BEFORE THE MINNESOTA OFFICE OF ADMINISTRATIVE HEARINGS
600 North Robert Street
St. Paul, MN 55101

FOR THE MINNESOTA PUBLIC UTILITIES COMMISSION
121 Seventh Place East, Suite 350
St Paul, MN 55101-2147

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Dan Lipschultz	Commissioner
Matt Schuerger	Commissioner
John Tuma	Commissioner
Katie Sieben	Commissioner

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	MPUC PL-9/CN-14-916; OAH 65-2500-32764
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	MPUC PL-9/PPL-15-137; OAH 65-2500-33377

INITIAL LEGAL BRIEF OF INTERVENOR FRIENDS OF THE HEADWATERS

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INTRODUCTION

This case may have a lengthy record, but the core issues are straightforward.

First, Enbridge has not established the "need" for the expansion of its crude oil pipeline system through Minnesota under a proper understanding of Minn. Stat. § 216B.243 and the pipeline rules. The refineries in Minnesota and the region are operating at capacity, and there is no evidence that they have been unable to obtain sufficient crude oil. To the extent there is currently any "apportionment" on the Enbridge Mainline, it will be addressed by likely reductions or flattening of oil supply and demand and by other pipelines. Minnesota has no obligation to assist Enbridge or shippers to reach markets on the Gulf Coast or overseas, or to displace other means of transporting crude oil.

Second, there is no evidence that pipeline construction jobs or economic activity will result in a net economic benefit for Minnesota. It is certain, however, that Minnesota consumers will be asked to pay extra to cover the pipeline's cost, whether they benefit or not.

Third, opening up a new crude oil pipeline corridor through high-value, sensitive natural resources poses unnecessary and unacceptable environmental risks, both in construction and operation. If there is genuinely a "need" for additional pipeline capacity, there are alternative routes that better "minimize human and environmental impact," as the law requires.

Fourth, if a certificate of need and route permit are granted, the PUC should use its authority to impose several conditions to help reduce the risk, including but not limited to a robust financial assurance package.

ARGUMENT

I. ENBRIDGE HAS NOT ESTABLISHED THE NEED FOR THE LINE 3 PROJECT.

A. Applicable Legal Standards

At least since 1974, Minnesota has required "large energy facilities" to obtain a certificate of need (CN) from a state agency, now the Public Utilities Commission (PUC), before proceeding. The statute, which has been on the books in substantially the same form for decades, strikes a careful balance. It places the burden of demonstrating "need" squarely on the applicant, Minn. Stat. 216B.243, subd. 3, and requires the Public Utilities Commission (PUC) to consider:

1. The accuracy of the long-range energy demand forecasts on which the necessity for the facility is based;

2. The relationship of the proposed facility to overall state energy needs, as described in the most recent state energy policy and conservation report . . . ;

3. The effect of existing or possible energy conservation programs [under state and federal law] on long-term energy demand;

4. Promotional activities that may have given rise to the demand for this facility;

5. Benefits of this facility, including its uses to protect or enhance environmental quality and to increase reliability of energy supply in Minnesota and the region;

6. Possible alternatives for satisfying the energy demand . . . including but not limited to potential for increased efficiency . . . ; and

7. The policies, rules and regulations of other state and federal agencies and local governments.

Id.[1] The rules governing crude oil pipelines then provide that:

A certificate of need shall be granted to the applicant if it is determined that:

[1] The CN criteria in Minn. Stat. 216B.243, subd. 3, include some that clearly apply only to high voltage transmission lines or other facilities delivering electricity. Those provisions have been deleted from this list.

A. The probable result of denial would adversely affect the future adequacy, reliability, or efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states, considering:

(1) The accuracy of the applicant's forecast of demand for the type of energy that would be supplied by the proposed facility;

(2) The effects of the applicant's existing or expected conservation programs and state and federal conservation programs;

(3) The effects of the applicant's promotional practices that may have given rise to the increase in the energy demand, particularly promotional practices that have occurred since 1974;

(4) The ability of current facilities and planned facilities not requiring certificates of need to meet the future demand; and

(5) The effect of the proposed facility, or a suitable modification of it, in making efficient use of resources.

B. A more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record by parties or persons other than the applicant, considering:

(1) The appropriateness of the size, the type, and the timing of the proposed facility compared to those of reasonable alternatives;

(2) The cost of the proposed facility and the cost of energy to be supplied by the proposed facility compared to the costs of reasonable alternatives and the cost of energy that would be supplied by reasonable alternatives;

(3) The effects of the proposed facility upon the natural and socioeconomic environments compared to the effects of reasonable alternatives; and

(4) The expected reliability of the proposed facility compared to the expected reliability of reasonable alternatives.

C. The consequences to society of granting the certificate of need are more favorable that the consequences of denying the certificate, considering:

(1) The relationship of the proposed facility, or a suitable modification of it, to overall state energy needs;

(2) The effects of the proposed facility, or a suitable modification of it, upon the natural and socioeconomic environments compared to the effects of not building the facility;

(3) The effects of the proposed facility, or a suitable modification of it, in inducing future development; and

(4) The socially beneficial uses of the output of the proposed facility, or a suitable modification of it, including its uses to protect or enhance environmental quality.

D. It has not been demonstrated on the record that the design, construction, or operation of the proposed facility will fail to comply with those relevant policies, rules, and regulations of other state and federal agencies and local governments.

Minn. R. 7853.0130.[2]

In previous pipeline CN rulings, the PUC has used language that implies a narrow view of its discretion under these rules.[3] It set a low threshold for establishing "need" under subparts A and C of the rule, and an impossibly high threshold for parties offering alternatives under subpart B. Members of the Commission expressed considerable frustration,[4] but apparently concluded that they had little choice but to adopt the interpretation of the rule they received from Judge Lipman.[5]

That Sandpiper order was not a final decision, because the route permit proceedings had not concluded, the court of appeals vacated the order,[6] and Enbridge and its shippers decided that they did not "need" the Sandpiper pipeline anymore and cancelled the project in favor of the Dakota Access pipeline. Even if it had been a final decision, administrative agency decisions of course do not have *stare decisis* effect. Agencies like the PUC are free to modify their

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[2] The rule language for intrastate natural gas pipelines is identical. Minn. R. 7851.0120.
[3] *E.g.* In the matter of the Application of North Dakota Pipeline Company, LLC for a Certificate of Need for the Sandpiper Pipeline Project, MPUC Docket No. PL-6668/CN-13-473, Order Granting Certificate of Need with Conditions (August 3, 2015), https://www.edockets.state.mn.us/EFiling/edockets/searchDocuments.do?method=showPoup&documentId={DD7E8D2C-5C0C-4E24-8FF3-A4883ED056A8}&documentTitle=20158-112984-01
[4] *Id.*, Deliberations at 70 (June 5, 2015)
[5] *Id.*, Report-ALJ's Findings of Fact, Summary of Public Testimony, Conclusions of Law, and Recommendations (April 13, 2015).
[6] *In re North Dakota Pipeline Co.*, 869 N.W.2d 693 (Minn. Ct. App. 2015)

interpretations of the law, so long as they acknowledge that they are doing so and offer a reasonable rationale. The only rule is that "when an agency seeks to deviate from its prior decisions, the agency is charged with setting forth a reasoned analysis for the change." *In re Review of 2005 Annual Automatic Adjustment of Charges for All Elec. And Gas Utilities*, 768 N.W.2d 112, 120 (Minn. 2009).

Friends of the Headwaters urges the ALJ to recommend to the PUC that it modify its previous interpretation of the statute and rules governing this case in three ways.

First, the PUC should hold that a demonstration of "need" requires more than a showing that the pipeline company and its customers have a private financial interest in building the pipeline. The PUC's obligation is to protect Minnesota consumers, not to protect the private interests of Enbridge and its shipper customers. A pipeline proposer must establish that the pipeline is needed to meet energy demand in Minnesota and the region. On that point, Minn. Stat. § 216B.243, subd. 3 is pretty clear. Look at the legislature's word choices—"long range energy demand" (para. 1), "overall state energy needs" (para. 2), "long-term energy demand" (para. 3), "reliability of energy supply in Minnesota and the region" (para. 5), "satisfying the energy demand" (para. 6). If there is no unmet energy demand in Minnesota or the region, or no genuine challenge to the reliability of energy supply, a certificate of need should not be granted.

The PUC has no obligation to look after the business interest of Canadian tar sands oil producers who desire greater and easier access to Gulf Coast refiners or export markets, or to displace other means of transporting oil. Neither does the PUC have any obligation to increase Enbridge's "rate base," so that it can secure a greater guaranteed return from the rate structure approved by the Federal Energy Regulatory Commission (FERC).[7] The PUC's task is to

[7] Like most similar provisions at the federal and state levels, Minnesota's CN requirements for large energy facilities are premised on the incentive for rate-regulated companies to overbuild or overinvest in infrastructure.[7]

determine whether a new pipeline is needed to assure adequate crude oil supplies or will provide other benefits to Minnesota and the region, and whether those benefits justify the risks involved. *See generally Lakehead Pipeline Co. v. Illinois Commerce Comm'n,* 296 Ill. App. 2d 942, 696 N.E.2d 345 (Ill. App. 1998)(affirming Illinois Commerce Commission decision to deny certificate of need and public convenience and necessity to Enbridge predecessor's pipeline application on grounds that private interests are not sufficient to establish need).[8]

To the extent that the rule suggests that the economic interest of the applicant or the applicant's customers is alone enough to justify a certificate of need, it cannot be reconciled with the statute. *See generally In re Hubbard*, 778 N.W.2d 313 (Minn. 2010)(striking down longstanding DNR variance certification rule as contrary to statute). A new pipeline or pipeline expansion must serve the public interest, not just the private interests involved. Minn. Stat. § 645.17(5)("the legislature intends to favor the public interest as against any private interest"); Minn. Stat. § 645.001 (canons of statutory construction apply to rules).

Second, the PUC should no longer impose an impossible burden on parties offering alternatives to a proposed pipeline project under subpart B of the rule. First, as a threshold matter, the statute grants no authority to any agency to shift the burden of proof on any consideration away from the applicant. The risk of nonpersuasion remains with applicants under the statute. Second, there is no genuine basis in the language of subpart B for the PUC's conclusion that any proposed alternative "must have a reasonable prospect of coming to fruition" or a "meaningful likelihood of being constructed." The rule asks the PUC to consider and

When companies are guaranteed a return on their "cost of service,"[7] which includes capital costs, that, in turn, creates an incentive to "gold plate" or pad their rate base. So long as the guaranteed rate of return exceeds their costs of capital, companies like Enbridge make more money from more pipelines, whether there is any genuine need for additional pipelines or not. Regulators like Minnesota's PUC, then, step in to evaluate with a skeptical eye whether there is genuine public need for new capital projects.

[8] The 1997 Illinois Commerce Commission decision, *Lakehead Pipe Line Company Limited Partnership,* is at 1997 WL 33771802 (Ill. C.C. 1997).

compare appropriateness, cost, environmental effects, and reliability between a proposed project and alternatives, but it does not require a party to produce a pipeline company that wants to build it.

The PUC's consideration of alternatives is, of course, analogous to the consideration of alternatives that is at the heart of environmental review under either the National or Minnesota Environmental Policy Acts. *See* 40 C.F.R. § 1508.14. Under those statutes, responsible government units have a duty to develop and then assess reasonable alternatives to a proposed action. Nowhere, however, is there any suggestion that an agency can reject an alternative in environmental review because no one has come forward saying they want to build it, or no one has done the necessary engineering work to submit a permit application, or any of the unreasonable requirements the PUC has imposed on other parties. In typical environmental review documents, the lead agency identifies a "preferred alternative" that may or may not be the same as the proposed action. No one has suggested that an agency cannot "prefer" an alternative that no one at the moment wants to build. The standard for considering alternatives under Minn. Stat. § 216B.243, subd. 3, should be the same as the standard for considering alternatives under MEPA, Minn. Stat. § 116D.04.

Third, the PUC should make it clear that its decisions are governed by legal requirements outside Minn. Stat. §216B.243, subd. 3, and the pipeline rules. For example, MEPA imposes a substantive general duty on all state agencies:

> No state action significantly affecting the quality of the environment shall be allowed nor shall any permit for natural resources management and development be granted, where such action or permit has caused or is likely to cause pollution, impairment, or destruction of the air, water, land, or other natural resources located within the state, so long as there is a feasible and prudent alternative consistent with the reasonable requirements of the public health, safety, and welfare and the state's paramount concern for the protection of its air, water, land

> and other natural resources from pollution, impairment, or destruction. *Economic considerations alone shall not justify such conduct.*

Minn. Stat. § 116D.04, subd. 6 (emphasis added). The PUC cannot grant a CN or a route permit if the project would violate this provision of MEPA, and it cannot rely on "economic considerations alone" to justify granting what Enbridge is seeking.

Any PUC decision in this case must also conform to Minnesota's public trust doctrine. The state of Minnesota holds title to the waters of the state, not in the usual proprietary sense, but in its sovereign capacity, as trustee for the benefit of the people. That means all state agencies have a fiduciary duty to protect those public waters. As the Minnesota Supreme Court held in *State v. Kulevar:*

> It is fundamental, in this state and elsewhere, that the state in its sovereign capacity possesses a proprietary interest in the public waters of this state . . . . When it is established that the public has access to waters capable of substantial beneficial use by all who so desire, the statute direct that the state fulfill its trusteeship over such waters by protecting against interference by anyone, including those who assert the common-law right as a riparian owner. To permit such owners to interfere with the natural rights of the public to fish, hunt, swim, navigate, or otherwise enjoy such waters would result in subordinating public rights to private rights and in abdicating the state's trust over an incomparable natural resource.

266 Minn. 408, 123 N.W.2d 699 (1963). *See generally* Alexandra Klass, "Modern Public Trust Principles: Recognizing Rights and Integrating Standards," 82 *Notre Dame L. Rev.* 699 (2006); Joseph Sax, "The Public Trust Doctrine in Natural Resources Law: Effective Judicial Intervention," 68 *Mich. L. Rev.* 471 (1970).[9] The PUC cannot grant a CN or an RP that would violate the Commission's fiduciary duty to protect the waters of the state.

[9] Several scholars contend that the public trust doctrine extends beyond water to other shared resources like air, and have encouraged judicial adoption of an "atmospheric trust" theory primarily to challenge state climate policy. *See generally* Mary Christina Wood, *Nature's Trust: Environmental Law for a New Ecological Age* (2014).

Likewise, the PUC cannot lawfully grant a CN or an RP that would interfere with federal Indian treaty rights. In the early nineteenth century, several Chippewa bands in Minnesota ceded their territory to the United States in a series of treaties, but in each case reserved the right to hunt, fish, and gather in the "ceded territories." State agencies may not lawfully interfere with those rights, and state actions that damage habitat for resources like wild rice in the ceded territories can be enjoined. *See generally Minnesota v. Mille Lacs Band of Chippewa Indians,* 526 U.S. 172, 119 S.Ct. 1187 (1999)(upholding 1837 treaty hunting and fishing rights); *United States v. Washington*, 827 F.3d 836 (9th Cir. 2016)(affirming that treaty fishing rights include right to habitat protection). Similarly, section 106 of the National Historic Preservation Act, 16 U.S.C. § 470f, protects "traditional cultural water resources and habitat for plants, fish, and wildlife in Indian ceded territory." Certainly, if there are ambiguities in the law governing large energy facility CN's and RPs, the interpretation that favors the environment and the public interest needs to prevail.[10]

With this understanding of the applicable legal standards in place, FOH addresses each of the relevant criteria in Minn. Stat. § 216B.243 and Minn. R. 7853.0130.

B. Adequacy, reliability, and efficiency.

1. Enbridge's bullish forecasts for western Canada crude oil production and demand are too high and not credible.

The core of Enbridge's need case are the forecasts contained in the Muse Stancil reports that project considerable growth in both the supply of and demand for western Canada crude oil between now and 2030. The argument is that the demand for this oil is already exceeding the capacity of the Enbridge Mainline system, and that, as a common carrier, Enbridge regularly has

[10] Statutes with common purposes and subject matter must be construed together, *in pari materia*, to define ambiguous statutory language. *State v. Thonesavahn,* 2017 WL 3660768 (Minn. Sept. 6, 2017)("related statutes" canon).

to "apportion," i.e. reduce shipper "nominations" pro rata. Their contention is that situation will only get worse as production and demand continue to increase.

The Muse Stancil reports rely heavily on forecasts from the Canadian Association of Petroleum Producers (CAPP), the industry trade association. In its 2015 application, Enbridge relied on 2014 CAPP projections that Western Canada Sedimentary Basin (WCSB) production would more than double in fifteen years, increasing from 2.4 million barrels per day in 2015 to 6.35 million barrels per day by 2030.[11]

But between the time of Enbridge's application and now, the world has changed for Canadian tar sands oil.

- Oil prices collapsed, and have stayed low.[12] Because tar sands extraction costs are relatively high, tar sands oil is selling at a loss.[13]
- Almost no new tar sands capacity has been approved since 2013.[14] Even the already approved or "sanctioned" projects are not certain to be constructed.[15]
- There is an oil supply glut in the region containing Minnesota.[16] All refineries in the region are operating at or near maximum capacity.[17] Indeed, the oil glut today and for at least the near future appears to be global.[18]

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[11] Ex. FOH-6 at 5 (Joseph direct), *citing* CAPP 2014 Crude Oil Forecast, Markets & Transportation.
[12] The West Texas Intermediate (WTI) benchmark price has declined by one-half from 2014. Ex. FOH-6 at 5-6 (Joseph direct).
[13] Ex. FOH-6 at 15-16 (Joseph direct), *citing* Canadian Energy Research Institute (CERI), Canadian Oil Sands Supply Costs and Development Projects (2014-2048)(2014). That CERI study concluded that the WTI prices needed to justify tar sands expansion were $85 for *in situ* steam assisted gravity drainage (SAGD) projects and $106 for stand-alone mine projects, well above current WTI prices. Even with some cost cutting, the low prices (and the fact that tar sands oil typically sells at a discount because of the lengthy transportation required and the difficulty of working with diluted bitumen) have brought tar sands expansion to a halt.
[14] HTE-3at 10 (Stockman rebuttal).
[15] *Id.* at 13.
[16] CAPP itself acknowledges that "PADD II [the district including Minnesota and the Midwest] is essentially saturated with western Canadian and domestic U.S. supplies." CAPP 2017 Crude Oil Forecast, Markets and Transportation. For CAPP, the reason for adding pipeline capacity is not to serve Minnesota or Midwest markets, but rather to use "market hubs in the region [to] facilitate transshipment [to] the largest U.S. tank farm located in Cushing, Oklahoma. If built, proposed pipeline projects will also enable large volumes to be transported to

- Demand for refined petroleum products in the region has declined since 2005.
- Canada has committed to the Paris Accords and to substantial reductions in carbon emissions by 2030.[19] Canada cannot meet its 30% national reduction target (or future greenhouse gas emission goals) and continue to expand tar sands production at the level CAPP projects.

Major oil multinationals have abandoned their investments in Canadian tar sands oil. Just last month, AXA, the Paris insurance giant, announced it was divesting about $1 billion from the main oil sands producers and associated pipelines, and that it would no longer insure North American oil pipelines either.[20]

The result is that the CAPP forecasts are simply too high, and cannot be justified by supply/demand conditions in Minnesota or the region.[21] Those forecasts are based substantially on a survey of members, who are not required to disclose the assumptions behind their projections. CAPP forecasts are therefore only industry forecasts, meant to serve industry interests to support future investment. And they have historically been too optimistic.[22]

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tidewater and reach additional international markets." *Id.* Enbridge's own expert projects that 60% of increased shipments from a new line 3 will be shipped through Minnesota to other pipelines exiting the Midwest. Muse Stancil, Enbridge Line 3 Replacement Market Analysis, at 83 (2017).

[17] The London Economics International (LEI) report offered by the department of commerce (DOC-ER) cited Energy Information Administration (EIA) data that "Minnesota district (Minnesota, North Dakota, South Dakota, and Wisconsin) refineries as a group have been operating at high levels of utilization, which indicates that they are not short of physical supplies of crude oil, and also that they have little room to increase total crude runs." Ex. DER-4 (Fagan direct), LEI report at 5. Indeed, the utilization levels have been near 100%. *Id.* at 14.

[18] *E.g.* "Global oil glut won't subside in 2017, says IEA," *Wall Street Journal* (June 15, 2017), https://www.wsj.com/articles/global-oil-glut-wont-subside-in-2017-says-iea-1497427203

[19] The Canadian National Energy Board (NEB) forecasts Enbridge uses to corroborate the CAPP forecasts acknowledge that they do not incorporate the new law requiring carbon pricing in all provinces by 2018. Ex. FOH-6 at 8 (Joseph direct), *citing* NEB, *Canada's Energy Future Update: Energy Supply and Demand Projections to 2040* (2016)

[20] "Insurance giant Axa dumps investments in tar sands pipelines," *The Guardian* (Dec. 13, 2017), https://www.theguardian.com/environment/2017/dec/12/insurance-giant-axa-dumps-investments-tar-sands-pipelines

[21] CAPP oil production forecasts have always proven to be too high by hundreds of thousands of barrels per day even in the near term. As the U.S. State Department observed in 2013, "CAPP forecasts generally have overestimated potential production compared to the trend of actual production."

[22] Ex. FOH-6 at 7 (Joseph direct), *citing* U.S. Department of State, *Draft Supplemental Environmental Impact Statement for the KeystoneXL Project*, vol. 1: 4-24 (2013).

In a low oil price scenario (around $50/bbl) it is more likely that western Canada production will increase slightly as new projects come on line in the next two or three years, and then begin a long decline.[23] Even if prices rebound to the $80/barrel level, the International Energy Agency (IEA) sees increases from already-permitted projects to 2020, but then predicts production would be essentially flat for the next ten years.[24]

If Canada intends to honor its commitment to the Paris Climate Accord, then it *cannot* allow western Canada tar sands production to increase. By the time those projects (including a new Line 3) reach the end of their useful life (40 or 50 years), carbon emissions will have had to be reduced to *zero* to meet the 2 degree Celsius target.

If electric vehicle market penetration occurs as quickly and substantially as many observers believe, then the demand for refined petroleum products will drop even more precipitously and demand for crude oil will drop even faster. Bloomberg New Energy Finance's Electric Vehicle Outlook from July 2017 predicts 530 million EVs on the road by 2040, with 54% of new car sales and 33% of the global car fleet electric by that same date. BNEF forecasts the inflection point for EVs is likely to occur between 2025 and 2030. That level of EV penetration will displace up to 8 million barrels of transportation fuel per day.[25]

2. At the same time, Enbridge's forecasts of likely available transportation capacity for western Canada oil are too low.

Since the time Enbridge filed its application in 2015, Canadian government officials approved Kinder Morgan's Trans Mountain Expansion Project (TMEP), which will be able to transport 590,000 barrels per day to export terminals on the Pacific coast. Construction began in September 2017. During that same period, Trans Canada's Keystone XL project was approved

[23] This is the Rystad low price case production forecast described in Stoneman Surrebuttal, at 28-32.
[24] Ex. FOH-6 at 9 (Joseph direct), *citing* IEA, *World Energy Outlook 2016* (2016).
[25] https://data.bloomberglp.com/bnef/sites/14/2017/07/BNEF_EVO_2017_ExecutiveSummary.pdf

by the Trump Administration and passed its last major regulatory hurdle in Nebraska. Just last week, Trans Canada confirmed that, after its recent "open season," it had received long-term commitments from enough shippers (including the province of Alberta itself) to commence construction relatively soon. Keystone XL will bring another 830,000 bpd of capacity to move western Canada oil to the Cushing, Oklahoma terminal and then to the Gulf Coast. That additional capacity, or any part of it, will take any existing pressure off the Enbridge Mainline.

Even then under the more bullish CAPP projections, there will likely be excess oil transport capacity. If, for example, oil supply from the West Canada Sedimentary Basin (WCSB) were to go as high as 5.2 mbpd by 2030, TMEP and Keystone XL would leave a 220 kbpd surplus in transport capacity, even if all rail shipments were eliminated.[26]

Table 1. Oil supply and transport capacity demand: scenario 3 (low oil supply growth, no rail, no L3R) (kbpd).

	2020	2025	2030
Oil Supply Forecast[1]	4334	4334	4334
Current Pipeline Capacity[2]	4020	4020	4020
Surplus/Deficit	*-314*	*-314*	*-314*
Kinder Morgan TMEP	590	590	590
Keystone XL	830	830	830
Energy East	1100	1100	1100
Current capacity + KM TMEP	276	276	276
Current capacity + Keystone XL	516	516	516
Current capacity + Energy East	786	786	786
Current capacity + KM TMEP + Keystone XL	1106	1106	1106
Current capacity + KM TMEP + Keystone XL + Energy East	2206	2206	2206

Notes. 1. Forecast is based on CAPP's 2016 WCSB supply forecast (CAPP 2016) but including only current projects under construction and no new projects commenced during the forecast period. Because CAPP's 2016 forecast does not provide an estimate of production based on current projects under construction, I use CAPP's forecast production in 2020 as a proxy of operating and currently under construction oil production. Note that CAPP's forecast incorporates the extra volume of diluents mixed with bitumen to allow bitumen to be transported in pipelines (CAPP 2016, p. 39). I have adjusted CAPP's forecast by deducting WCSB refinery consumption (595 kbpd), adding refined product shipments of 120 kbpd (Enbridge 2015b, p. 3-26) and Bakken shipments of 190 kbpd (Muse Stancil 2017, p. 105) on Enbridge Mainline, and refined product shipments on TMEP of 50 kbpd (Muse Stancil 2017, p. 65), for a net reduction in oil supply exports of 235 kbpd from the CAPP forecast. 2. Capacity is 95% of nameplate capacity from CAPP (2016).

[26] Ex. FOH-6 at 17 (Joseph direct).

If we assume rail shipments of 550 kbpd, which is CAPP's mid-point forecast,[27] then *no* additional pipeline capacity would be needed until 2025. When TMX is completed, however (construction began in September 2017), no additional capacity will be needed until 2030. When Keystone XL comes on, then there will be no additional capacity needed until well after 2030.[28]

Table 2. Oil supply and transport capacity demand: scenario 2 (high oil supply growth, rail, no L3R) (kbpd).

	2020	2025	2030
Oil Supply Forecast[1]	4334	4637	5220
Current pipeline and rail capacity[2]	4570	4570	4570
Surplus/Deficit	*236*	*-67*	*-650*
Kinder Morgan TMEP	590	590	590
Keystone XL	830	830	830
Energy East	1100	1100	1100
Current capacity + KM TMEP	826	523	-60
Current capacity + Keystone XL	1066	763	180
Current capacity + Energy East	1336	1033	450
Current capacity + KM TMEP + Keystone XL	1656	1353	770
Current capacity + KM TMEP + Keystone XL + Energy East	2756	2453	1870

Notes. 1. Forecast is based on CAPP's 2016 WCSB supply forecast (CAPP 2016). CAPP's forecast incorporates the extra volume of diluents mixed with bitumen to allow bitumen to be transported in pipelines (CAPP 2016, p. 39). However, for the purposes of assessing the need for the L3R project, I have adjusted CAPP's forecast by deducting WCSB refinery consumption (595 kbpd), adding refined product shipments of 120 kbpd (Enbridge 2015b, p. 3-26) and Bakken shipments of 190 kbpd (Muse Stancil 2017, p. 105) on the Enbridge Mainline, and refined product shipments on TMEP of 50 kbpd (Muse Stancil 2017, p. 65), for a net reduction in oil supply exports of 235 kbpd from the CAPP forecast. 2. Capacity is 95% of nameplate capacity from CAPP (2016) plus rail capacity of 550 kbpd.

Of course, if oil sands production only grows modestly—for example, from 2.4 mbpd in 2015 to 3.1 mbpd in 2020, but then only to 3.3 mbpd by 2030[29]-- the need for additional pipeline capacity lessens even further. Either TMEP or Keystone XL, perhaps with some rail, will soak up the extra supply. If supply declines between 2020 and 2030, e.g. under the Rystad low price scenario, then none of these projects will be needed.

[27] Rail has certain inherent advantages over pipelines—lower capital costs, shorter lead times to add capacity, shorter shipment times, flexibility to reach alternative markets, and high product integrity—so it is reasonable to assume some oil will move by rail under most scenarios.
[28] Ex. FOH-6 at 18 (Joseph direct).
[29] Ex. FOH-6 at 14 (Joseph direct), *citing* IEA *World Energy Outlook 2016* (2016).

When Enbridge first submitted its application, back in 2015, oil was riding high and CAPP's projections were even more optimistic. Their application relied on earlier CAPP forecasts projecting over 6 mbpd out of the WCSB by 2030, and they could make a more plausible case that all of these pipeline projects could be fully utilized if supply increased that much. By the time Enbridge submitted its direct testimony in early 2017, however, oil prices had dropped precipitously and even CAPP's projections had cooled substantially. Enbridge could only make the numbers work even with CAPP's optimistic projections if it assumed that Keystone XL would never be approved.[30]

This pattern of manipulating the numbers to get the desired result continued with the additional forecast testimony Enbridge submitted late in the process. Mr. Earnest's later testimony considered a number of different scenarios, but in every one of them, the volume of oil moving through the Enbridge Mainline remained constant. In other words, Earnest's testimony assumed that any surplus pipeline capacity would be borne by the other pipelines, meaning that Enbridge would run full and the others would run at two-thirds capacity.[31] The opposite is more likely. The major non-Enbridge pipelines—Keystone XL and TMEP—will have long-term take-or-pay contracts with shippers for most of their capacity. Shippers will shift their volume to those pipelines to avoid paying penalties rather than use Enbridge's lines.[32] The bottom line remains that, under even the more optimistic forecasts about crude oil supply from western Canada, there is no need for *three* new pipelines.

[30] As Dr. Joseph pointed out, Ex. FOH-6 at 10, Enbridge and its consultant made several changes in assumptions between the 2015 application and the 2017 testimony to make the numbers work better for Line 3. The changes were not based on the facts. In 2015, Keystone XL had not been approved, and was on its way to rejection; in early 2017, its federal approval was assured and the remaining state approvals were forthcoming (and occurred later in the year).
[31] Ex. FOH-10 at 8 (Joseph surrebuttal).
[32] *Id.* at 8-9.

Trans Canada, Kinder Morgan, and Enbridge are of course competitors, and all three have staked a substantial part of their futures on growing production from the Canada tar sands region. But only under the most optimistic high price scenarios can a case be made that there is a need for the Trans Mountain Expansion Project, the KeystoneXL pipeline, *and* the Line 3 expansion. It may be in Enbridge's private financial interest to get their proposed pipeline permitted and built first, but Minnesota has no stake in how that competitive battle turns out. If the suppliers for Minnesota consumers are operating at capacity, getting the raw material they need, and long-term demand is likely flat, it is in Minnesota's interest that Canadian tar sands producers gain access to Gulf Coast refineries and export markets in a way that imposes no new environmental risks on Minnesota.

C. The "shipper support" Enbridge claims for this project does not establish that the adequacy, reliability, or efficiency of our energy supply is at risk if Line 3 is not built.

Enbridge cites the willingness of the shippers who might use the pipeline to pay a toll surcharge as compelling evidence of "need" for the project. And it is true that FERC and the PUC have acknowledged that shipper commitments can be probative on the issue of need.

It is important, however, to distinguish between the kinds of commitments shippers make. In "open season" situations like those governing Kinder-Morgan's Trans Mountain Expansion Project or Trans Canada's Keystone XL project, shippers are asked to make long-term, often ten years or more, "take or pay" commitments to certain volumes, meaning that if they do not use as much of the pipeline's capacity as they have promised, they have to pay anyway.

In Enbridge's case, however, the shippers have made no such commitments. They only pay the extra charge if they actually use the new pipeline. They agree to a higher price, knowing that under FERC regulations, pipelines are entitled to cost-of-service based rates if the shippers do not agree. But no shipper need ever actually pay those higher tolls. Indeed, if any of these shippers can get more favorable terms from one of the other available pipelines on a take-or-pay basis, the shippers will obviously turn to those pipelines first, not to the Enbridge mainline. As Dr. Joseph concluded:

> Shipper support for the project does not mean that the project is needed; shippers bear little or no risk agreeing to the higher tolls that Enbridge will charge because shippers will be under no obligation to ship on the Enbridge system, and if they do ship on the Enbridge system they can pass the costs onto consumers.[33]

If evidence of shipper support like this is sufficient to establish need, then the certificate of need process becomes little more than a ministerial function. No pipeline is going to be proposed that does not have some potential customer support. The bar is considerably higher, and, as this brief previously explained, establishing need requires proof that a proposed project is needed to serve Minnesota energy needs.

D. The new Line 3 is not needed to meet any Minnesota energy needs.

If the focus changes to the needs of Minnesota and the Midwest region, as it should, the case that there is a "need" for the new Line 3 is even less persuasive. Minnesota is part of Petroleum Administration for Defense District (PADD) II, which covers the traditional Midwest plus Kentucky, Tennessee, and Oklahoma. And the available evidence is that PADD II does not need any more oil. Even the Canadian Association of Petroleum Producers (CAPP) acknowledges that the PADD II market is saturated, and the only available new markets are elsewhere:

> PADD II is essentially saturated with western Canadian and domestic U.S. supplies. However, increased deliveries to this market will be significant as market hubs in the region facilitate transshipment and the largest U.S. tank farm is

[33] Ex. FOH-10 at 3 (Joseph surrebuttal).

> located in Cushing, Oklahoma. If built, proposed pipeline projects will also enable large volumes to be transported to tidewater and reach additional international markets.[34]

In other words, increased production from the Western Canada Sedimentary Basin (WCSB) will be shipped *through* PADD II to other markets. Dr. Earnest, Enbridge's consultant, estimated that 60% of the increased shipments on Enbridge resulting from the Line 3 project would be shipped through Minnesota to other pipelines exiting the upper Midwest, 25% would displace pipeline shipments heading north into the upper Midwest, and 15% would displace rail transportation primarily to Chicago.[35] None of the new capacity would go to Minnesota.[36] The "shipper support" for the project is to be able to move more oil, some to eastern Canada, but most to the Gulf Coast and then on to foreign markets, and to displace other means of transport.

That is corroborated by the refinery capacity utilization data in the "Minnesota district" (Minnesota, North Dakota, South Dakota, and Wisconsin). According to the Energy Information Administration (EIA), refinery capacity utilization has been at or near 100% for many years.[37] That means those refineries have been processing all the crude they possibly can, and crude oil has not been in short supply.[38] There is little room for refineries in this region to increase their total crude runs, and therefore the refineries in this region do not "need" additional pipeline capacity.

Enbridge was able to obtain support letters from Flint Hills Resources, which owns and operates Minnesota's largest oil refinery, and from Andeavor, which operates the smaller refinery in St. Paul Park. Conspicuously, neither refinery indicated that they had been unable to obtain enough crude oil feedstock, nor did either assign any costs from any apportionment that

[34] Ex. FOH-6 at 20 (Joseph direct).
[35] *Id., citing* Muse Stancil, *Enbridge Line 3 Replacement Market Analysis* 83 (2017).
[36] *Id.*
[37] Ex. DER-4 at 14 (Fagan direct).
[38] *Id.*

has occurred or might occur. Neither refinery chose to intervene in this case to protect their interests, or to produce any witnesses for cross-examination, or to provide any background documentation. These facilities are not strangers to PUC processes, and they have been willing and able to defend their interests on many, many occasions. Their unwillingness to do so here supports the inference that, while they might prefer easier access to crude oil, they do not genuinely need this new pipeline to satisfy the energy needs of Minnesota or the region.

Presumably, like any production facility, FHR and Andeavor have several raw material sources available. If there is apportionment in any particular month, and the refineries cannot get what they have "nominated" from Enbridge, they can make up their reduced share through some combination of transactions with other shippers, using rail, or perhaps drawing on storage. Since neither refinery offered a witness, we do not know exactly what they have been doing each month. We do know, however, that they have been able to operate at near-capacity all along, whether there has been apportionment or not.

So have all the other refineries in the region. Minnesota does consume refined oil products from refineries other than the two located in the state, but there is no evidence that either of those refineries in the region have been unable to get the crude oil they need to operate at capacity. BP acknowledged on cross-examination that they have several sources of oil for their Midwest refineries. There simply is no basis for the conclusion that there is a shortage of crude oil in either Minnesota or in the region, and therefore there is no "need" for additional pipeline capacity under Minn. R. 7853.0130.

II. THE NON-ENERGY BENEFITS OF THIS PROJECT TO MINNESOTA DO NOT EXCEED ITS COSTS.

Enbridge claims that construction of the Line 3 project will create thousands of jobs and have significant economic benefits to Minnesota, over $2 billion in economic output, which will increase tax revenues and spur indirect and induced economic benefits. Indeed, this claimed economic benefit has been a major part of the public rationale for the project. The problem with this claim is that it confuses economic effects with economic benefits. What matters is not the gross economic activity associated with what Enbridge says will be a $2.1 billion project, but whether there will be any *net* economic benefit to Minnesota.

With low unemployment and a tight labor market in Minnesota and in surrounding states,[39] there are few idle workers available to meet Enbridge's labor demands. When the labor supply is fully employed, any additional demand for labor carries opportunity costs, since if it is used on the Line 3 project, it cannot be employed elsewhere. This project would put few if any people to work that otherwise would not be working.[40] Enbridge might have to offer a wage premium, which would benefit some, but that kind of labor competition would cost Enbridge and any competing employers.

As Dr. Joseph testified, this failure to consider opportunity costs is a well-documented limitation on the kind of input-output modeling Enbridge (and, to some extent, DOC-EERA) used.[41] And, of course, as Enbridge's Dr. Lichty acknowledged at the evidentiary hearing, there was no effort to assess negative externalities from the project, not just environmental risks, but also the costs of labor market disruption, additional government service expenses, and so on. Indeed, as Dr. Lichty acknowledged, under his analysis, spending $1.2 billion on cleaning up an

[39] In November 2017, the seasonally adjusted unemployment rate in Minnesota was 3.1%. https://mn.gov/deed/data/current-econ-highlights/state-national-employment.jsp (accessed January 17, 2018).
[40] Ex. FOH-6 at 13 (Joseph direct), *citing* Denniss, "The use and abuse of economic modeling in Australia; Users' Guide to Tricks of the Trade (2012), http://www.rai.org.au/sites/defau;tfo;es/TB%2012%%20The%Use%20and%20abuse%20of%20economic%20modelling%20in%20Ausstralia_4.pdf.; Grady & Muller, "On the Use and Misuse of Input-output Based Impact Analysis in Evaluation," *Canadian Journal of Program Evaluation* 3(2), 49-61 (1988); Shaffer, *Multiple Account Benefit-Cost Analysis; A Practical Guide for the Systematic Evaluation of Project and Policy Alternatives* (2010); Tombe, "How to create two jobs for every Canadian worker," *Financial Post* (2016), http://business.financialpost.com/fp-comment/trevor-tombe-how-to-create-two-jobs-for-every-canadian-worker.
[41] *Id.*

oil spill, the cost so far of cleaning up Enbridge's Marshall, Michigan spill, would also have significant economic benefits to Minnesota, but no one is proposing that. There is therefore little to no credible evidence that could quantify a net economic benefit for Minnesota.

What we do know for sure, on the other hand, is that Minnesota consumers will pay the cost of building this project. The capital costs of building the Line 3 project will be covered by a toll surcharge paid by shippers on top of existing toll charges. For oil delivered to Clearbrook, where the two Minnesota refineries would take their product, the surcharge will be 49 cents per barrel for the first 10 years of the project and 46 cents for the last five years.[42]

Enbridge's estimate is that the total cost of this toll increase over the 15 year agreement on shipments to Minnesota refineries will be between $693 million and $1.1 billion, based on Enbridge's forecast of oil demanded by those refineries.[43] The parties that will initially pay that toll surcharge will be shippers on the Enbridge mainline—refiners, oil producers, or third partgy distributors. But, regardless of who initially pays, the increased toll costs will increase the marginal cost of crude oil supply to Minnesota and to PADD II and much, if not all, of that increase will be passed on to consumers of refined products.[44]

That cost may be much higher. As Earnest testified, and Flint Hills corroborated, Minnesota's market for refined petroleum products is integrated into the larger regional market. Regional refinery costs will incorporate the toll surcharge to Enbridge's terminal in Flanagan, Illinois, which will be 89.5 cents per barrel for the first ten years and then 84.5 cents per barrel for the last five years. If the increased tolls to Flanagan are passed on in the form of higher

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[42] Ex. FOH-10 at 14-15 (Joseph surrebuttal), *citing* Appendix D to Enbridge's Application for Certificate of Need.
[43] Ex. FOH-10 at 15 (Joseph surrebuttal), *citing* Enbridge Response to FOH Information Request No. 16 (attached as Exhibit 1).
[44] *Id.*

refined petroleum product prices in the regional market, the potential cost to Minnesota consumers would be $1.6 billion over 15 years.[45]

If the utilization of the new Line 3's capacity is lower than Enbridge forecasts, due to construction of other pipelines or broader market forces, then Enbridge will presumably seek further toll increases to cover its cost-of-service, either by agreement, or by petition to the National Energy Board (NEB) in Canada or FERC in the United States. Those additional tolls would also be passed on to Minnesota consumers, even though this capacity increase will largely serve non-Minnesota markets.[46]

Unlike the speculative benefits Enbridge claims, those added toll charges are real and certain and will be imposed on Minnesota consumers, precisely the people the PUC is supposed to be protecting. Without even considering potential environmental risk, those costs likely exceed the putative benefits of the project.

III. ENBRIDGE'S PROPOSED ROUTE POSES UNREASONABLE ENVIRONMENTAL RISKS. ALTERNATIVE ROUTES, INCLUDING SA-04, WOULD REDUCE THOSE RISKS.

A. Applicable legal standard

The PUC should deny Enbridge's application for a certificate of need. Under Minn. R. 7852.1900, subp. 2, however, if the PUC determines that a certificate of need is appropriate for a pipeline, it must select a route "that minimizes human and environmental impact." The rule then lists a set of criteria the commission must consider:

> A. Human settlement, existence and density of populated areas, existing and planned future land use and management plans;
>
> B. The natural environment, public and designated lands, including but not limited to natural areas, wildlife habitat, water, and recreational lands;

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[45] *Id.* at 15
[46] Ex.FOH-6 at 22-23 (Joseph direct).

C. Lands of historical, archaeological, and cultural significance;

D. Economies within the route, including agricultural, commercial or industrial, forestry, recreational, and mining operations;

E. Pipeline cost and accessibility;

F. Use of existing rights-of-way and right-of-way sharing or paralleling;

G. Natural resources and features;

H. The extent to which human or environmental effects are subject to mitigation by regulatory control and by application of the permit conditions contained in part 7852.3400 for pipeline right-of-way preparation, construction, cleanup, and restoration practices;

I. Cumulative potential effects of related or anticipated future pipeline construction; and

J. The relevant applicable policies, rules, and regulations of other state and federal agencies, and local government land use laws including ordinances adopted under Minnesota Statutes, section 299J.05, relating to the location, design, construction, or operation of the proposed pipeline and associated facilities.

Id., subp. 3. As with the CN criteria, these RP criteria must be interpreted in light of other legal requirements that apply to all state agencies:

- The Minnesota Environmental Policy Act's (MEPA) requirement that agencies avoid the pollution, impairment, or destruction of Minnesota's natural resources if feasible and prudent alternatives are available;
- MEPA's prohibition on letting economic considerations alone determine whether alternatives are feasible and prudent;
- The public trust responsibility all agencies have to protect Minnesota's waters; and
- The general obligation to protect the public interest over any private interest.

Enbridge's proposed route does not meet that standard. It opens up a new crude oil pipeline corridor through some of Minnesota's most vulnerable and irreplaceable natural resources in order to limit its cost. The mitigation measures Enbridge has described to prevent and/or remediate oil spills may be laudable, but they cannot eliminate the risk of a destructive spill and irremediable damage. There are alternative routes like SA-04 that could reduce those risks substantially. And, any additional pipeline capacity will facilitate the extraction and combustion of fossil fuels that will increase greenhouse gas emissions, directly contrary to the policy of this state.

B. A new crude oil pipeline corridor through some of Minnesota's most vulnerable and irreplaceable natural resources poses an unreasonable environmental risk.

Construction of a new pipeline will do damage to the natural resources in the areas through which it passes. In operation, the additional crude oil that will be transported through this proposed pipeline also poses substantial environmental risks, including along those parts of the route where it would share or expand an existing pipeline right-of-way. Friends of the Headwaters' (FOH) focus, of course, is on that portion of the proposed route that would travel south from Clearbrook, Minnesota, past the Mississippi River Headwaters area, through the central sands shallow aquifer near Park Rapids, and then across Minnesota lake country, with some of the cleanest water and most intact wetlands and habitat in the state.

Crude oil contains several toxic compounds that can pose a threat to human health and wildlife, particularly the aromatic hydrocarbons referred to as "BTEX"—benzene, toluene, ethyl benzene, and xylenes.[47] Diluted bitumen, which will be the bulk of what will travel through a new Line 3, poses unique risks if it spills. As it "weathers" – or as the diluent evaporates – the density of "dilbit" can increase to more than the density of water, which means that it can sink to the bottom of a waterbody, as it did in the Marshall, Michigan spill. If it comes into contact with even a small amount of suspended sediment, it can sink even if its density is less than water.[48] In

[47] Exh. FOH-13 at 24, 60-61 (NAS *Spills of Diluted Bitumen from Pipelines,* included in Kuprewicz surrebuttal)
[48] *Id.* at 28-29.

addition, dilbit is much more adhesive than conventional crude oil. It can stick to animals, aquatic vegetation, and rocks, and its adhesive properties can greatly complicate cleanups.[49]

Oil spills on land do not spread very far, but once oil comes into contact with water, it can spread rapidly.[50] It can also persist for years despite cleanup efforts. The Marshall, Michigan spill reached a reservoir 60 km away called Morrow Lake, and an oil sheen appeared for several years after in the warmer months.[51] In coarse soil conditions, and especially with shallow aquifers, spilled oil can reach the groundwater and will then move along the downward groundwater gradient. It can persist as well. At the 1979 Bemidji spill site, there is still a substantial amount of oil in the subsurface despite five years of remediation and over 30 years of natural degradation.[52] The degree to which a dilbit spill could contaminate groundwater depends on how much of the light components remain, where the toxic BTEX compounds soluble in water can migrate easily. And, of course, groundwater and surface water are in fact a single resource, connected to each other in various ways. Wetlands at the land-water interface pose special cleanup problems if contaminated, because they are fragile and often impossible to fully restore.[53]

The degree of risk depends on the nature of the landscape a pipeline is passing through. Some surface waters are more pristine than others, some groundwater is more vulnerable than others, some areas are richer in wetlands than others, and some areas have greater fish and wildlife populations susceptible to oil contamination.

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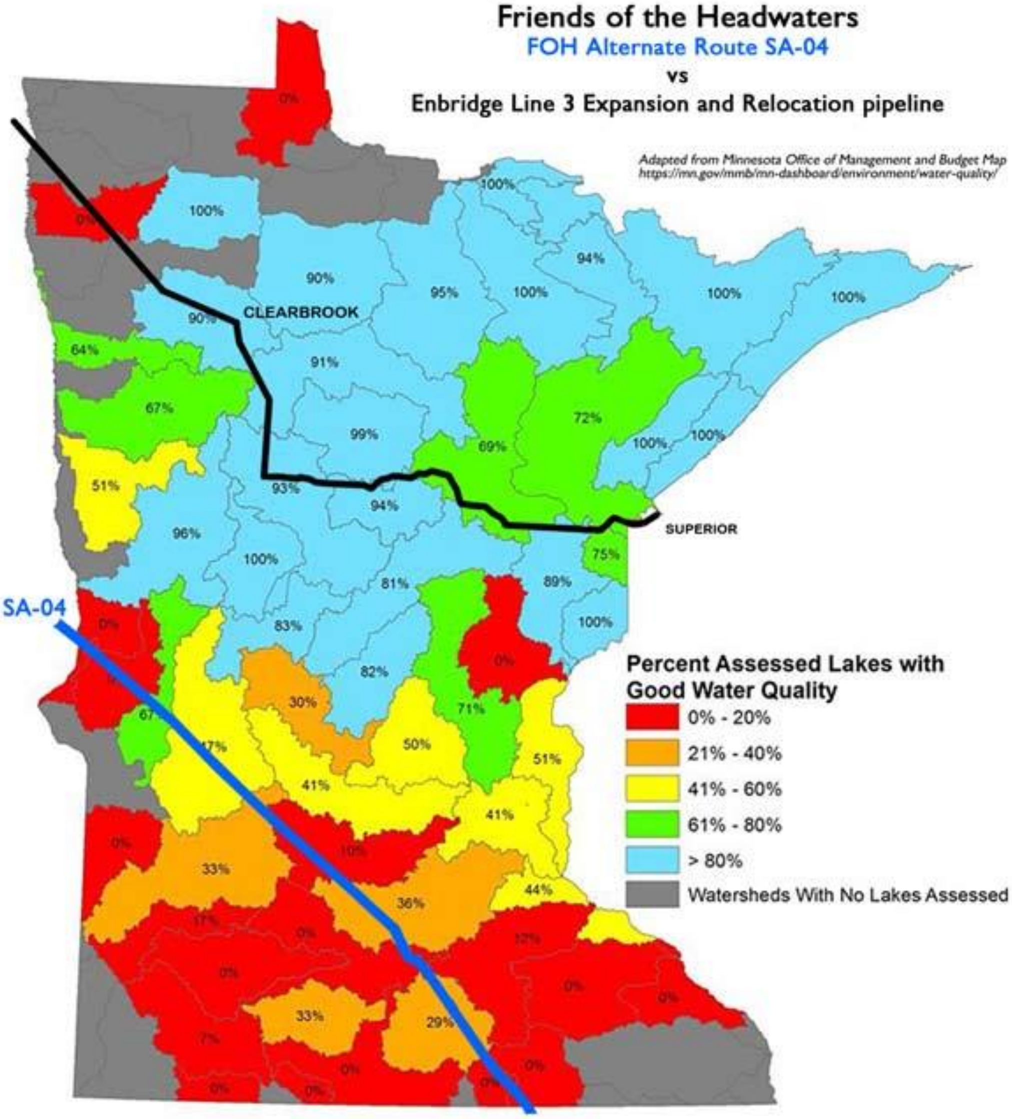
[49] *Id.* at 30-31.
[50] *Id.* at 41.
[51] *Id.* at 53.
[52] *Id.* at 51.
[53] *Id.* at 54.

Maps in the evidentiary record demonstrate that Enbridge's proposed route travels through some of the cleanest surface waters in the state, some of the most vulnerable aquifers, and some of the most wetland and habitat-rich parts of Minnesota.[54]

1. Surface water

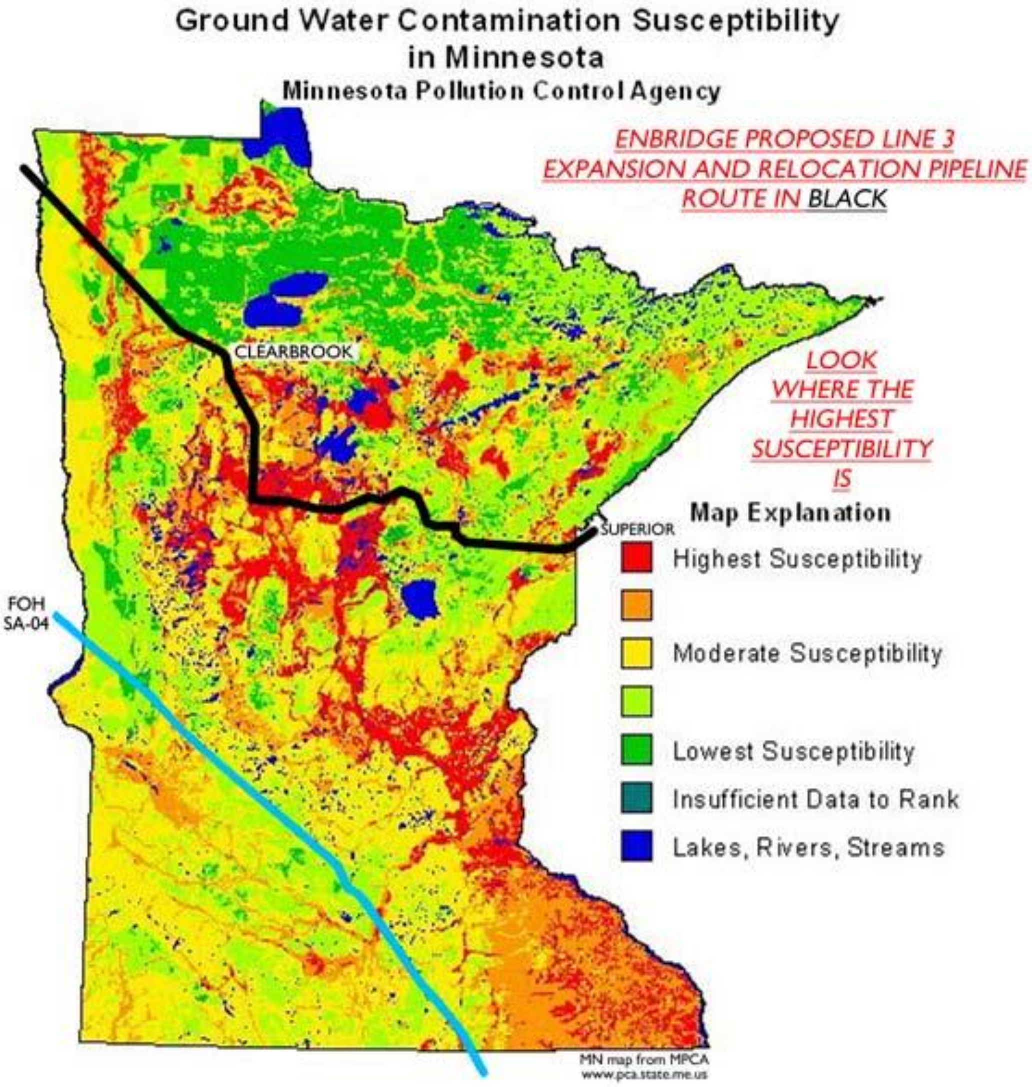
The Remote Sensing Laboratory at the U of Minnesota Water Resources Center produced this map. FOH overlaid Enbridge's proposed Line 3 expansion and relocation pipeline corridor to show the comparison of Line 3 high risks to lakes of high water clarity versus FOH's proposed alternative pipeline route, SA-04, to avoid the region of Minnesota's clearest lakes.

[54] The November 22, 2017 DNR comment (attached as Exhibit 2) contains a number of maps making the same points.



This map portrays the state's assessment of the water quality in Minnesota lakes. FOH overlaid Enbridge's proposed Line 3 expansion and relocation pipeline corridor to show the comparison of Line 3 high risks to good water quality lakes versus FOH's proposed alternative pipeline route, SA-04, to avoid those good quality waters.

2. Groundwater

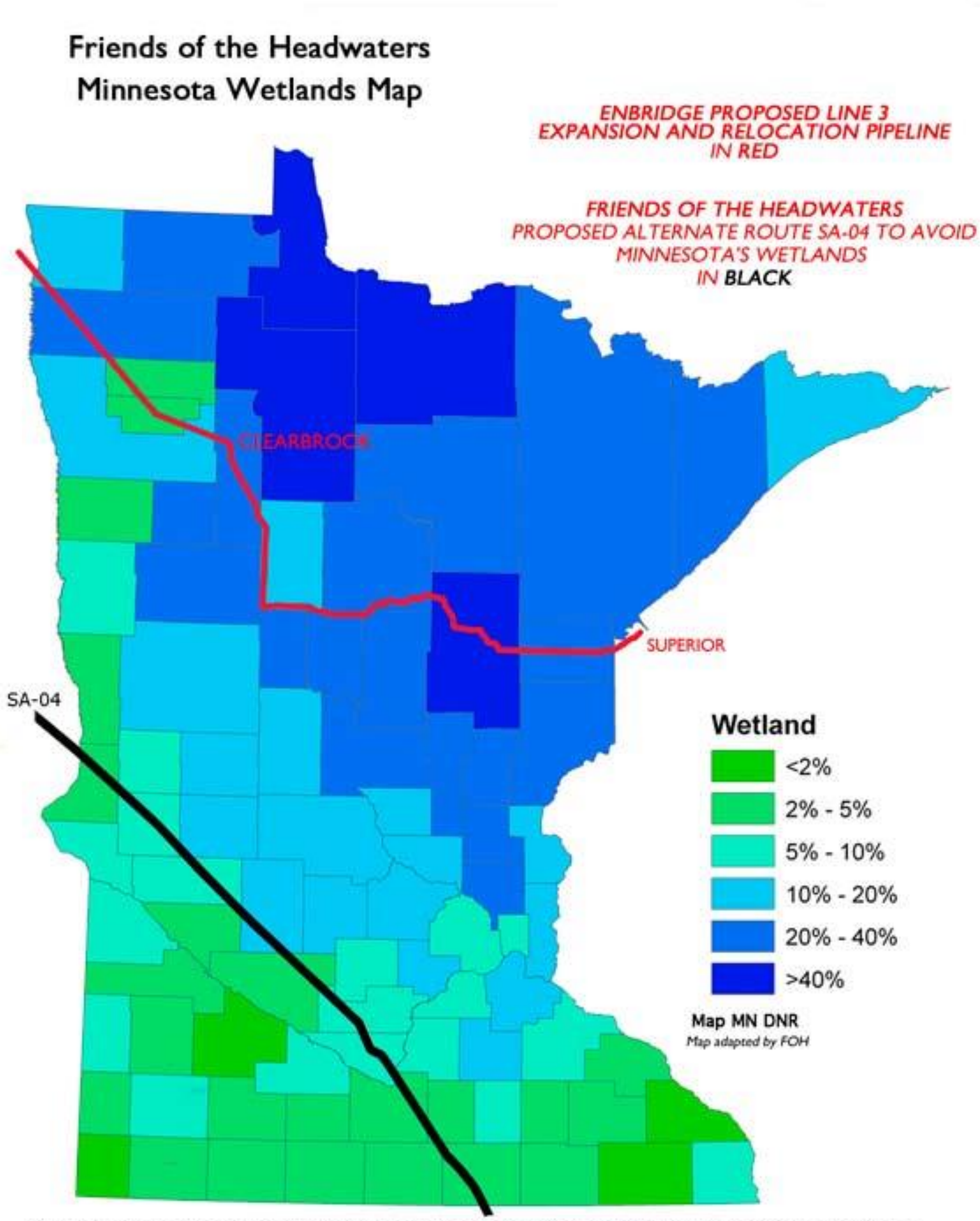


Those bright red areas on the above map, besides being extremely susceptible to contamination, also just happen to be critical aquifers. Besides providing drinking water these aquifers also irrigate thousands of acres of farmland for Minnesota's farmers and the state's agri-business economy.

The Straight River aquifer supports the county's largest employer, the RDO/LambWeston Company, which grows and makes french fries for MacDonalds besides other potato products. The aquifer supplies all the drinking water for the county seat, Park Rapids and provides clear, cold water for a nationally renowned brown trout stream. All that at that right turn elbow in Enbridge's proposed Line 3 route.

Nothing is more critical than our drinking water sources.

3. Wetlands



This comparative map juxtaposes the proposed Line 3 route and FOH's SA-04 in relationship to the state's prime wetlands areas as identified on this map. The intention was to illustrate the risk to the state's wetlands. Note the correlation of this wetlands map to the wild rice map.

These wetlands are also critical to Minnesota's nesting and migratory waterfowl.

4. Habitat

Friends of the Headwaters

Minnesota 2001 and 2011 Comparison
(Numbers in thousands. Expenditures in 2011 dollars)

	2001	2011
Fishing		
Anglers in state	1,624	1,562
Days in state	30,083	21,702
In-state expenditures by U.S. anglers	$1,631,503	$2,414,257
State resident anglers	1,345	1,328
Total expenditures by state residents	$1,589,977	$2,225,059

2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation—Minnesota
U.S. Fish and Wildlife Service and U.S. Census Bureau

The area in blue is Minnesota's prime fisheries habitat meaning the region is best for Minnesota's fish to feed and breed. Although the Minnesota Land Trust map features other areas, FOH overlaid Enbridge's preferred route to illustrate the potential risks to the fisheries habitat. FOH's alternative route SA-04 does not risk prime fish habitat. In 2011 fishing expenditures in Minnesota totalled over $2.4 BILLION dollars.

FRIENDS OF THE HEADWATERS
ALTERNATE ROUTE SA-04
TO BYPASS WILD RICE WATERS

ENBRIDGE PROPOSED LINE 3
EXPANSION AND RELOCATION
PIPELINE ROUTE

This map illustrates the extreme risk to the state's wild rice waters by the proposed Line 3 route. Could Enbridge have picked a worse route for jeopardizing the prime wild rice lakes and wetlands. Wild rice is Minnesota's native grain and a part of our heritage and history. For the Ojibwe Nation it is their culture and identity. To them wild rice is priceless.
Wild rice is also critical to Minnesota's nesting and migratory waterfowl.

The extent of environmental damage from any particular construction incident or any particular spill is, of course, impossible to predict. Any pipeline routing decision that must, by statute, minimize human and environmental risks would, however, avoid the most vulnerable areas.

Enbridge tries to minimize concerns about their route choice in several ways. First, they point out that the odds of a spill at any particularly sensitive location in any particular year are very small. That is no doubt true when you limit the range of locations or the relevant time period. On the other hand, of course, it is equally reasonable to say the likelihood of a spill somewhere on a new Line 3 over the course of its expected lifetime is quite high. Those arithmetic calculations are not particularly probative, but everyone concedes that the likelihood of a major oil spill is not zero.

Second, Enbridge says it will comply with applicable pipeline safety regulations, the "Part 194" and "Part 195" regulations administered by the Pipeline and Hazardous Materials Safety Administration (PHMSA), part of the U.S. Department of Transportation. 49 C.F.R. pt 195. The deficiencies in Parts 194 and 195 and in PHMSA are, however, well-documented.[55] PHMSA does not have the staffing or inclination to inspect very many pipeline "integrity management systems," and relies heavily on paper reviews.[56] PHMSA takes the position that it has no authority to review the adequacy of pipeline facility response plans, and it rarely conducts exercises to evaluate spill response plans. Pipeline safety expert Richard Kuprewicz testified

[55] *See generally* Office of Inspector General, *Insufficient Guidance, Oversight, and Coordination Hinder PHMSA's Full Implementation of Mandates and Recommendations* (Oct. 14, 2016), http://www.oig.dot.gov/library-item/33823; National Transportation Safety Board, *Pacific Gas and Electric Company Natural Gas Pipeline Rupture and Fire San Bruno California September 9, 2010* (Sept. 26, 2011), https://www.ntsb.gov/investigations/Accident Reports/Reports/PAR1101.pdf; U.S. DOT, *Audit Report: PHMSA's State Pipeline Safety Program Lacks Effective Management and Oversight* (May 7, 2014), https://www.oig.dot.gov/sites/default/files/PHMSA%State%20Pipeline%20Safety%20Program%20Audit%5E5-7-14.pdf.

[56] US DOT (2014).

that PHMSA has shifted away from prescriptive regulations to "performance"-based standards that have weakened the ability of pipeline safety regulations to prevent failures.[57] The rules also do not address the particular challenges involved in dilbit spills.[58] The previous Administration did promulgate an important set of "Part 195" updates on January 13, 2017, to respond to the major spills this decade, but those were promptly suspended by the current Administration.[59] The regulations Enbridge promises to honor do not inspire much confidence.

Third, Enbridge says it has upgraded all of its safety systems since the disastrous Marshall, Michigan spill in 2010. Enbridge has said this kind of thing before. Just ten days before that spill, Richard Adams, Enbridge's vice president of operations told a Congressional subcommittee that Enbridge had "almost instantaneous" control room response for major leaks built into its system. Ten days later, it took Enbridge's control room 17 ½ hours to close the valves spanning the rupture.[60] But, even assuming that Enbridge has in fact made significant changes in its program, there are inherent limits to what can be accomplished. For example, a 2012 US DOT leak detection study found that pipeline control room personnel identified that a release occurred only about 16% of the time.[61]

The 2010 Marshall spill may have been an industry wake-up call, but the fact remains that significant spills continue to frequently occur.

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[57] Exh. FOH-1 at 3 (Kuprewicz direct)
[58] *Id.* at 6.
[59] *Id.* at 6-7.
[60] *Id.* at 8, Exh. FOH-5)(Kuprewics direct, schedule 4, Congressional subcommittee testimony).
[61] *Id.* at 7, Exh. FOH-4 (Kuprewicz direct, schedule 3, DOT Final Leak Detection Study).

Year	Location	Substance	Volume	Impact
2011	Laurel, MT	Crude oil	42,000 gallons	Released into Yellowstone River
2013	Tioga, ND	Crude oil	20,600 barrels/865,200 gallons	Contaminated nearby groundwater supplies
2013	Mayflower, AK	Crude oil	5,000 barrels	Required evacuation of 22 homes
2015	Santa Barbara, CA	Crude oil	3,400 barrels	Contamination of Refugio State Beach on Pacific Ocean
2016	North Dakota	Crude oil	12,615 barrels/529,830 gallons	Spilled into Ash Coulee Creek, a tributary of Missouri River
2016	Shelby Co., AL	Refined gasoline	336,000 gallons	Contained before reaching Peel Creek, a tributary of the Cahaba River
2016	Cushing, OK	Crude oil	307,734 gallons	Leaked into surrounding area
2017	Sweetwater, TX	Crude oil	361,200 gallons	Brand new pipe leaked despite PHMSA corrective action order to fix welding
2017	Worth Co, IA	Diesel	138,600 gallons	Leaked into surrounding area
2017	Glendive, MT	Crude oil	40,000 gallons	Leaked into Yellowstone River

And, as the evidentiary hearing in this case concluded, on November 16, 2017, the Keystone pipeline, which went into operation in 2010, spilled 210,000 gallons or 5000 barrels of crude oil, near Amherst, SD even though TransCanada had just recently sent electronic leak detection equipment ("smart pig") through the pipeline, including past the leak point, that detected no sign of a leak or leak risk. https://insideclimatenews.org/news/29112017/keystone-pipeline-oil-spill-south-dakota-permit-transcanada-construction-weights. Pipeline safety programs may have improved in the past decade, but they are not preventing major spills from occurring.

Fourth, Enbridge says that, if a spill does occur, they are ready to remediate it. But, of course, the ability to complete a successful remediation depends entirely on the circumstances. A light crude spill on flat farmland with easy access can likely be mitigated quickly and effectively. But a dilbit spill in a wetland complex, without easy access, with a shallow aquifer, with lakes and rivers downstream, may be enormously difficult to fix. Such an event may be improbable, but these kinds of spills continue to occur despite the pipeline companies' efforts. This is not a risk Minnesota needs to take.

C. Alternate routes like SA-04 could substantially reduce that environmental risk.

As the maps included in subsection B above show, the SA-04 route would avoid many of the environmental risks the PUC is obligated to avoid. It bypasses Minnesota lake country, it stays away from areas that have retained wetlands, it avoids areas with vulnerable groundwater resources, and it reduces potential impacts on wild rice, fish, and wildlife habitat. As the DNR observed, "oil spills on routes with greater numbers and density of water features and sensitive natural resources could have greater natural resource impacts than spills on routes with fewer and less dense sensitive areas."[62]

The DNR's analysis focuses on construction impacts, but it is useful in assessing potential spill impacts as well. On most of the factors it considered, the DNR found SA-04 to do a better job of minimizing environmental risk:

[62] DNR comment, November 22, 2017, at 2 (attached as Exhibit 2).

- Loss or alteration of forests: 2,202 acres (Enbridge) vs. 161 acres (SA-04)

- Loss or alteration of rare native plant communities: 46 acres (Enbridge) vs. 3.6 acres (SA-04);

- Impacts to forested and scrub/shrlub wetlands: 440 acres (Enbridge) vs. 34.2 acres (SA-04);

- Wildlife conservation lands within 0.5 miles: 23,198.6 acres (Enbridge) vs. 3,546.8 acres (SA-04)[63]; and

- High groundwater contamination susceptibility in MN: 26,382 acres (Enbridge) vs. 4,674 acres (SA-04).

The DNR did find that SA-04 could have greater potential impact on wellhead protection areas, and noted that SA-04 could affect fewer than 100 additional acres of emergent wetlands. And it of course found that SA-04 would potentially impact more cropland and pastures, because it would primarily travel through flat farmland. The main thrust of the DNR's comment is that, from an environmental perspective, trading off cropland impacts for smaller impacts on high-value, sensitive natural resources is likely a trade worth making.

Likewise, the Minnesota Pollution Control Agency (MPCA) similarly concluded that "SA-04 offers lower potential effects on surface water and groundwater resources than other proposed new corridor options."[64] The MPCA identified the greater risks involved in opening up new pipeline corridors, and also observed that:

- Enbridge's proposed route would cross a higher percentage of unaltered, natural watercourses than SA-04;

- Enbridge's proposed route includes areas of high or very high erodibility, while SA-04 shows overall lower erodibility;

[63] The DNR challenges the DOC-EERA's use of 34,806.8 acres as the appropriate measure of the US Fish and Wildlilfe Service's Dakota Tallgrass Prairie Management Area. That number reflects the acreage where USFWS has authority to purchase conservation easements, not the acreage of the actual easements.

[64] MPCA comment letter, November 22, 2017, at 4 (attached as Exhibit 3). Although this has not been a focus for Friends of the Headwaters, it is important to note that the Minnesota Pollution Control Agency (MPCA) found SA-04 to be far preferable to Enbridge's proposed route from an environmental/low-income population perspective—155 miles (Enbridge) vs. 8 miles (SA-04)—and the lowest impact on tribal lands.

- Enbridge's proposed route crosses a relatively high percentage of high or highest groundwater vulnerability, while SA-04 does not; and
- SA-04, because it crosses mostly pasture and cropland, which is less environmentally sensitive, would have lower potential environmental effects and less habitat fragmentation.[65]

Enbridge has criticized SA-04 for being longer than Enbridge's preferred route, but they are comparing apples to oranges. SA-04 would deliver crude oil directly to Enbridge's Illinois terminals, where it could then move on to Midwest refineries or, as we have seen, mostly move on to the Gulf Coast. Enbridge's proposal stops at Superior, Wisconsin, and does not include the hundreds of miles of pipeline through Wisconsin and northern Illinois that will have to carry the oil from Superior. If one compares apples to apples, the two routes are about the same length, with SA-04 possible somewhat shorter.

The other major concern has been karst topography. The Alliance gas pipeline corridor (which Enbridge co-owns) comes near to karst topography in southeastern Minnesota and perhaps a few acres in Iowa and Illinois. What DNR and we believe DOC-EERA[66]has found, however, is that, with minor route tweaks, SA-04 can avoid the karst altogether. And it can certainly avoid going near as much karst topography as the existing Enbridge pipelines in Wisconsin and northern Illinois do.

Enbridge also argues that, because neither it nor any other pipeline company wants to build SA-04, it should not be considered. There is no legal basis for that conclusion. Enbridge also complains that SA-04 would be too expensive. But the Minnesota Environmental Policy Act makes it clear that economic considerations alone are not adequate grounds for polluting, impairing, or destroying any Minnesota natural resource. Minn. Stat. § 116D.04.

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[65] *Id.*

[66] The revised FEIS is not yet available, but DOC-EERA has been tasked with assessing the viability of SA-04 route adjustments to avoid karst issues.

No pipeline is without risk, but if the PUC is to take its responsibility to Minnesota's water resources and its duty to minimize environmental effects seriously, SA-04 poses fewer risks. There are other alternatives as well, including the existing corridor, which would better meet the PUC's statutory and common-law responsibilities.

D. Any new pipeline likely will increase greenhouse gas emissions, which contribute to climate change.

Besides the construction risks and the risk of a spill, adding additional pipeline capacity may well exacerbate greenhouse gas emissions. Enbridge and, to a significant extent, DOC-EERA take the position that, if the new Line 3 is not built, the same amount of tar sands oil will be extracted and eventually burned anyway and so there is no net climate impact.

If all of this oil will get to market anyway, the need for this pipeline project is even more questionable. But it is also important to note that this "no net climate impact" argument has been rejected by three different federal courts in just the past year, and it was rejected by the EPA in the Keystone XL case. *Wild Earth Guardians v. U.S. Bureau of Land Management*, 870 F.3d 1222 (10th Cir. 2017)(BLM could not assume coal leases had no greenhouse gas emissions impact because, if coal did not come from these lease sites, it would come from somewhere else); *Sierra Club v. FERC*, 867 F.3d 1357 (D.C. Cir. 2017)(FERC must evaluate downstream greenhouse emissions from burning the natural gas pipelines will transport); *accord Montana Environmental Information Center v. U.S. Office of Surface Mining*, 2017 WL 3480262 (D. Mont. August 14, 2017)(could not ignore downstream GHG effects from renewing coal mining lease on "perfect substitution" theory that denying lease would just mean that coal would come from somewhere else).

Those were cases under the National Environmental Policy Act (NEPA), but the logic applies here as well. Presumably shippers like Cenovus believe the construction of a new Line 3 will increase the profitability of producing tar sands oil, which would accelerate the pace of tar sands development in Alberta and increase greenhouse gas emissions.

Intervenors other than Friends of the Headwaters will likely focus more on likely climate impacts of a new Line 3, but it is important to be aware that the courts are beginning to reject the "no net climate impact" idea as it applies to pipelines and coal mines. A new Line 3 will lead to an increase in greenhouse gas emissions, which of course is directly contrary to Minnesota law and policy.

IV. IF THE PUC GRANTS ENBRIDGE A CERTIFICATE OF NEED AND A ROUTE PERMIT FOR LINE 3, IT SHOULD IMPOSE PERMIT CONDITIONS TO PROTECT MINNESOTA'S ENVIRONMENT AND ITS TAXPAYERS.

Enbridge has, in FOH's view, not proven the need for expanded pipeline capacity, nor has it proposed a route that would minimize human and environmental impact. Nevertheless, if the PUC decides to grant a CN and an RP for any route, it should take care to include several conditions to reduce the environmental risk. Minnesota Rules, part 7832.3600, generally authorizes the PUC to impose conditions on any pipeline route permit for any and "[a]ll appropriate precautions to protect against pollution of the environment. . . ." *Id.,* para. G. Generally, of course, within constitutional or statutory bounds, the authority to grant or deny permits related to land use almost always includes the authority to impose reasonable conditions on approval or to deny a permit because an applicant refuses to agree to reasonable conditions. *See e.g. Koontz v. St. Johns River Water Management Dist.,* 133 S.Ct. 2586 (2013)(reaffirming authority to impose permit conditions that have an "essential nexus and rough proportionality" to the impacts of a proposed development).

In this case, if the PUC concludes that genuine need has been established and has approved a route, it should still impose conditions to mitigate potential adverse environmental impacts. Those conditions should include those recommended by Minnesota's natural resource agencies—the Department of Natural Resources and the Pollution Control Agency—and a financial assurance requirement to ensure that spill remediation funds are available and that neither Minnesota's environment nor its taxpayers are left holding the bag.

A. The permit should include all the recommended conditions from the DNR and MPCA from the Sandpiper proceeding and from other major pipeline cases.

After the evidentiary hearing concluded, the State's resource agencies weighed in with recommended conditions for any PUC route permit. Those include:

- Installation of copper wire for cathodic protection and AC mitigation whenever the pipeline runs adjacent to existing powerlines;
- Clarification of responsibilities where new pipeline runs adjacent to existing pipelines or powerlines owned by non-Enbridge entities;
- Route around wildlife and aquatic management areas with federal funding encumbrances;
- Preparation and compliance with a "Construction Environmental Control Plan" to address extreme weather conditions, to require construction near water crossings and public lands in frozen conditions only, to describe the maximum depth of rutting and compaction;
- Addressing temporary disruptions on state trails, recreational trails, and recreation areas;
- Development of alternative crossing methods for trout streams, wetlands, and other waterbodies;
- Define why and when "additional temporary workspace" will be needed within wetlands or within the 50-foot setback from wetlands and public waters;
- Manage unauthorized activities (e.g. ATVs) on license rights-of-way;
- Use temporary and permanent wildlife-friendly erosion control measures;
- Use independent third party environmental monitors to assure compliance (or report noncompliance) with the construction plan and any permits;

- Use mats and frozen ground conditions for sensitive natural areas such as high quality wetlands, native plant communities, and important habitat areas;

- Development of and compliance with detailed vegetation and invasive species management plans;

- Development of mineral resource plans to reduce interference with metallic mining assets;

- Restoration to preconstruction conditions in wetlands and peatlands after construction, particularly to address settling and crowning;

- Development of and compliance with a horizontal directional drilling plan that addresses frac outs or other spills associated with HDD, with detailed notification, response capability, containment, and identification requirements;

- Guarantee DNR access to state land for resource management purposes;

- Create no-disturbance windows for endangered and threatened species, restrict tree clearing to protect long-eared bats, and best management practices to protect Blanding's turtles;

- Clarification of responsibility for abandoned pipe, and circumstances under which abandonment or removal have the fewest natural resource impacts;

- Restoration of water crossing damage from current Enbridge pipelines, rerouting or other adjustments at other water crossings where aquatic system degradation would be possible, including but not limited to Spring Brook in Cass County, LaSalle Creek in Hubbard County, and the Straight River in Hubbard County;

- Avoidance of DNR easement interests, or compensation for encumbered easement interests;

- Obtaining "take" permits from DNR to cover any excavation or trampling that could result in an endangered or threatened species take;

- Identify location and use of shut-off valves at water crossings, require shut-off valves at all trout stream crossings;

- Natural vegetation buffer strips along stream or waterbody banks;

- Direction of runoff away from waterbodies toward swales or low spots to allow infiltration;

- Post-construction restoration of stream banks to pre-construction cross-sections and revegetation with native, deep-rooted species; and

- Avoiding cedar/conifer cover to maintain thermal cover for critical animals including bobcats, lynx, fishers, martins, and other furbearers.

In the Sandpiper case a couple of years ago, the PUC imposed a number of conditions for a pipeline along this same route. Those should all be included as well. Likewise, the National Energy Board (NEB) approval of the Kinder Morgan Trans Mountain Expansion Project contained 157 conditions to protect environmental and cultural resources, https://apps.neb-one.gc.ca/REGDOCS/Item/Filing/A77045. Those conditions should also be evaluated and, if appropriate, incorporated into any certificate of need or route permit in this case.

B. The certificate of need and route permit should include a requirement that the existing Line 3 be decommissioned.

This condition can be added on the same basis that the consent decree in Michigan over the Marshall, Michigan spill included stipulations involving Line 3. This is well within the "nexus" of the environmental protection goals the PUC is obligated to pursue.

Enbridge has, of course, continued to insist that a new Line 3 is "replacing" the old Line 3, but that is highly misleading. Whatever reductions in capacity the old Line 3 has suffered, Enbridge has already more than "replaced" that capacity on the Mainline with line 67 and its expansion. The purpose of the new Line 3 is not to "replace" the old Line 3, but rather to expand the overall capacity of the Mainline system, especially to carry tar sands oil from Alberta. (The old Line 3 is limited to light crude, so this new project will be carrying a very different product mix.)

Nevertheless, Enbridge should be willing to accept decommissioning of the old Line 3 as a condition here. All that would do is make their stated commitment binding and certain.

C. The certificate of need and route permit should include robust financial responsibility requirements, including a cleanup and decommissioning trust fund and a guarantee from Enbridge, Inc.

Legal requirements and company promises to protect the environment are only as good as the financial resources available to discharge those obligations. Enbridge today appears to have lots of money, but there is no guarantee that that will always be the case. Companies go bankrupt, they become insolvent, subsidiary assets can be transferred to parent companies and affiliates, and suddenly the financial resources are no longer there to clean up spills, to reclaim disturbed land, or to compensate affected landowners, citizens, or governments. The coal industry's experience over the past decade is a warning. Coal companies flying high in the 2000's went bankrupt in the 2010's. Any industry subject to volatile global commodity pricing is vulnerable to sudden financial deterioration. To protect taxpayers, then, the PUC should be advised to insist on a robust financial assurance package as a condition to any certificate of need or route permit.

The 2010 Enbridge spill into the Kalamazoo River near Marshall, Michigan has cost $1.2 billion so far to clean up. That figure is a useful starting point for how much financial assurance the PUC should require. It should be adjusted upwards to reflect what it would cost the *government* to complete a clean-up like Kalamazoo, which can easily increase the needed amount by 30 to 50 percent.

What should be included in a financial assurance package? The goal must be to have sources of funds that cannot be marshalled into a bankruptcy estate, that are reasonably liquid, and that the government can tap without having to sue for the proceeds. Elements could include:

(1) A genuine parent corporation guarantee. Enbridge, Inc. appears to be the current parent of all the various Enbridge entities, and so it should be a guarantor along with all of the Enbridge entities in between Enbridge, Inc. and the specific subsidiary making the application in this case—Enbridge Energy

Enbridge has offered up “Enbridge Energy Partners, LLC” as a guarantor, but it acknowledges that 85% of that entity’s assets are the applicant’s. If the applicant becomes insolvent—if, for example, shippers stop using Line 3—Enbridge Energy Partners will not be in any better shape than the applicant. Enbridge, Inc. will be where the profits from this pipeline will go, and it should be obligated to guarantee performance of the applicant’s obligations.

Of course, parent corporation guarantees are not sufficient by themselves. Obviously, parent corporations can go bankrupt too, but more likely is that the corporate family will be restructured, or all or part of the Enbridge entities are merged or acquired by another company, with the result that the formerly solvent parent no longer has the money to meet its subsidiaries’ obligations. Consequently, other financial assurance instruments are necessary.

(2) Letters of credit

Letters of credit obligate banks to pay up to limits upon the presentation of certain documents. They typically have limited terms, which create immediate problems if a company is facing financial adversity or more certain liability at the time for renewal. Letters of credit must therefore contain automatic renewal provisions, be irrevocable, and be supported by a standby trust. The letters should allow direct action to generate payment, and not require any action by the holder of the letter to release the money. The wording matters with letters of credit, and any permit condition should specify exactly what language the letter of credit would need to contain.

(3) Surety bonds

At minimum, sureties must be qualified as sureties on federal bonds and be listed on Treasury Circular 570. The bond must require at least six months’ notice before cancellation, and owner/operator failure to obtain adequate substitute coverage should trigger payment of the bond amount into a standby trust. Any bond should permit direct action against the surety, i.e.

not require the holder of the bond to make the claim. And, like letters of credit, experts have developed language for surety bonds that make it more likely that a claim will be successful, and a permit condition should specify the exact wording required.

(4) Insurance

Insurance is the tool DOC-EER offered at the evidentiary hearing, but they acknowledged that they were in no way rejecting the use of other financial assurance instruments. There do need to be minimum requirements—no insurance from captive insurers or risk retention groups, the same kind of standby trusts needed for L/C's or surety bonds, automatic renewal provisions, blanket performance clauses, requirement for insurer to set up a standby trust if proposing to cancel insurance until insured gets adequate substitute coverage, and no owner/operator termination without regulator consent.

(5) Financial test

A financial test is not sufficient to provide adequate financial assurance, because any assessment of companies' financial strength can at best provide a temporary snapshot. Nevertheless, regular monitoring of the permittee's (and guarantors') finances should be a permit condition. The permittee or its guarantors should be required to provide and maintain a long-term corporate credit rating equal to or higher than A- from Standard & Poor's or its equivalent. They should be able to document tangible net worth and U.S. assets equal to six times the potential environmental liability. They should be required to provide audited financial statements, subject to Generally Accepted Accounting Principles (GAAP), on at least an annual basis, and pay for an outside expert to do an analysis of the companies' ability to absorb the potential liability.

(6) Trust fund

Cash in a trust fund for the benefit of the State is probably the most secure financial assurance mechanism available. Obviously the trustee must not be captive or related to the owner/operator, the trust must be for the benefit of the State and the State must be able to draw on the trust with a simple written request (not litigation), and the owner/operator must be responsible for maintaining the level of the trust at what would be needed to meet the potential liability.

No single instrument can provide adequate financial assurance, other than perhaps a trust fund for the maximum amount needed, so a combination of these different tools would certainly be appropriate. The most recent analysis of these different financial responsibility instruments came from the EPA. Under section 108(a) of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), EPA is obligated to develop rules governing financial assurance for industries likely to generate hazardous waste so that the Superfund will not be stuck with the bill. In January 2017, the EPA published a proposed financial responsibility rule for the hardrock mining industry that describes in considerable detail how to make these different instruments genuinely useful. 82 Fed. Reg. 3388-3512 (Jan. 11, 2017). If the PUC decides to grant the certificate of need and route permit Enbridge requests, then it should use the EPA materials to design a financial responsibility package that will genuinely protect Minnesota taxpayers.[67] Likewise, the State's DNR has been evaluating financial assurance for potential nonferrous metallic mining in northeast Minnesota, and the PUC should draw on that experience in developing its own plan. In addition, the Canadian National Energy Board (NEB) conditioned its permit of Kinder-Morgan's TMEP project on a $1.1 billion

[67] On December 1, 2017, the Trump Administration announced that it would not be promulgating the financial responsibility rule for hardrock mining. That decision will likely draw a legal challenge, because the statutory requirement is mandatory.

financial assurance plan, \$100 million in "ready cash" and \$1 billion in "core coverage," which can also assist the PUC in setting the bar for an adequate financial assurance plan in this case.

If the CN and RP are granted, then, they should be provisional on Enbridge's commitment to an acceptable financial assurance package. The PUC should define the criteria—protection from bankruptcy, sufficient liquidity, and immediate availability to the state on demand—and the appropriate amount, within a range. Enbridge can then submit a proposal, to which the DOC, the parties, and the public can react. No CN or RP should take effect until this requirement has been satisfied.

CONCLUSION

For the reasons stated above, the Administrative Law Judge should recommend to the Minnesota Public Utilities Commission that Enbridge's application for a certificate of need for a new Line 3 be denied. If the conclusion is that the requirements for a certificate have been met, then the ALJ should recommend that Enbridge's proposed route be rejected and a route permit denied, giving Enbridge the option to resubmit a new proposed route that better minimizes human and environmental impact. Finally, if the conclusion is that both a CN and an RP be granted, the ALJ should commence additional proceedings to set proper conditions, including an adequate financial assurance package.

Respectfully Submitted,

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