan Terminal, because such alternatives could meet most if not all of Enbridge's underlying alleged need.

B. The Commission Must Select One or More Routes that Connect to the Flanagan Terminal and Avoids Minnesota's Pristine Aquatic Resources, Because Such Route Would Meet Most if Not All of Enbridge's Alleged Underlying Need and Likely Reduce Environmental Impacts

In response to the Commission's January 31, 2014, Notice of Application Acceptance and Public Information Meetings, FOH volunteers proposed a number of alternative routes, including the routes enumerated by the Department of Commerce Report dated July 17, 2014, ("DOC Report") as SA-04, SA-05, SA-06, SA-07, and SA-08. In addition, Honor the Earth proposed a route that followed Interstate 29 to Interstate 94 through Minnesota, and the

Minnesota Pollution Control Agency ("PCA") proposed route SA-03 and voiced support for consideration of other routes through central Minnesota.

The general policy intent of these routes was to avoid going through Minnesota's most pristine aquatic and wild rice while still providing crude oil transportation service to northern Illinois. It is true that these routes are not technically specific and were based on uncertainty about Enbridge's alleged commercial need for its Project, but the Commission should not expect citizens to provide alternative routes with the same level of precision as that possessed by NDPC and Enbridge. Instead, FOH suggests that the Commission understand that its purpose should be to focus on the underlying policy goals of citizen commenters and then direct the Department of Commerce to develop more precise alternative routes that meet these goals.

Moreover, the Commission should consider these routes in light of the June 25, 2014, approval by the North Dakota Public Service Commission of a route through North Dakota, because this approval did not exist during Minnesota's routing comment period. Should this approval have been made before or during Minnesota's comment routing comment period, citizens would have adapted their routes to it. The Commission has the discretion to recognize this recent development and modify previously proposed routes accordingly.

1. FOH Combined Routes

After reviewing all of its own proposed routes, as well as the routes proposed by Honor the Earth and the PCA, in light of the North Dakota approval, the DOC Route Report, and the more detailed need analysis presented in these comments, FOH proposes that the Commission adapt different elements of the various proposals into an alternative route or routes that likely meet the policy goals of the citizen commenters, as well as many Minnesotans, while still

meeting most if not all of Enbridge's alleged need. Specifically, FOH proposes the following combined route alternatives:

a) **Combined SA-03, SA-07, and SA-04 Route**: Due to the completion of the North Dakota Public Service Commission routing process, FOH proposes to start SA-04 at the terminus of the North Dakota route and then follow SA-03 south along the Viking Pipeline to the point where the Viking Pipeline turns east. At his point, this proposed alternative route would continue south to the Magellan Pipeline and follow it to the SA-04 route (Alliance Pipeline), from where it would follow the Alliance Pipeline to northern Illinois and ultimately the Flanagan Terminal. The policy purpose of this route is to combine the SA-03, SA-07, and SA-04 routes so as to recognize the North Dakota approval and follow existing pipeline corridors to the maximum extent possible while avoiding northern Minnesota's aquatic resources and providing crude oil transportation service to northern Illinois.

b) Combined SA-03 and SA-08 Route Extended Through Wisconsin:

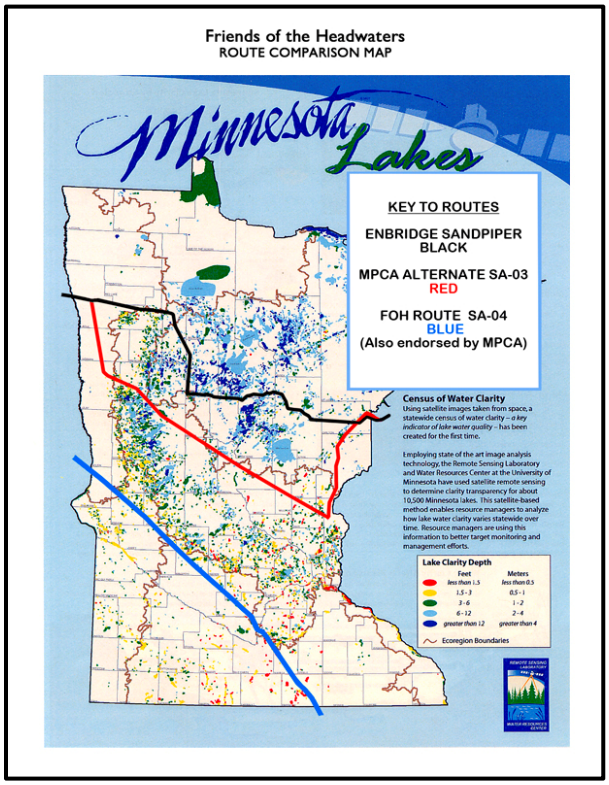
This proposed route is intended to acknowledge the decision of the North Dakota Public Service Commission by entering Minnesota at the terminus of the approved route in North Dakota, then following SA-03 south along the Viking Pipeline to the point that it turns east, and continuing south from there to the SA-07/SA-08 routes, at which point the route would follow the Magellan Pipeline to into central Wisconsin, to a connection with Line 61. The policy purpose of this route is to combine the SA-03, SA-07, and SA-08 routes so as to follow existing pipeline corridors to the maximum extent possible while avoiding northern Minnesota's aquatic resources and providing crude oil transportation service to northern Illinois.

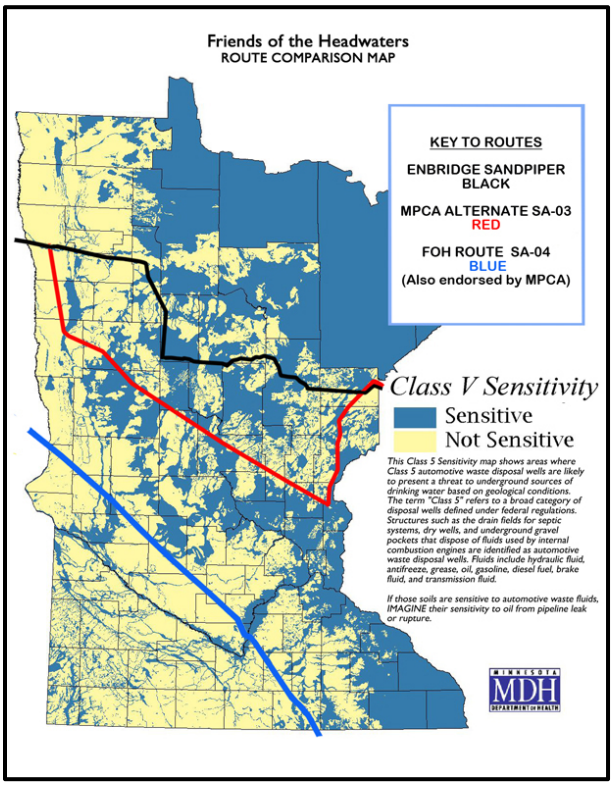
c) Combined SA-03, SA-07, and Wood River Pipeline Route:

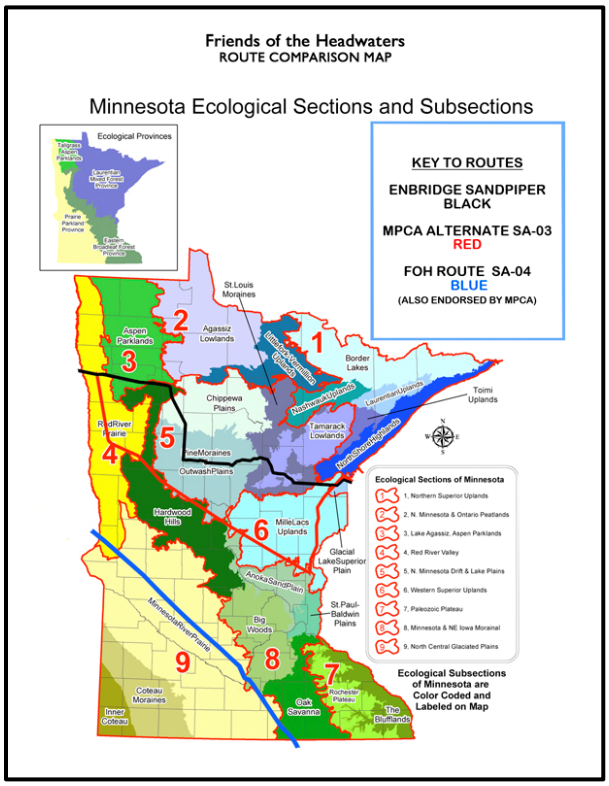
This proposed route is intended to acknowledge the decision of the North Dakota Public Service Commission by entering Minnesota at the terminus of the approved route in North Dakota, then following SA-03 south along the Viking Pipeline to the point that it turns east. At this point, this proposed alternative route would continue south to the Magellan Pipeline and follow it to the terminus of the Wood River Pipeline, from where Enbridge would purchase and use the Wood River Pipeline to transport crude oil to its Flanagan South Pipeline and/or Wood River. The policy purpose of this route is to combine the SA-03, SA-07, and currently mothballed Wood River Pipeline so as to follow existing pipeline corridors to the maximum extent possible and fully utilize existing pipeline infrastructure within the state while avoiding northern Minnesota's aquatic resources and providing crude oil transportation service to central Illinois. Although the Wood River Pipeline has been discussed by a number of commenters, FOH believes the Commission would be remiss if it did not at least investigate why an existing unused pipeline through Minnesota that could serve much of the need alleged by Enbridge is not being used by the industry.

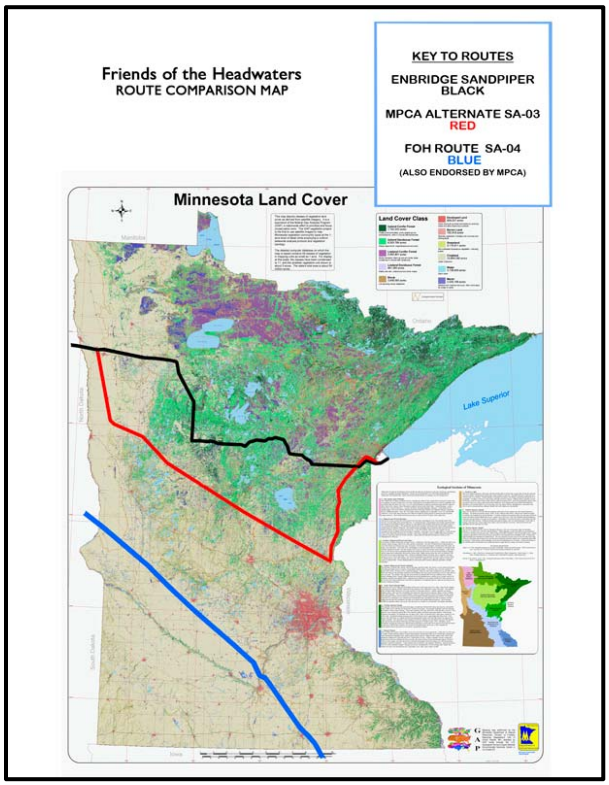
2. The Environmental Advantages of FOH's Proposed Combined Routes Relative to the NDPC Preferred Route

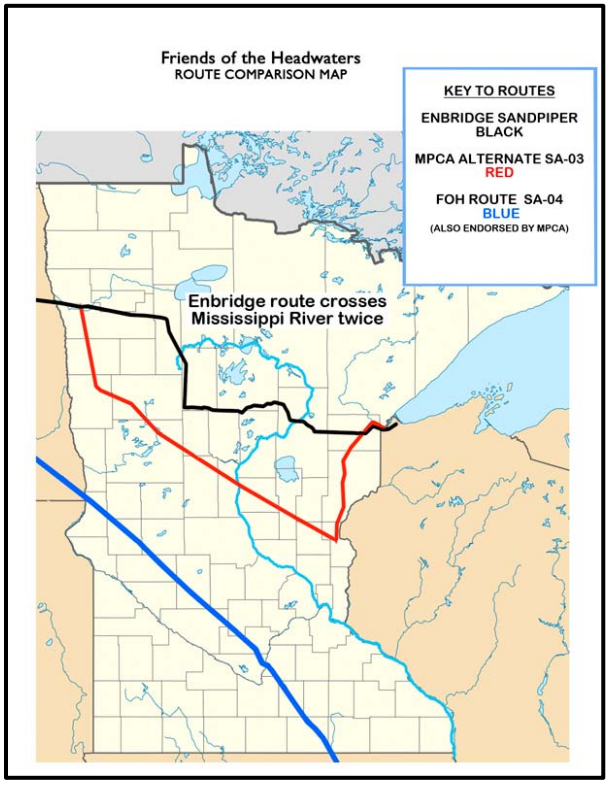
As previously described in FOH written and oral comments, the NDPC proposed route cuts through the heart of Minnesota's pristine lake county, Mississippi River headwaters, and the wild rice that grows abundantly in this region. In addition, it impacts sensitive soil types and ground water resources. In contrast, the routes proposed by citizens and the PCA seek to avoid these impacts while continuing to serve Enbridge's alleged commercial need for the Project. The following maps show with great clarity that NDPC's proposed route puts critical environmental resource at risk.

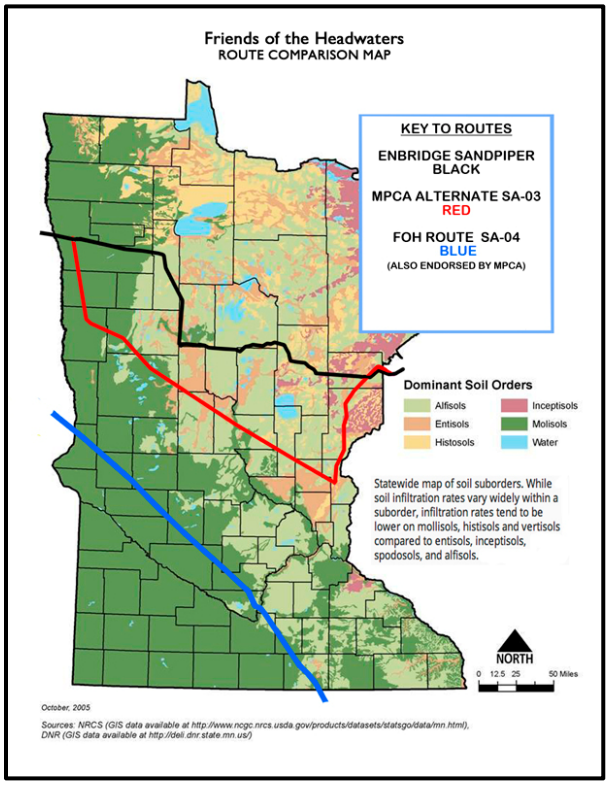

Friends of the Headwaters
ROUTE COMPARISON MAP
Minnesota Lakes
KEY TO ROUTES
ENBRIDGE SANDPIPER
BLACK
MPCA ALTERNATE SA-03
RED
FOH ROUTE SA-04
BLUE
(Also endorsed by MPCA)
Census of Water Clarity
Using satellite images taken from space, a statewide census of water clarity – a key indicator of lake water quality – has been created for the first time.
Employing state of the art image analysis technology, the Remote Sensing Laboratory and Water Resources Center at the University of Minnesota have used satellite remote sensing to determine clarity transparency for about 10,500 Minnesota lakes. This satellite-based method enables resource managers to analyze how lake water clarity varies statewide over time. Resource managers are using this information to better target monitoring and management efforts.
Lake Clarity Depth
Feet
Meters
less than 1.5
less than 0.5
1.5 - 3
0.5 - 1
3 - 6
1 - 2
6 - 12
2 - 4
greater than 12
greater than 4
Ecoregion Boundaries


Friends of the Headwaters
ROUTE COMPARISON MAP
KEY TO ROUTES
ENBRIDGE SANDPIPER
BLACK
MPCA ALTERNATE SA-03
RED
FOH ROUTE SA-04
BLUE
(Also endorsed by MPCA)
Class V Sensitivity
Sensitive
Not Sensitive
This Class 5 Sensitivity map shows areas where Class 5 automotive waste disposal wells are likely to present a threat to underground sources of drinking water based on geological conditions. The term "Class 5" refers to a broad category of disposal wells defined under federal regulations. Structures such as the drain fields for septic systems, dry wells, and underground gravel pockets that dispose of fluids used by internal combustion engines are identified as automotive waste disposal wells. Fluids include hydraulic fluid, antifreeze, grease, oil, gasoline, diesel fuel, brake fluid, and transmission fluid.
If those soils are sensitive to automotive waste fluids, IMAGINE their sensitivity to oil from pipeline leak or rupture.
MINNESOTA
MDH
DEPARTMENT OF HEALTH


Friends of the Headwaters
ROUTE COMPARISON MAP
Minnesota Ecological Sections and Subsections
Ecological Provinces
KEY TO ROUTES
ENBRIDGE SANDPIPER
BLACK
MPCA ALTERNATE SA-03
RED
FOH ROUTE SA-04
BLUE
(ALSO ENDORSED BY MPCA)
St.Louis Moraines
Agassiz Lowlands
Aspen Parklands
Red River Prairie
Chippewa Plains
Tamarack Lowlands
Nashwauk Uplands
Laurentian Uplands
Toimi Uplands
Border Lakes
Superior Uplands
Lake Superior
Hardwood Hills
Mille Lacs Uplands
Glacial Lake Superior Plain
St.Paul-Baldwin Plains
Big Woods
Rochester Plateau
Oak Savanna
The Blufflands
Coteau Moraines
Inner Coteau
Minnesota River Prairie
Ecological Sections of Minnesota
1. Northern Superior Uplands
2. N. Minnesota & Ontario Peatlands
3. Lake Agassiz, Aspen Parklands
4. Red River Valley
5. N. Minnesota Drift & Lake Plains
6. Western Superior Uplands
7. Paleozoic Plateau
8. Minnesota & NE Iowa Morainal
9. North Central Glaciated Plains
Ecological Subsections of Minnesota are Color Coded and Labeled on Map


Friends of the Headwaters
ROUTE COMPARISON MAP
KEY TO ROUTES
ENBRIDGE SANDPIPER
BLACK
MPCA ALTERNATE SA-03
RED
FOH ROUTE SA-04
BLUE
(ALSO ENDORSED BY MPCA)
Minnesota Land Cover
Land Cover Class
Lake Superior


Friends of the Headwaters
ROUTE COMPARISON MAP
KEY TO ROUTES
ENBRIDGE SANDPIPER
BLACK
MPCA ALTERNATE SA-03
RED
FOH ROUTE SA-04
BLUE
(ALSO ENDORSED BY MPCA)
Enbridge route crosses
Mississippi River twice


Friends of the Headwaters
ROUTE COMPARISON MAP
KEY TO ROUTES
ENBRIDGE SANDPIPER
BLACK
MPCA ALTERNATE SA-03
RED
FOH ROUTE SA-04
BLUE
(ALSO ENDORSED BY MPCA)
Dominant Soil Orders
Alfisols
Inceptisols
Entisols
Mollisols
Histosols
Water
Statewide map of soil suborders. While soil infiltration rates vary widely within a suborder, infiltration rates tend to be lower on mollisols, histisols and vertisols compared to entisols, inceptisols, spodosols, and alfisols.
NORTH
0 12.5 25 50 Miles
October, 2005
Sources: NRCS (GIS data available at http://www.ncgc.nrcs.usda.gov/products/datasets/statsgo/data/mn.html),
DNR (GIS data available at http://deli.dnr.state.mn.us/)

While it is true that all routes have an impact, it is also true that some routes have fewer environmental impacts than others. The foregoing maps make clear that the NDPC preferred route has far more significant impacts to treasured resources then the alternatives proposed herein. According, if one or more proposed routes appear to be feasible to the extent that they could reasonably be expected to substantially meet the need alleged by the NDPC, then MEPA requires that the Commission include them for consideration within the Comparative Environmental Analysis ("CEA").

3. The Economic Merits of the Various Routes to the Flanagan Terminal Are Uncertain and Require Consideration of the Cost of the Line 61 and 66 Projects in Comparison to SA-04

It seems likely that NDPC will continue to present economic evidence related to the alternative routes in an effort to convince the Commission that they are not feasible. FOH understands that MEPA requires consideration of alternatives without requiring detailed economic analysis ahead of time. Instead, the CON docket is intended to address economic analysis, such that the Commission should not base its routing decision for the CEA on economic data provided by Enbridge. Moreover, consideration of such data would be entirely unfair to citizens who do not have access to Enbridge's level of financial, personnel, and data resources.

II. What Is the Legal Basis for Determining Whether a System Alternative Should Be Considered in the Certificate of Need Proceeding?

The CON process is required by Minn. Stat. § 216B.243. This law does not expressly describe the range of alternatives that must be considered by the Commission. Due to the legislature's confusing decision to apply what was historically a law written for electric power line siting to underground pipelines, much of the language in this section relates poorly to the decision at hand. The only language in it that relates to the Commission's obligation to consider alternatives is in Subd. 3(6), which states in relevant part:

> No proposed large energy facility shall be certified for construction . . . unless the applicant has otherwise justified its need. In assessing need, the commission shall evaluate:
> (6) possible alternatives for satisfying the energy demand or transmission needs including but not limited to potential for increased efficiency and upgrading of existing energy generation and transmission facilities . . . .

In an effort to interpret this law, the Commission promulgated Minn. R. Ch. 7853. It also does not provide significant guidance with regard to the scope of alternatives that the Commission must consider. Part 7853.0120 requires that the Commission "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, this Part limits the Commission's consideration to (1) alternatives proposed before the end of the hearing, (2) for which substantial evidence exists with regard to the criteria listed in Part 7853.0130.

Part 7853.0130 states in relevant part:

> A certificate of need shall be granted to the applicant if it is determined that:
>
> * * *
>
> B. a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record by parties or persons other than the applicant, considering:
> (1) the appropriateness of the size, the type, and the timing of the proposed facility compared to those of reasonable alternatives;
> (2) the cost of the proposed facility and the cost of energy to be supplied by the proposed facility compared to the costs of reasonable alternatives and the cost of energy that would be supplied by reasonable alternatives;
> (3) the effect of the proposed facility upon the natural and socioeconomic environments compared to the effects of reasonable alternatives; and
> (4) the expected reliability of the proposed facility compared to the expected reliability of reasonable alternatives;

However, when read in light of Part 7853.0120, it is clear that this language does not apply to a pre-determination of the alternatives that must be considered in the CEA, because parties that propose alternatives have until the "close of the public hearing" to meet this burden.

Minn. Stat. § 216B.243 and Minn. R. Ch. 7853 are not the only laws that govern the CON process. As more fully discussed in the FOH August 5 Comments, the Commission must prepare an environmental review for the CON decision, as well as the routing decision. Under MEPA, an EIS or alternative form of review must be prepared for "major governmental actions" "where there is potential for significant environmental effects" resulting from the action. Minn. Stat. § 116D.04, Subd. 2a. In this regard, Minn. Stat. § 116D.04, Subd. 1a(d), defines "governmental action" as activities, including projects wholly or partially conducted, permitted, assisted, financed, regulated, or approved by units of government . . . ." A key policy component of the MEPA process is "[a]n early and open process" "to determine . . . the alternatives which are appropriate for consideration in the statement." Minn. Stat. § 116D.04, Subd. 2a(f).

Here, granting a CON is a "major governmental action" within the meaning of MEPA, such that a decision under it requires an environmental review of the environmental impacts related to the Commission CON decision. The plain language of Minn. R. Ch. 7853 demonstrates that the Commission must consider environmental impacts within the CON docket. *See, e.g.*, Minn. R. 7853.0130(B)(3); 7853.0130(C)(2),(4); and 7853.0600 to 0800. Therefore, it cannot be argued that the Commission's decision in the CON docket has no environmental impacts. The Commission may choose to conduct a separate Environmental Impact Statement ("EIS") for the CON docket, or it may choose to include consideration of CON issues in its CEA, but it cannot ignore MEPA as it applies to the CON docket.

Thus, the answer to the Commission's question about "the legal basis for determining whether a system alternative should be considered" at this phase of the proceeding depends not on Minn. Stat. § 216B.243 or Minn. R. Ch. 7853, but on MEPA.

Moreover, to avoid irreparable conflicts between these laws, the Commission must simply ensure that its scoping process for the CEA considers not only route permit alternatives, but also non-route alternatives. Unfortunately, the Commission has not fully addressed its responsibilities in this regard and has chosen to elicit comments on only route alternatives. To rectify this situation, the Commission must open its docket to allow scoping related to the CON docket. After it identifies both route and non-route alternatives, the DOC-EERA will be able to complete a CEA or EIS that fully complies with MEPA.

Therefore, at this phase of this proceeding, the law that applies to the Commission's decision about the range of alternatives to consider is governed by MEPA. After the close of the public hearing, the Commission has discretion to disregard those alternatives that are not supported by substantial evidence. But, the Commission may not apply this "substantial evidence" test now, because the public hearing process has just begun.

III. What is the legal basis for determining whether a system alternative should be considered in the route permit proceeding?

The routing permit law, Minn. Stat. § 216G, does not specify the alternatives that must be considered by the Commission. Likewise, Minn. R. Ch. 7852 does not specify the alternatives that the Commission must consider. Instead, it states:

> A comparative environmental analysis of all of the pipeline routes accepted for consideration at public hearings shall be prepared by the commission staff or by the applicant and reviewed by the commission staff. This comparative environmental analysis must be submitted as prefiled testimony as required by part 1405.1900.

By reference the "comparative environmental analysis," the regulation makes clear that it defers to the policy standards for alternative review under MEPA Section. § 116D.04, Subd. 4a, including the policy standards for selection of alternatives. These policy standards are described more fully in the FOH August 5 Comments at 23-27.

Thus, the legal basis for determining whether a system alternative should be considered in the Commission's routing permit proceeding is the standard for alternative review provided by MEPA.

IV. CONCLUSION

For the foregoing reasons, FOH respectfully requests that the Commission issue an order:

1) requiring consideration of a route or routes that do not pass through northern Minnesota yet still serve the underlying need alleged by Enbridge;
2) directing the DOC-EERA to include consideration in the CEA those reasonable alternatives proposed by parties in the CON docket; and
3) directing the DOC-DER to consider all routes evaluated by the CEA to be alternatives in the CON docket.

Date: August 21, 2014

Respectfully submitted,

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Bar No. 0391685

ATTACHMENT A

ATTACHMENT B

ATTACHMENT C

ATTACHMENT D