

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

121 Seventh Place East, Suite 350
St Paul, MN 55101-2147

Nancy Lange
Dan Lipschultz
Matt Schuerger
John Tuma
Katie Sieben

Chair
Commissioner
Commissioner
Commissioner
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

EXCEPTIONS OF INTERVENOR FRIENDS OF THE HEADWATERS TO
ADMINISTRATIVE LAW JUDGE'S FINDINGS OF FACT, CONCLUSIONS OF LAW,
AND RECOMMENDATION

Scott Strand
Environmental Law & Policy Center
15 South 5th Street, Suite 500
Minneapolis, MN 55402
(612) 386-6409

ATTORNEY FOR INTERVENOR
FRIENDS OF THE HEADWATERS

May 9, 2018

TABLE OF CONTENTS

I. INTRODUCTION: THE ALJ MOSTLY GOT IT RIGHT	1
II. EXCEPTIONS.....	4
A. THE ALJ REPORT IMPROPERLY INTERPRETS THE APPLICABLE LEGAL STANDARDS FOR “NEED” IN MINNESOTA.	4
1. <i>The ALJ Report improperly concludes that, under the statute and rule, the purely private financial interests of the applicant and its shipper customers are sufficient to justify granting a certificate of need.</i>	<i>4</i>
2. <i>The ALJ report incorrectly treats “adequacy, reliability, and efficiency” as separate elements, when they should be construed together.</i>	<i>8</i>
3. <i>The ALJ report improperly shifts the entire risk of non-persuasion to parties other than the applicant when it comes to the consideration of reasonable and prudent alternatives.</i>	<i>9</i>
4. <i>The ALJ report does not acknowledge the legal requirements outside of Minn. Stat. § 216B.243, subd. 3 and Minn. R. 7853.0130 that govern the PUC’s decisions in cases like these.</i>	<i>10</i>
B. THE ALJ REPORT’S DISSMISSAL OF ALTERNATIVE PROJECTIONS OF FUTURE DEMAND FOR WESTERN CANADIAN CRUDE OIL WAS UNJUSTIFIED.....	12
C. THE ALJ REPORT’S FINDING THAT “APPORTIONMENT” ON THE ENBRIDGE MAINLINE SYSTEM IS LIKELY TO CONTINUE WELL INTO THE FUTURE IF THIS PROJECT IS DENIED IS NOT SUPPORTED BY THE EVIDENCE.	14
D. SA-04 IS INDEED A REASONABLE AND PRUDENT ALTERNATIVE TO THE PROJECT.....	19
E. THE ALJ REPORT DOES NOT DESCRIBE OR ANALYZE OTHER METHODS OF PROVIDING FINANCIAL ASSURANCE THAT MAY PROVIDE GREATER PROTECTION TO MINNESOTA TAXPAYERS THAN PRIVATE INSURANCE	23
III. CONCLUSION	

I. INTRODUCTION: THE ALJ MOSTLY GOT IT RIGHT

Intervenor Friends of the Headwaters (FOH) is in full agreement with many of the ALJ's core findings:

- That the proposed new line 3 (the "Project") will provide little if any benefit to Minnesota consumers, or refiners in the region. The only parties likely to benefit are Enbridge (the "Applicant") and Canadian oil sands producers who want access to Gulf Coast and global markets;
- That the potential environmental (and socioeconomic) risks of opening up a new crude oil pipeline corridor past the Mississippi Headwaters, through central Minnesota's shallow aquifer regions, and through Minnesota lake country are very significant and greater than any potential benefits from Applicant's Proposed Route.
- That the Applicant's projections of future Canadian oil sands supply and demand are not credible. Those projections are compromised by conflict of interest, they ignore flat or decreasing demand for refined petroleum products, and they ignore the fact that all refineries in Minnesota and neighboring states are already running at full capacity and do not need additional crude oil.
- That, while the Project will require a number of temporary construction jobs, there is no evidence that the Project will have net economic or even jobs benefits for Minnesota; and
- The social cost of the additional greenhouse gas emissions resulting from this project total \$287 billion over the 30-year lifetime of the pipeline. That cannot be reconciled with Minnesota's statutory goals to reduce GHG emissions by 80% by 2050. (Findings 669-680).

Those core findings, in FOH's view, justify outright denial of the Applicant's application for a certificate of need (CN)) under Minn. Stat. § 216B.243, subd. 3 and Minn. R. 7853.0130, and the Commission need not reach the Route Permit (RP) issues.

FOH does take issue with the ALJ report on several points, and, in the Appendix to these exceptions, suggests changes to the ALJ's findings and conclusions that FOH urges the Commission to adopt. FOH believes the ALJ report can be improved in the following ways:

First, the ALJ's constructions of the "adequacy, reliability, and efficiency" provisions in the rule, Minn. R. 7853.0130(A), and the "reasonable and prudent alternatives" provisions in Minn. R. 7853.0130 (B) are incorrect, and the ALJ report does not include or discuss all of the PUC's legal obligations. Most important, perhaps, the ALJ report concludes that the purely private interests of the applicant and its shipper customers can be sufficient *by themselves* to justify granting a certificate of need, even if the project serves no public interest. FOH submits that interpretation cannot be reconciled with chapter 216B, and that, under Minnesota law, the public interest must prevail. FOH also contends that shifting the burden of proof to parties other than the Applicant on the question whether there are "reasonable and prudent alternatives" is not consistent with the statute. And, the PUC's final decision in this case must recognize and apply its statutory duty under the Minnesota Environmental Rights Act (MERA) not to permit projects that can cause the pollution, impairment, and destruction of Minnesota natural resources if there are feasible and prudent alternatives. Minn. Stat. § 116D.04, subd. 6, and its duty under Minnesota's "public trust" doctrine to preserve and protect Minnesota's public waters.

Second, while the ALJ quite properly finds the Applicant's projections of crude oil production are not credible, the ALJ improperly dismisses or ignores the alternative projections provided by several intervenor witnesses. Contrary to the ALJ's findings, several witnesses did

provide alternative quantified projections of likely western Canada crude oil production, complete with price of oil assumptions, cited sources, and a range of likely outcomes. The PUC should find that the more credible projections estimate that western Canada oil production may increase for a couple of years as projects under construction are completed, but will then flatten or decline over the next two decades.

Third, while the ALJ is correct that there is no evidence that “apportionment” on the Enbridge Mainline has harmed any refiners in Minnesota and the region, the ALJ report is mistaken that apportionment is likely to continue indefinitely into the future. Even in the unlikely event that western Canada oil production continues to increase indefinitely, added pipeline capacity from already-permitted projects like the TransMountain Expansion Project and the Keystone XL pipeline will take pressure off Enbridge’s Mainline system, and reduce or eliminate apportionment without any new Enbridge pipeline being constructed.

Fourth, the ALJ improperly dismisses reasonable and prudent alternatives to the Project like System Alternative 04 (SA-04). Contrary to the ALJ’s report, the record does show that SA-04 would meet the objectives of a new Line 3 at much lower environmental and socioeconomic risk. It would cost Enbridge more, but that cannot lawfully be the dispositive factor.

Finally fifth, while the ALJ quite appropriately concludes that financial assurance must be a precondition for any CN or RP, there are financial assurance mechanisms other than those the ALJ discusses that the Commission should seriously evaluate to protect both Minnesota taxpayers and the environment.

II. EXCEPTIONS

A. THE ALJ REPORT IMPROPERLY INTERPRETS THE APPLICABLE LEGAL STANDARDS FOR “NEED” IN MINNESOTA.

1. *The ALJ Report improperly concludes that, under the statute and rule, the purely private financial interests of the applicant and its shipper customers are sufficient to justify granting a certificate of need.*

The ALJ report thoroughly analyzes and explains why the Applicant’s forecast of demand is not credible (Findings 547-598, 659-662):

- The reliance on figures provided by the Canadian trade association for the oil industry, the Canadian Association of Petroleum Producers (CAPP), which is not an unbiased source;
- The failure to disclose price of oil assumptions;
- The refusal to consider the long-term decline in demand for refined petroleum products in Minnesota and the Midwest, and the entire U.S.;
- The assumption without evidence that global demand for Canadian oil sands production will grow to consume whatever the oil sands producers can supply;
- The failure to consider the ongoing disinvestment in the oil sands region, and the significant likelihood that no more projects will be permitted;
- The dismissal of any concern about the relatively high cost of oil sands extraction, likely to remain above the West Texas Intermediate price of oil indefinitely;
- The discounting of the likely effect of electric vehicle (EV) market penetration on petroleum demand; and
- The minimization of the likely (and necessary) consequences of evolving government policies to reduce greenhouse gas emissions.

The report also explains very clearly why the evidence of “shipper support” in this record is essentially meaningless, because the shippers have only agreed to pay more if they actually use Enbridge’s pipelines (Findings 635-649). Those findings alone are sufficient to justify denying the Applicant’s CN application. Without growing production of and demand for western Canada crude oil over the next few decades, there can be no “need” for this pipeline.

The ALJ report also properly concludes that this proposed pipeline has little to nothing to do with the energy needs of Minnesota or its neighboring states. All of the refineries in this region are operating at nearly 100% utilization, and there is no credible evidence that any Minnesota refiner has been unable to secure the crude oil they need with the existing pipeline infrastructure.

But then, the ALJ goes on, at least in some parts of the report, to find some benefit, not for the public, but for Canadian oil producers if a new pipeline reduces “apportionment,” the process Applicant goes through if “nominations” of expected shipments exceed capacity in any particular month. If there is apportionment, then the Applicant’s customers (the Canadian oil producers) cannot ship as much oil as they would like on the Enbridge Mainline; if apportionment disappears because of a new Line 3, presumably they would benefit, at least to some degree

FOH of course questions the factual premise, and vehemently disagrees with the conclusion that apportionment is likely to continue for long if the permit for the Line 3 Project is denied. *See* section II.C., *infra*. But, even if it were, the ALJ is wrong to conclude that the financial interest of Canadian oil producers to ship more crude oil *alone* can justify a CN.

This Commission’s obligation is to protect Minnesota consumers, not to protect the private interests of either the Applicant or 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, the statute—Minn. Stat. § 216B.243, subd. 3—is quite 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 unmet energy demand in Minnesota and the region does not exist, and is not likely to exist in the future, and there is no genuine challenge to the reliability of Minnesota’s 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 global export markets, or to displace other adequate means of transporting oil. Neither does the PUC have any obligation to increase Enbridge’s “rate base,” so that it can secure a greater return from the rate structure approved by the Federal Energy Regulatory Commission (FERC). Indeed, a principal rationale for CN requirements like Minnesota’s is to guard against the “perverse incentive” in rate-regulated environments to overbuild or overinvest in capital infrastructure. It is the PUC’s task to determine whether a new pipeline is needed to assure adequate and reliable crude oil supplies to Minnesota and the region, and whether those benefits outweigh 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 the grounds that the private financial interests of a pipeline company or its shipper customers are not sufficient to establish need).¹

¹ The Illinois Commerce Commission decision, *In re Lakehead Pipe Line Co. LP*, is available at 1997 WL 33771802 (Ill. C.C.1997).

The ALJ relies entirely on the language of the rule, which refers to 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.” Minn. R. 7853.0130 (A). According to the ALJ, that language puts the interests of Enbridge, and customers like BP and Suncor, on an equal footing with the interests of the public. In the ALJ’s words, “the rule does not prioritize the needs of Applicant’s customers, the people of Minnesota, or the people of neighboring states.” (Finding 667).

In Minnesota (and in most jurisdictions), however, there is a canon of construction that “the legislature intends to favor the public interest as against any private interest.” Minn. Stat. § 645.17(5). That presumption applies fully to administrative rules as well. Minn. Stat. § 645.001. If Minn. R. 7853.0130 (A) does not itself provide guidance on how to prioritize the various interests involved, that canon of construction clearly does.

So does the underlying statute. Nowhere does Minn. Stat. § 216B.243, subd. 3 suggest that purely private interests are just as important as the public interest in the PUC’s consideration. The core premise of Minn. Stat. § 216B.243 is that, when considering “large energy facilities,” the interests of rate-regulated applicants are quite likely to diverge from the interests of consumers. If the financial interests of applicants and their shipper customers are enough by themselves to establish “need,” then the PUC’s consumer protection role is severely limited.

Of course, if the PUC concludes that the rule conflicts with the statute, the statute governs. *E.g. In re Hubbard*, 778 N.W.2d 313 (Minn. 2010)(striking down longstanding DNR variance certification rule as contrary to the governing statute). The statute here is pretty clear

that a new pipeline or pipeline expansion must serve the public interest, not just the private interests involved.

As the ALJ observed, “[i]t is a bitter pill to swallow, however, that the ‘need’ for this Project is to primarily assist foreign oil producers in transporting their products through (and mostly out of) Minnesota.” (Finding 667). FOH submits that the Commission can spit that “bitter pill” out and do no violence to the language of the statute or the rule.

2. The ALJ report incorrectly treats “adequacy, reliability, and efficiency” as separate elements, when they should be construed together.

In their submissions and at the evidentiary hearing, both the applicant and DOC-DER treated adequacy, reliability, and efficiency as separate elements with separate definitions, and the ALJ unfortunately adopted that approach. FOH submits that this approach to interpretation is flawed, and those three words should be construed together.

Justice William Mitchell stated the basic principle in *International Trust Co. v. American Loan & Trust Co.*, 62 Minn. 501, 65 N.W. 78 (1895):

It is always an unsafe way of construing a statute or contract to divide it, by a process of etymological dissection, into separate words, and then apply to each, thus separated from its context, some particular definition given by lexicographers, and then reconstruct the instrument on the basis of those definitions. An instrument must always be construed as a whole, and the particular meaning to be attached to any word or phrase is usually to be ascertained from the context, the nature of the subject treated of, and the purpose or intention of the parties who executed the contract, or of the body which enacted or framed the statute or constitution.

Id. at 503; accord *Christensen v. State, Dept. of Conservation, Game, and Fish*, 175 N.W.2d 433, 437 (Minn. 1970).

The legislative findings at the beginning of Minn. Stat. ch. 216B set the context for terms like adequacy, reliability, and efficiency:

It is hereby declared to be in the public interest that public utilities be regulated as hereinafter provided in order to provide the retail customers of natural gas and electric service in this state with *adequate* and *reliable* services at reasonable rates, consistent with the financial and economic requirements of public utilities and their need to construct facilities to provide such services or to otherwise obtain energy supplies, to avoid unnecessary duplication of facilities which increase the cost of service to the consumer and to minimize disputes between public utilities which may inconvenience or diminish *efficiency* in service to its customers.

Minn. Stat. § 216B.001 (emphasis added).² Those findings, which essentially comprise the mission statement of the PUC, show how considerations like adequacy, reliability, and efficiency can only be properly understood as focused on the overall quality of service to retail customers at reasonable rates. The distinctions among those terms, or the priorities among them, unnecessarily complicate the analysis. The PUC should decline the invitation to parse the language of the rule as the ALJ did, and instead read those three terms together.

3. The ALJ report improperly shifts the entire risk of non-persuasion to parties other than the applicant when it comes to the consideration of reasonable and prudent alternatives.

Minn. R. 7853.0130 (B) requires parties other than the applicant to prove by a preponderance of the evidence that a reasonable and prudent alternative to the project is available. That cannot be reconciled with the statute. The statute does not grant the PUC the authority to shift the burden of proof on any consideration away from the applicant, who always carries the risk of non-persuasion.

Of course, it remains in the interests of a party that wants to establish that a reasonable and prudent alternative exists to make its description and analysis as complete as possible.

Vague assertions that there must be some alternative will almost certainly not prevail. That

² Minn. Stat. § 216B.01 does not refer to pipelines, but that is only because the responsibility for pipelines was added later to the PUC's responsibilities. The same rationale and the same statement of the PUC's mission fully applies to pipeline cases.

should be more than enough to assure applicants that they will not be called upon to prove a negative. A concern for applicants having to prove a negative does not justify burden-shifting that has no support in the statute. Nor does even the rule suggest that a party proposing an alternative must prove that it “have a reasonable prospect of coming to fruition” or a “meaningful likelihood of being constructed,” as Applicant contends.

The PUC’s consideration of alternatives should follow the same approach as that required by the National and Minnesota Environmental Policy Acts. *E.g.* 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. The applicant’s proposal gets equal consideration, and in the typical case, the RGU selects a “preferred alternative.” No one has ever suggested that an agency cannot “prefer” an alternative that no one at the moment wants to build. The PUC should follow the same approach here.

4. The ALJ report does not acknowledge the legal requirements outside of Minn. Stat. § 216B.243, subd. 3 and Minn. R. 7853.0130 that govern the PUC’s decisions in cases like these.

PUC decisions over pipelines are governed by legal requirements outside of Minn. Stat. § 216.243, subd. 3 and the pipeline rules. The ALJ report does not incorporate any of these.

First, the Minnesota Environmental Policy Act (MEPA) imposes a substantive 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. The PUC cannot grant a CN or an RP if the project would violate this provision of MEPA, and it may not rely, as the ALJ report does, on “economic considerations alone” to justify granting what the Applicant is seeking.

Second, any PUC decision in this case must also be consistent with 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 directs 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. 40, 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).³ The PUC may not grant a CN or an RP that would violate the Commission’s fiduciary duty to protect the waters of the state. The ALJ report, however, does not discuss this issue.

³ 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 (or the lack thereof). *See generally* Mary Christina Wood, *Nature’s Trust: Environmental Law for a New Ecological Age* (2014).

The ALJ report did acknowledge that the PUC cannot lawfully grant a CN or an RP that would interfere with federal Indian sovereign or treaty-based rights. FOH will largely defer to the tribal intervenors to discuss this set of issues further. But, as the ALJ did appropriately find, the applicant's desire to open up a new crude oil pipeline corridor, not just for a "new line 3" but likely for several more pipelines, is driven by the looming 2029 expiration of its leases with the Leech Lake and Fond du Lac Bands. And the corridor they have chosen arguably interferes with the Bands' reserved treaty hunting, fishing, and gathering rights in the much larger "ceded territories," by potentially damaging critical habitat for resources like wild rice. Those are federal rights, they supersede any irreconcilable state laws, and they do compel construction of state statutes and rules in favor of property rights and natural resources in land areas where those rights are in force.

B. THE ALJ REPORT'S DISMISSAL OF ALTERNATIVE PROJECTIONS OF FUTURE DEMAND FOR WESTERN CANADIAN CRUDE OIL WAS UNJUSTIFIED.

The ALJ correctly concluded that the bullish projections of future western Canada oil production the Applicant's witness—Mr. Earnest-- supplied were not credible. But the ALJ report unjustifiably dismissed the projections of other witnesses as "unquantified."

That is simply not accurate. Mr. Stockman, who testified on behalf of intervenor Honor the Earth, provided detailed numeric projections of Canadian oil production using the Rystad Energy UCube Database.⁴ He used a long-term West Texas Intermediate oil price assumption of \$50 per barrel, based on historic price levels, and then calculated that, because of relatively high production costs, Canadian oil supply would peak in 2020 and then begin to drop after 2023,

⁴ Ex. HTE-2 at 10 (Stockman direct).

with significant reduction in supply through 2030.⁵ The difference between Stockman's projections and the CAPP projections relied on by Earnest is that Stockman disclosed his oil price assumptions.

Dr. Joseph, who testified on behalf of FOH, likewise cited to numeric projections from the International Energy Agency (IEA) which predicted, that with WTI prices at a relatively bullish \$80 per barrel through 2040, the completion of current oil sands projects under construction could increase production from 2.4 million barrels per day (bpd) to 3.1 million by 2020, but then would level off for the next decade, perhaps reaching 3.3 million bpd by 2030. Dr. Joseph compared that to the CAPP projection of over 6 million bpd in 2015 and then just under 5 million bpd in 2017, and found the IEA projection more credible. Like Mr. Stockman, Dr. Joseph pointed to high breakeven points for western Canada oil sands production, well above even the \$80 price level, as reason to expect that production to flatten and not increase dramatically, as the Applicant predicts it will.

Similarly, Mr. Twite, the Sierra Club's witness, who testified about likely future sales of electric vehicles, included numbers in his testimony. He cited Bloomberg New Energy Finance's Electric Vehicle Outlook from July 2017, which 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 concluded that EV adoption would displace up to 8 million barrels of transportation fuel per day.

Therefore, the ALJ's finding that the PUC is somehow "left with" the Applicant's forecasts, because intervenor witnesses did not quantify their projections, just is not consistent with the record in this case. Those witnesses did quantify their projections, they explained their assumptions, and they cited their sources. And the less bullish projections they provided more

⁵ *Id.* at 12.

credibly incorporate the likely effects of climate policy changes, the current oversupply of crude oil in the Minnesota and “PADD II” markets, and likely developments like EV penetration. They more accurately reflect the fact that virtually *no* new oil sands capacity has been approved since 2013, and that even under-construction projects may not be completed.⁶ There is more than enough evidence in the record (perhaps for the first time in a Minnesota pipeline case) for the PUC to conclude that applicant’s demand forecasts are too high, and that western Canada oil production is in fact likely to flatten or decline during the proposed lifetime of this pipeline.

If the PUC finds, as it should, that a less bullish scenario is more likely than the ever-expanding oil industry scenario offered by the applicant, then the need case should be over. If production is not going to increase significantly and for the long term, then there can be no need for additional pipeline infrastructure. If production is going to decline, then even current pipeline assets may well be stranded in the next ten to twenty years.

C. THE ALJ REPORT’S FINDING THAT “APPORTIONMENT” ON THE ENBRIDGE MAINLINE SYSTEM IS LIKELY TO CONTINUE WELL INTO THE FUTURE IF THIS PROJECT IS DENIED IS NOT SUPPORTED BY THE EVIDENCE.

To the extent the ALJ report finds any benefit from this proposed Project, it comes from the claim that, without the Project, “apportionment”—the reduction of shipper “nominations” pro rata when they exceed pipeline capacity—is likely to continue well into the future. That finding is just not supported by the record.

First, of course, if western Canada oil production begins to decline in the 2020’s, then there will be no reason for apportionment to continue even with existing pipeline capacity.

Second, there is substantial testimony and evidence in the record that, even if the applicant’s bullish projections are accurate, additional oil transport capacity from *other pipelines*

⁶ Ex. HTE-3 at 10, 13 (Stockman rebuttal)

will eliminate apportionment on Enbridge's Mainline system. Since the time Enbridge filed its Line 3 application in 2015, the Canadian government has 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 secured Trump Administration approval, and passed its last major regulatory hurdle in Nebraska. Trans Canada has confirmed that it has received long-term "take or pay" commitments from enough shippers (including the Province of Alberta) to commence construction fairly soon. Keystone XL will bring another 830,000 bpd of capacity to transport western Canada oil to the Cushing, Oklahoma terminal and then to the Gulf Coast.

As Dr. Fagan testified, citing Energy Information Administration data, the "Minnesota district (Minnesota, North Dakota, South Dakota, and Wisconsin) refineries 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."⁷ Indeed, the utilization levels have been near 100%.⁸ Even the Canadian Association of Petroleum Producers (CAPP), the source of Enbridge's projections, acknowledges, "PADD II [the district including Minnesota and the Midwest] is essentially saturated with western Canadian and domestic U.S. supplies."⁹ For CAPP then, 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 tidewater and reach additional international markets."¹⁰

⁷ Ex. DER-4 (Fagan direct), LEI report at 5

⁸ *Id.* at 14.

⁹ CAPP, 2017 Crude Oil Forecast, Markets, and Transportation, *cited in* Ex. FOH-6 at 21 (Joseph direct).

¹⁰ *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, with the rest simply displacing other oil transport options.¹¹

This is an important point. The evidence shows that the objective of the Canadian oil producers is to transport more oil, not to Minnesota or the Midwest, but to Gulf Coast refineries and global markets. If that is the goal, then it does not matter whether the oil moves through Keystone XL, through TMEP, or through a new line 3. If those producers choose, for example, to use Keystone XL (as many of them have committed to do), then they will not have to use a new line 3 or any part of Enbridge's Mainline system. That will reduce any pressure that currently exists on the Mainline system, and therefore reduce and eventually eliminate apportionment on that system.

Dr. Joseph worked up the numbers. If oil supply from the Western Canada Sedimentary Basin (the oil sands) were to go as high as 5.2 mbpd by 2030, the combination of current pipeline capacity, plus TMEP, plus KXL would leave a 220 kbpd *surplus* in oil transport capacity, *without a new Line 3*. That assumes no rail shipments at all. If we assume rail shipments of 550 kbpd, which is CAPP's midpoint forecast, then *no* additional pipeline capacity would be needed until 2025. If TMEP is completed, no additional capacity will be required until 2030. When KXL comes on line, no additional capacity will be needed until well after 2030.¹² These charts lay out the details:

¹¹ Muse Stancil, Enbridge Line 3 Replacement Market Analysis, at 83 (2017), *cited in* Ex. EN-15 (Earnest direct)

¹² Ex. FOH-6 at 18 (Joseph direct)

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
<i>Surplus/Deficit</i>	<i>-314</i>	<i>-314</i>	<i>-314</i>
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

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
<i>Surplus/Deficit</i>	<i>236</i>	<i>-67</i>	<i>-650</i>
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

Of course, if oil sands production only grows modestly—for example from 2.4 mbpd in 2015 to 3.1 mbpd in 2020, and then to 3.3 mbpd by 2030 (the IEA’s \$80/barrel scenario),¹³ the need for additional pipeline capacity lessens even further. Either TMEP or KXL, perhaps with some rail, will soak up the extra supply. If supply declines between 2020 and 2030 (the Rystad low price scenario), then *none* of these projects will be needed.

¹³ Ex. FOH-6 at 14 (Joseph direct)

When Enbridge first submitted its application, back in 2015, oil was riding high and CAPP was projecting more than 6 mbpd out of the WCSB by 2030. It may have been possible then to make a plausible case that all of these pipeline projects might be “needed,” if not to serve Midwest markets, but to get more oil to the Gulf Coast and global markets. By the time Enbridge submitted its direct testimony in 2017, however, oil prices had dropped precipitously and CAPP’s projections had cooled substantially. Enbridge could only make its numbers work if it assumed that Keystone XL would never be approved. When that change in assumptions was pointed out, Enbridge’s witness submitted another report to try to show that Line 3 would still be needed if KXL were built. But that report assumed that the burden of any surplus pipeline capacity would always be borne by other pipelines—that Enbridge would always run full, but KXL and TMEP would run way below capacity.¹⁴ The opposite is more likely to be true. The major non-Enbridge pipelines—Keystone XL and TMEP—have long-term “take or pay” contracts with shippers for most of their capacity. Canadian oil producers who have signed those contracts will shift their volume to those pipelines to avoid paying penalties rather than use Enbridge’s “common carrier” lines.¹⁵ The bottom line is that, under even the more optimistic forecasts about crude oil supply from western Canada, there is no need for *three* new pipelines.

The most likely scenario is that we will have *surplus* oil transport capacity in the next decade. And surplus capacity means reduced or eliminated apportionment on the Enbridge Mainline system. Apportionment only happens when demand exceeds capacity. With either TMEP or KXL, or both, in operation, shippers will have options other than the Enbridge Mainline system and will adjust their “nominations” accordingly. Consequently, the ALJ’s

¹⁴ Ex. FOH-10 at 8 (Joseph surrebuttal).

¹⁵ *Id.* at 8-9.

finding that apportionment will continue indefinitely if the Line 3 project is not approved is unsupported in the record.¹⁶

None of this analysis about additional pipeline capacity and its likely impact on apportionment is included in the ALJ report, although it was presented in prefiled testimony and in live testimony at the evidentiary hearing. It is important because reducing or eliminating apportionment is essentially the only benefit from the Project for Minnesota refiners and consumers that the ALJ could identify.¹⁷ If other projects already further along than this one will take care of apportionment on the Mainline system, then there is really no benefit at all, and the PUC's findings should reflect that.

D. SA-04 IS INDEED A REASONABLE AND PRUDENT ALTERNATIVE TO THE PROJECT.

Just as TMEP and KXL will take pressure off the Enbridge Mainline and thereby reduce or eliminate apportionment, the alternative SA-04 route FOH proposed would do the same. The ALJ's finding that SA-04 was not a reasonable alternative because it would "not serve" Minnesota refiners falls for the same reason. Indeed, with a route like SA-04, Minnesota refiners would get the benefit of reduced apportionment without having to pay the shipping toll surcharge Enbridge will assess to pay for a new line 3.

The capital costs of building the line 3 project will be covered by a toll surcharge paid by shippers who chose to use the Enbridge Mainline system. For oil delivered to Clearbrook, where the two Minnesota refineries would take their product, the surcharge will be 49 cents per barrel

¹⁶ The analogy is to the transmission of electricity. If congestion has been causing brownouts in, say, Brainerd, running new transmission lines to Brainerd is not the only solution. *Anything* that will take demand off the congested lines—including transmission lines located elsewhere--can help solve the brownout problem.

¹⁷ The ALJ report is very clear that there is no credible evidence that any refiner in Minnesota or the region has suffered any harm from apportionment.

for the first 10 years of the project and 46 cents for the last five years.¹⁸ Enbridge's own 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 for oil demanded by those refineries.¹⁹ The parties that will initially pay that toll surcharge will be shippers who choose to use the Enbridge Mainline system.

If, on the other hand, a new line 3 is not built, refiners in Minnesota and the region will not have to pay that toll surcharge. But if apportionment is reduced by additional pipeline capacity elsewhere, those refiners get that benefit at no extra charge.

Of course, it is likely that extra shipping charges will get passed on to Minnesota consumers. And that cost may be much higher than \$1.1 billion. 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 prices for refined petroleum products in the entire region, the potential cost to Minnesota consumers would be \$1.6 billion over 15 years.²⁰

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

¹⁸ Ex. FOH-10 at 14-15 (Joseph surrebuttal)

¹⁹ *Id.* at 15.

²⁰ *Id.*

would also be placed on Minnesota consumer, even though the capacity increase would largely serve non-Minnesota markets.²¹

With the SA-04 alternative, Minnesota refiners and Minnesota consumers do not have to bear that cost. Minnesota citizens, however, would gain the benefit of reduced risk to the environment. The ALJ report does an excellent job of outlining many of the environmental risks posed by opening up a new crude oil pipeline corridor through central Minnesota.²² The SA-04 route, in contrast, would stay far away from the Headwaters region, it would bypass Minnesota lake country, it would not run through areas with high levels of retained wetlands, it would avoid areas with particularly vulnerable groundwater resources, and it would reduce potential impacts on wild rice, fish, and wildlife habitat. Both the DNR and the MPCA agree that SA-04 would pose a much smaller environmental risk, and their comparisons are included in the ALJ report. (Findings 763-64, 766-67, 769).

The ALJ report does, however, fall into the trap of finding that SA-04 would be much “longer” than the APR and therefore carry a proportionately greater degree of environmental risk. That is an apples-to-oranges comparison. 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. Like SA-04, the APR would also be intended to deliver crude oil to those same Illinois terminals, but instead by way of Superior, Wisconsin. The oil would not stop at Superior, but would have to continue hundreds of miles south through Wisconsin and Illinois. If Enbridge’s Mainline system is as full as Enbridge says it is, then

²¹ Ex. FOH-6 at 22-23 (Joseph direct).

²² As the ALJ report explains, it is not just one pipeline at stake here. Enbridge’s current Mainline system route crosses both the Leech Lake and Fond du Lac reservations, but its easement expires in 2029. Both Bands have expressed their unwillingness to extend those easements, so Enbridge needs a new corridor for *all* of its Mainline pipelines in Minnesota, and indeed has been acquiring private easements along the new corridor that would accommodate *several* pipelines. The environmental risks at stake here are therefore considerably greater than they would be if this was truly only about one pipeline.

Enbridge will have to build more pipeline capacity through Wisconsin and Illinois. If one compares apples to apples—pipelines from the Canadian border to terminals in Illinois—the two routes are about the same length.

The ALJ report also criticizes SA-04 for not avoiding karst topography in southeastern Minnesota. The ALJ did acknowledge that DOC-EERA did develop alternative routes which largely bypassed the karst regions, and almost completely avoided shallow karst regions, but still concluded that the APR compared favorable since it avoided karst regions altogether.

Again, however, if one makes the apples-to-apples comparison, all Enbridge Mainline system pipelines, including any new line that would pick up the oil from line 3 in Superior, travel directly through karst regions in south central Wisconsin and northern Illinois. An accurate comparison would conclude that the potential impact on karst regions is roughly comparable.

The ALJ report also accepts Enbridge's estimates that SA-04 would cost more to build. That is probably true, but the Minnesota Environmental Policy Act (MEPA) makes it crystal clear that "economic considerations alone" cannot justify permitting a project that may cause the pollution, impairment, or destruction of Minnesota natural resources. Minn. Stat. § 116D.04, subd. 6. On balance, SA-04 would provide the same benefits of reduced apportionment to Minnesota refiners (and perhaps Minnesota consumers) that a new Line 3 would, it would do it without forcing those refiners (and consumers) to bear additional shipping toll charges, and it would do it without posing anywhere near as much a risk to the environment as the APR does. The ALJ report's dismissal of the SA-04 alternative is simply not supported by the record.

E. THE ALJ REPORT DOES NOT DESCRIBE OR ANALYZE OTHER METHODS OF PROVIDING FINANCIAL ASSURANCE THAT MAY PROVIDE GREATER PROTECTION TO MINNESOTA TAXPAYERS THAN PRIVATE INSURANCE.

The ALJ report does a commendable job of explaining why Enbridge's offer of a corporate guarantee from one of its US pipeline subsidiaries—Enbridge Energy Partners LP (EEP)-- does not provide adequate financial assurance against the risks of a spill, or the eventual closure costs of a new pipeline. (Findings 966-98). The ALJ report explains why a minimum requirement for any permit should be the agreement of the Enbridge parent company—Enbridge, Inc.—to assume or guarantee all of its obligations. The ALJ report also describes in reasonable detail why and how additional private insurance coverage could provide additional assurance. (Findings 999-1024).

What the ALJ report does not do is describe or analyze other financial assurance mechanisms that might provide more liquid sources of funds that government can tap without having to sue for the proceeds. FOH suggested at least four other measures the PUC should consider:

- Trust fund: Cash in a trust fund for the benefit of the State in an amount sufficient to cover reasonably foreseeable costs is probably the most secure financial assurance mechanism. Obviously, the trustee must not be captive or related to Enbridge, 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 a lawsuit. The amount in the trust fund would need to be reviewed at least annually, or upon any material change of conditions.
- Letters of credit: Letters of credit obligate banks to pay up to limits upon the presentation of certain documents. Letters of credit must contain automatic renewal provisions, be

irrevocable, and be secured by a standby trust; otherwise, when the possibility of default arises, the bank will cancel.

- 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 before cancellation should trigger payment of the total bond amount into a standby trust. Any bond should permit direct action against the surety. Like letters of credit, experts have developed language for surety bonds that make it more likely that they will be useful when the time comes. Any permit condition should include the exact language required/
- Financial test: No financial test is adequate by itself, because all it can provide is a temporary snapshot. For example, three years ago, the share price for Enbridge Energy Partners LP was \$37.73, at closing on May 8, 2018, it was \$9.03.²³ Nevertheless, regular monitoring of the permittee's (and guarantors') financial condition 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 (perhaps the \$1.2 billion the Kalamazoo spill has cost so far, perhaps more). They should be required to provide audited financial statements, subject to Generally Acceptable Accounting Principles, at least annually, and pay for an outside, independent expert to do an analysis of the companies' ability to absorb the potential liability.

²³ <https://www.nasdaq.com/symbol/eep/historical>

There are other sources to consult, both for calculating potential liability and for selecting appropriate financial assurance mechanisms—the EPA’s proposed financial responsibility rule for the hardrock mining industry, published in January 2017, 82 Fed. Reg. 3388-3512 (Jan. 11, 2017), the Canadian Energy Board’s \$1.1 billion financial assurance plan for the Kinder Morgan Trans Mountain Expansion Project, and the Minnesota DNR’s current effort to evaluate financial assurance for proposed sulfide mine facilities in northeastern Minnesota.

The ALJ report unfortunately considers none of these alternatives. FOH submits that, if the PUC grants a CN and RP, 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, immediate availability to the state on demand—and the appropriate amount. Enbridge can 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.

III. CONCLUSION

The ALJ report spells out many of the reasons the Applicant’s CN and RP applications should be denied—the less-than-credible crude oil supply and demand forecasts, the lack of demand for additional crude oil in Minnesota and the surrounding region, the lack of any evidence of any harm to Minnesota refiners or their customers if the application is denied, the significant environmental and socioeconomic risks of opening up a new crude oil pipeline corridor along the route the Applicant has proposed.

These exceptions also demonstrate that, while the ALJ is correct that approval of Enbridge’s application would only benefit Enbridge and Canadian oil producers, those purely private interests alone cannot be a legitimate basis for granting a certificate of need. FOH also submits that there are reasonable and prudent alternatives for additional pipeline capacity if

needed, including already-approved pipelines elsewhere and the SA-04 alternative FOH proposed, that would serve the alleged need without imposing new costs on Minnesota consumers and without posing anywhere the same level of environmental risk.

If the PUC nevertheless does decide to grant a CN and RP, the permit conditions must include adequate financial assurance to protect Minnesota taxpayers and the environment. FOH offered several alternatives that would likely do a better job of protecting Minnesota's taxpayers and the environment. The ALJ report does not discuss or acknowledge those alternatives, but, if it gets that far, that is something the PUC must consider.

FOH therefore respectfully requests that the PUC deny Applicant's Certificate of Need and Route Permit applications, adopt the bulk of the ALJ's findings but make the changes FOH suggests, and vacate its earlier EIS adequacy determination as moot

DATED: May 9, 2018

Respectfully Submitted,

/s/ Scott Strand

Scott Strand

Environmental Law & Policy Center

15 South 5th Street, Suite 500

Minneapolis, MN 55402

(612) 386-6409

ATTORNEY FOR INTERVENOR
FRIENDS OF THE HEADWATERS

APPENDIX:

**INTERVENOR FRIENDS OF THE HEADWATERS'
SUGGESTED MODIFICATIONS TO ALJ REPORT**

I. APPLICABLE LEGAL STANDARD

ADD Finding 545.1:

Intervenor FOH cautioned against the word-by-word definition approach both the Applicant and DOC-DER employed, and emphasized that the language in the rule must be interpreted in light of the requirements of the statute. According to FOH, a pipeline proposer must establish that the pipeline is needed to meet energy demand in Minnesota and the region. 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. Under FOH's interpretation, the question for the Commission is whether a new pipeline is needed to assure adequate crude oil supplies or will provide other energy-related benefits to Minnesota and the region, and whether those benefits justify the risks involved.

II. ACCURACY OF APPLICANT'S FORECAST OF DEMAND

ADD to Finding 569:

As Dr. Joseph pointed out, the U.S. State Department observed in the environmental review process for the KeystoneXL pipeline:

CAPP forecasts generally have overestimated potential production compared to the trend of actual production.

ADD to n. 1343:

Ex. FOH-6 at 5 (Joseph direct)

ADD n. 1343.1:

USDS, *Draft Supplemental Environmental Impact Statement for the KeystoneXL Project*, vol. 1: 4-24 (2013); *id.* at 7 (Joseph direct)

ADD to Finding 570:

Dr. Joseph pointed to the International Energy Agency (IEA) forecast from November 2016 from November 2016, which predicted, that with West Texas Intermediate (WTI) crude oil prices in a bullish US\$80 range through 2040, completion of current projects under construction would grow oil sands production from 2.4 million barrels per day (bpd) in 2015 to 3.1 million bpd in 2020, but then would level off for the next decade.

ADD n. 1347.1 after new sentence in finding 570:

IEA *World Energy Outlook 2016* (2016); Exh. FOH-6 at 9, 14 (Joseph direct).

ADD Finding 578 n. 1361:

In 2014, the Canadian Energy Research Institute (CERI) estimated that the WTI prices needed to justify oil sands expansion were US\$85 for *in site* SAGD projects, and US\$106 for stand-alone mine projects. CERI, *Canadian Oil Sands Supply Costs and Development Projects (2014-2048)*(2014); Ex. FOH-6 at 15 (Joseph direct). Dr. Joseph acknowledged that more recent CERI reports had reduced those breakeven cost levels somewhat, but noted that WTI prices were still well below supply costs for new oil sands investment, and oil sands production remained at the high end of the international cost curve. Exh. FOH-10 at 5-6 (Joseph surrebuttal).

ADD Finding 586.1:

Canada is a signatory to the Paris Climate Accord, and has committed to greenhouse gas emission reductions to keep global warming below 2 degrees Celsius. Canada cannot meet those obligations and allow western Canada oil sands production to increase, as Applicant projects.

MODIFY Finding 587:

~~But Mr. Stockman has not quantified the alleged future reduction in demand for petroleum products in any measurable way, whether in the long term or in the short term. Mr. Stockman's analysis is directed at the price of oil, not necessary changes in demand or consumption of refined products. Thus, while t~~The ALJ agrees that global policy changes to reduce dependence on fossil fuels will likely reduce the global demand for oil and refined products ~~sometime in the future,~~ no party has put a number or timeframe to that general statement; nor has any party shown how much the supply of Canadian crude is expected to be impacted by those changes. All other things equal, that reduced demand will lead to lower oil prices, which will in turn make oil sands production less attractive to investors.

MODIFY Finding 588:

Similarly, the Sierra Club's witness, Andrew Twite, testified that future sales of electric vehicles will decrease the demand for gasoline and diesel fuel. 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. The ALJ agrees that it is reasonable to believe that the sales of electric vehicles will likely increase in the future, ~~But Mr. Twite provided no evidence or empirical projections as to exactly how much these technologies may reduce demand for crude oil or when such reduction will likely occur. Accordingly, while and that~~ a dramatic shift to electric vehicles may be on the horizon. ~~Mr. Twite has not identified when this shift will come or how (in a quantifiable amount) it~~ That will reduce the demand or supply of Canadian oil into the United States.

DELETE n. 1378. ADD new n. 1378 after “...of transportation fuel per day”:

https://data.bloomberglp.com/bnef/sites/14/2017/07/BNEF_EVO_2017_ExecutiveSummary.pdf.

MODIFY Finding 590:

Mr. Swift maintains that nearly the entire international community has backed an energy transformation by committing to the Paris Accord, and that these international policy changes will likely reduce the demand for and use of fossil fuels in the future.

Mr. Swift cited to Bloomberg New Energy Finance’s 2017 report on electric vehicles, which projects that EVs will displace 8 million barrels per day of transportation fuel by 2040.

MODIFY Finding 591:

In sum, it is reasonable to assume that global climate change policies, mass transition to electric vehicles, and increased use of renewable energy sources will, sometime in the future, reduce global and domestic demand for refined products and, thus, demand for crude oil by refineries.

~~However, no party has been able to quantify how or when these changes are expected to impact Canadian crude oil supply during the forecasting period (i.e. until 2035). Consequently, the ALJ is left with Applicant’s forecasts of oil supply available for transport on the Project—and whether those supply forecasts justify the construction of a new pipeline. Mere statements of change, no matter how reasonable those changes may be to anticipate—without quantification of how they will impact Canadian crude oil supply and demand—are not sufficient to negate Applicant’s detailed projections. While they may invite doubt as to the extent of future demand for crude oil and oil transportation services, they do not negate Applicant’s projects of future oil supply.~~

MODIFY Finding 598:

Given the global recognition of the dangers of climate change and the calls to reduce dependence on fossil fuels, scenarios in which demand for oil in the international market place is significantly reduced (thereby causing an oversupply of oil, lowering oil prices, and reducing the opportunities for U.S. export) are very real. ~~However, no party has presented any data actually quantifying this possibility. General discussions on global and domestic climate policy changes are not sufficient to quantify the effect that these policies may have on oil prices or demand for refined product. Therefore, the raw claims alone do not negate Mr. Earnest's assumption that (at least through 2035) surplus oil can be exported outside the U.S. (Mr. Stockman's analysis based upon oil prices is as close as a party comes to addressing a decrease in global demand and his analysis is discussed above.)~~

MODIFY Finding 600:

Mr. Earnest responds to this criticism by modeling scenarios where the KeystoneXL, Energy East, TransMountain expansion, Ozark expansion, and Dakota Access Pipeline Expansion are all in service. Mr. Earnest concludes, based upon his modeled scenarios, that even with these new pipelines and expansions, the Project will still be utilized. ~~No party was effective in rebutting this analysis.~~

MODIFY Finding 601:

At trial, Dr. Fagan asserted generally that these additional pipeline scenarios were not realistically modeled by Mr. Earnest. For example, Dr. Fagan explained that Mr. Earnest's Model has the KeystoneXL pipeline transporting a little over 100 kbpd, despite the fact that the project is anticipated to run at 800 kbpd. Dr. Fagan asserts that such volume would not be

sufficient to get the Keystone pipeline built because the Keystone XL project is being built on a “take or pay” basis, meaning that shippers must commit to shipping a certain amount on the line or it will not be built. ~~Dr. Fagan, however, did not provide any additional analysis to show why or how Mr. Earnest’s revised utilization projections were erroneous. Her comments were essentially afterthoughts not addressed in any of her prefiled testimony.~~

ADD new Finding 601.1:

Dr. Joseph took the analysis further. As he pointed out, Canadian 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. The Trump Administration approved the Keystone XL pipeline in early 2017, and it has passed its last major regulatory hurdle in Nebraska. Trans Canada has secured long-term commitments from enough shippers (including the Province of Alberta, which ships crude oil it receives as royalty payments from oil sands producers) to finish construction. 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.

ADD new Finding 601.2:

Because of that additional pipeline capacity, Dr. Joseph concludes there will likely be excess oil transport capacity, even under the more bullish projections from CAPP and the Applicant.

ADD new Finding 601.3:

If, for example, oil supply from the West Canada Sedimentary Basin (WCSB) were to go as high as 5.2 mbpd by 2030 (compare the IEA projection of 3.3 mbpd), TMEP and Keystone XL would

leave a 220 kbpd surplus in transport capacity, even if Applicant's proposed Project is not built, and all rail shipments were eliminated.

ADD new footnote to Finding 601.3:

Exh. FOH-6 at 17.

ADD new Finding 601.4:

With rail shipments of 550 kbpd per year (CAPP's midpoint forecast), Dr. Joseph calculates that no additional pipeline capacity—TMEP, KXL, or Line 3—until at least 2025. With TMEP completed, no additional capacity would be needed until 2030. With TMEP and KXL, no additional capacity will be needed until well after 2030.

ADD new footnote to Finding 601.4:

Id. at 18.

ADD new Finding 601.5:

If oil sands production only grows modestly—for example, the IEA projection of 3.3 mbpd by 2030—then Dr. Joseph calculates that either TMEP or KXL will be able to take up the extra supply, without Applicant's Project. If oil sands production begins to decline between 2020 and 2030—as the Rystad low-price scenario projects—then none of these pipelines will be needed. In that scenario, if any of these pipelines are built, they will soon become stranded assets.

ADD new Finding 601.6:

In his initial submission, Mr. Earnest could include Keystone XL and TMEP in his analysis because at that time (2015), CAPP was projecting over 6 mbpd out of western Canada by 2030. By the time Applicant submitted its direct testimony, however, CAPP projections were under 5

mbpd, and Mr. Earnest had to assume that Keystone XL would never be built to make a credible case that a new Line 3 was needed.

ADD new footnote to Finding 601.6:

Ex. FOH-6 at 10 (Joseph direct). Mr. Earnest's changed assumptions about additional pipeline availability were not based on facts, but rather on which assumptions were necessary to make the numbers work for his client. In 2015, Keystone XL had not been approved, and indeed was headed for rejection. In 2017, however, Keystone XL's federal approval was assured and remaining state approvals were nearly certain.

ADD new Finding 601.7:

Mr. Earnest's later testimony claimed to reincorporate Keystone XL back into his model. It did not. Mr. Earnest's later testimony assumed that the burden of any surplus pipeline capacity would always be borne by the other pipelines; in other words, Enbridge would always run full while the others would run well below capacity. The opposite is more likely. KeystoneXL and TMEP are based on long-term take-or-pay contracts with shippers, so shippers will shift their volume to those pipelines to avoid paying penalties rather than use Enbridge's lines.

ADD footnote to Finding 601.7:

Ex. FOH-10 at 8-9 (Joseph surrebuttal).

MODIFY Finding 602:

The ALJ agrees that Mr. Earnest's ~~initial~~ analysis dismissing the Keystone XL pipeline as a possible means of transportation in the future was in error. The Keystone XL pipeline has now received all necessary regulatory permits and, thus, is a realistic possibility for crude oil

transportation in the future. ~~Mr. Earnest, however, updated his projections by including the Keystone XL pipeline in his Model; and Dr. Fagan provided little, if any, evidence to rebut Mr. Earnest's updated projections. Kinder Morgan's Trans Mountain Expansion Project has also received National Energy Board (NEBP approval, has begun construction, and is also a realistic possibility for shipping crude oil. The additional pipeline capacity from KXL and TMEP—830,000 bpd from KXL and 590,000 bpd from TMEP—will reduce and likely eliminate any need for a new Line 3 on the Enbridge Mainline.~~

III. APPORTIONMENT AND EFFECT ON APPLICANT'S CUSTOMERS

MODIFY Finding 624:

~~No party has effectively rebutted Applicant's claims of current or future apportionment. Thus, even if the oil supply and demand forecasts from the Muse Report are viewed with skepticism (which the ALJ recommends), Applicant has established that apportionment of heavy crude on the Mainline system, has existed for at least the last three years, and will likely continue to exist into the near future, unless if western Canada oil production increases at the pace CAPP projects and no additional pipeline or other oil transport capacity is added. to the Mainline System.~~

~~Based upon the most conservative of NEB's supply forecasts, unless additional capacity on the system is added to enable the transportation of more heavy crude, apportionment will continue to be an issue for the Applicant, its shippers, and refiners. If, however, additional pipeline capacity from the Canadian oil sands region does come on line in the next couple of years, such as the TMEP and KeystoneXL, apportionment on the Enbridge Mainline will likely be eliminated or largely reduced, even under the more bullish projections of oil sands production. That is because oil sands producers will have other options, and several of them have indicated their intent to use~~

those other options by signing long-term “take or pay” contracts with Kinder Morgan or TransCanada.

DELETE Finding 626.

MODIFY Finding 627:

The Commission’s criteria for need requires the ALJ and Commission to consider “the future adequacy, reliability, or efficiency of oil supply to Applicant, to Applicant’s customers, or to the people of Minnesota and neighboring states.” The rule does not differentiate among the importance of these three groups, but the governing statute, Minn. Stat. § 216B.243, subd. 3 only requires consideration of potential benefits to Minnesota and the region. Nowhere does the statute mention the interests of either applicants or applicants’ customers as necessary considerations. Minn. Stat. § 645.17(5) further provides that “the legislature intends to favor the public interest as against any private interest,” and this rule of construction applies as well to administrative rules. Minn. Stat. § 645.001. Consequently, it is the public interest that prevails over the private interests of either Enbridge or its shipper customers, if there is a conflict. In other words, the interests of Applicant’s customers and the people of Minnesota are on equal footing. Thus, if there is an adverse impact by denial on any of these groups, it must be considered.

MODIFY Finding 633:

Restoring Line 3 to its original capacity and allowing it to ship both heavy and light crude oil, would likely will reduce apportionment on the Mainline and allow refiners access to a more constant, predictable, and economical supply of crude from the Mainline system. Adding additional oil transport capacity from the oil sands elsewhere, e.g. TMEP or KeystoneXL would

also likely reduce apportionment on the Mainline, as oil sands producers use other new pipelines and fulfill their obligations under their “take or pay” contracts.

MODIFY Finding 664:

Despite the problems with Applicant’s supply forecast, the existence and likely near-term continuance of apportionment that there is demand by Applicant’s customers (i.e. Canadian oil producers) for the transportation of Canadian heavy crude through the Mainline that is not being fully met and will not be met in the short term ~~(through 2035). Accordingly, Applicant has established by a preponderance of the evidence that its forecast for demand for transportation of Canadian heavy crude on the proposed Project exists. In addition, Applicant has established that apportionment has the potential to negatively impact Applicant’s customers (mostly Canadian oil producers~~ even if harm has not been established to Minnesota or regional refineries.

MODIFY Finding 666:

The evidence presented establishes that a new Line 3 ~~will increase: adequacy, reliability, and efficiency on the Mainline System because it will~~ would likely (1) increase the amount ~~and types~~ of crude transported on the Mainline; (2) if the old line 3 is decommissioned, remedy the reliability issues associated with an aging line that, due to integrity issues, operates at half its original capacity; and (3) allow more operational flexibility ~~(i.e. efficiency)~~ to the Mainline System.

MODIFY Finding 667:

It ~~is~~ would be a bitter pill to swallow, ~~however, that if~~ the “need” for this Project is to primarily assist foreign oil producers in transporting their products through (and mostly out of) Minnesota, which could be the case under the interpretation of the rule offered by the Applicant and the

~~Shippers, that However,~~ the rule does not prioritize the needs of Applicant's customers, the people of Minnesota, or the people of neighboring states, ~~and Each~~ of these categories has equal priority under Rule 7853.0130(A). The statute, Minn. Stat. § 216B.243, subd. 3, however, does prioritize the interests of Minnesota consumers, and the rule must be interpreted consistently with the statute. Likewise, the command in Minn. Stat. § 645.17(5) that "the legislature intends to favor the public interest as against any private interest" compels an interpretation of the rule that the private interests of Applicant or of Applicant's customers cannot alone be the basis for granting a certificate of need.

MODIFY Finding 706:

The criterion of Rule 7853.0130(A) speaks to "the ability of current facilities and planned facilities not requiring certificate of need, *and to which the applicant has access*, to meet the future demand." Because these are non-Enbridge alternatives, they are not facilities "available to Applicant." The statute, Minn. Stat. § 216B.243, subd. 3, however, directs the Commission to consider "[p]ossible alternatives for satisfying the energy demand . . . including but not limited to potential for increased efficiency," suggesting that "possible alternatives" to proposed "large energy facilities" do not have to be under the control of the Applicant. In any event, Accordingly, these alternatives shall be reviewed below in relation to "reasonable and prudent alternatives," under Minn. R. 7853.0130(B), as opposed to Minn. R. 7853.0130(A)(4).

DELETE Finding 723

MODIFY Finding 724:

~~Therefore, the ALJ finds that a new Line 3 will be more reliable than the Existing Line 3; and that denial of the Project could adversely affect the reliability of energy supply to Applicant's~~

~~customers—mainly the Canadian oil producers seeking to bring their product into the United States. The ALJ finds no evidence that Minnesota and PADD II refiners have faced any reliability issues, since they have been able to secure the amounts of crude they need, or that a new Line 3 would provide them anything other than potential secondary reliability benefits.~~

MODIFY Finding 725:

Efficiency. A new Line 3 will allow the line to operate in a mixed service capacity, thereby giving the Mainline system flexibility to utilize and unused capacity existing on other Enbridge lines. According to Applicant, it would also eliminate apportionment of heavy crude on the Mainline System. As a result, Applicant ~~has established~~ claims that the Project will increase efficiency of the Mainline System for both Applicant and its customers. The DOC-DER agrees that the Project will increase efficiency.

MODIFY Finding 726:

The evidence establishes that a probable result of denial of the Project is that additional amounts of heavy crude will likely be transported through other means—rail or truck or other pipelines owned by other companies. ~~which are both more expensive, less efficient, and less desirable than pipeline transport.~~ In this way, a denial of the Project could result in Applicant's customers (mainly Canadian oil shippers) to choose companies other than Applicant to transport their oil. There is no evidence, however, that using other pipelines or other transport options will cause any suffering adverse effects in the efficient delivery of energy supply.

MODIFY Finding 727:

Adequacy. Applicant has established that the Project will ~~increase adequacy the size of~~ the Mainline System by providing more capacity for transport of heavy crude. According to

Applicant, this will eliminate apportionment on the Mainline System. As long as the Mainline System remains in apportionment, Applicant's customers (the shippers) are not able to transport as much oil as they would like to ship into the United States on the Mainline System. There is, however, little evidence to show that they would not be able to ship the oil they want through alternative means, such as other major crude oil pipelines coming online.

MODIFY Finding 729:

Canadian oil producers (the Shippers in this case), assert that they suffer adverse effects due to apportionment because they are not able to ship on the Mainline System all the heavy crude that they are producing and would like to export (to and out of) the U.S. Notably, the Shippers are not the Applicant in this case and do not carry the burden of proof. Nonetheless, the fact that apportionment currently exists on the Mainline System and ~~will likely continue to~~ might exist (if the CAPP and NEB projections of Canadian oil supply are correct) in the near future if no other pipelines from the oil sands region are constructed establishes that denial could result in Applicant's customers (mainly Canadian oil producers/suppliers) not being able to transport as much oil to the U.S. as they would like to ship on the Mainline System. ~~In turn,~~ Minnesota refiners would typically benefit from ~~the availability of any~~ increased oil supplies and mixes of crude from which to choose, no matter what the source.

MODIFY Finding 730:

The ALJ finds that Applicant's supply forecasts ignore certain, material issues, such as local and global demand of refined products; and make undisclosed assumptions about oil prices and refined product demand that do not take into account global climate change policies and the likely increase in electric vehicle usage worldwide. The international community is currently

making changes to carbon policy that will likely reduce demand for fossil fuels in the future and increase the use of electric vehicles, reducing or eliminating a major source of refined product demand. However, the impact of these major, global changes, in terms of quantification and timing on oil supply and demand, are currently unknown and in flux. Applicant's supply forecasts only extend to 2035—the year that Applicant anticipates recouping its construction expenses through the Line 3 surcharge. At that time, significant global climate change policies, and like Canada's, will have been in effect for decades and likely strengthened. Likewise, a significant transition to electric vehicles will ~~or will not~~ have taken effect. ~~But at this time, the near future projections (to 2035) establish the continued supply and demand for shipment of Canadian crude oil.~~

MODIFY Finding 732:

Applicant has established that ~~Existing Line~~ its Mainline System is unable to meet current customer demand (hence apportionment), and that it ~~will~~ may not be able to meet such demand, as measured by shipper nominations, if Canadian crude oil supply and demand for transportation powered by fossil fuels remains the same or increases in the future, as CAPP and NEB projections suggest, and no new pipeline capacity from Canada is ever constructed.

MODIFY Finding 733:

Minnesota's renewable energy policy encourages a shift away from non-renewable energy sources, such as fossil fuels. The ALJ finds that this Project does not advance Minnesota's progressive environmental policies and goals. ~~But it will assist~~ At best it will provide Minnesota refiners with ~~access to a more reliable, economical, and ample supply of petroleum~~ some

unquantifiable greater ease of access to crude oil supplies they can turn into refined products—a commodity upon which most Minnesotans (and Americans) currently rely.

MODIFY Finding 734:

Applicant has proposed a Project that, at this time and in the very near future, ~~will~~ might have some marginal benefits to Applicant's customers, Minnesota refiners, and other PADD II refiners: if western Canada crude oil production continues to increase and no new pipeline capacity is constructed. However, the long-term cost of obtaining those speculative benefits—to Minnesota—is what the Commission should carefully consider in deciding this case.

MODIFY Finding 735:

~~While~~ To the extent that Applicant has established that a denial of the Project could result in some adverse impacts with respect to reliability, efficiency, and adequacy of oil supply transport for Applicant's customers (mainly Canadian oil producers) , the Commission should consider these impacts in relation to Minnesota, its people and its natural resources, as discussed in more detail below.

IV. REASONABLE AND PRUDENT ALTERNATIVES

MODIFY Finding 736:

The second criterion in the rule that the ALJ and the Commission must apply in assessing a CN application is whether a more reasonable and prudent alternative to the proposed facility has been demonstrated by a preponderance of the evidence. Under the rule, ~~P~~parties other than the Applicant have the burden to establish whether a more reasonable and prudent alternative to the Project exists. The statute, Minn. Stat. § 216B.243, subd. 3, on the other hand, does not

contemplate shifting the burden of proof away from the Applicant on any point, including the consideration of possible alternatives.

MODIFY Finding 758:

The total length of SA-04 in the United States is 795 miles, with 251 miles in Minnesota, and the remaining 544 miles outside of Minnesota. It crosses North Dakota (233.5 miles), Iowa (187.9 miles), and Illinois (123 miles). Permitting requirements of other states would apply. SA-04 is approximately 450 miles longer than the proposed Project approximately the same length as the proposed Project, if the distance from Superior to the Chicago area is added to the Project's length to make an apples-to-apples comparison. It would require approximately 16 pump stations and numerous mainline valves.

ADD to Finding 763 and to Finding 769:

These comparisons do not include the pipeline impacts from Superior to the Chicago area, where the oil in a new Line 3 would almost all have to go. So these are not apples-to-apples comparisons either.

ADD Finding 775.1:

If a new line 3 is built, however, most of the 760,000 bpd will move south through Wisconsin and Illinois through new or existing Enbridge pipelines. Enbridge's Mainline currently runs through karst topography in south central Wisconsin and northern Illinois, more than the rerouted SA-04 would.

MODIFY Finding 777:

Because reliability of the Project and SA-04 are similar, the ALJ also looks to efficiency, use of existing resources, and benefit to Minnesota. SA-04 involves the construction of a whole new pipeline (as does the proposed Project), but it would not run in the existing corridor for separate from the Mainline System. Therefore, it does not present the same efficiency benefits of the Project for the Mainline System; it would not necessarily reduce apportionment on the Mainline; ~~It~~ It would not make use of Enbridge's existing infrastructure or maximize efficiencies within the Mainline System; it does not connect in Clearbrook or Superior; it does not interconnect with the Minnesota Pipeline System; and it does not directly serve Minnesota or Wisconsin refineries. It would take pressure off the Mainline System, and would likely reduce apportionment. It is uncertain whether it would be more expensive; if new pipeline capacity in Wisconsin is required to move the oil in a new Line 3 to the Chicago (likely), then the costs of that additional capacity need to be added to make a fair comparison.

MODIFY Finding 778:

In addition, while SA-04 would avoid the headwaters of the Mississippi River and Minnesota's most water-rich environments (including wild rice lakes), SA-04 would, nonetheless, have environmental impacts to Minnesota and three other states. SA-04 and its reroutes are approximately ~~twice the the same~~ length ~~of as~~ the propose [sic] Project, if the Superior to Chicago link is included in the Project's length; the reroutes cannot avoid karst topography altogether, although they do avoid shallow karst without losing and retain virtually all the benefits of co-location; and because ~~of~~ its length would be the same, it would ~~double the have~~ about the same impact on GHG emissions and carbon costs (SCC).

MODIFY Finding 779:

While SA-04, as a concept, would allow Western Canadian oil producers to transport their products to the Midwest and the Gulf Coast, it would bypass Minnesota's refineries altogether.

~~In this way, Even though~~ Minnesota would only be used as a conduit for oil transport, ~~without~~ Minnesota's refineries (and, thus, consumers) ~~receiving any~~ would still receive benefits from its existence. By taking pressure off the existing Mainline System, SA-04 would reduce the need for apportionment on the regular Mainline System, so Minnesota refiners would benefit from reduced apportionment even though SA-04 would not directly deliver oil to them. Furthermore, That way, SA-04 ~~wc~~ould provide the type of system benefits and efficiencies to Enbridge's Mainline that are the purpose of this Project.

ADD new Finding 779.1:

With SA-04 in place, Minnesota refiners (and ultimately Minnesota consumers) would not have to pay shipping toll surcharges as they would if a new Line 3 is constructed.

MODIFY Finding 780:

For these reasons, the ALJ finds that SA-04 ~~is not~~ could be a more reasonable and prudent alternative to the Project, ~~despite its~~ because it would deliver many of the same pipeline benefits and the important benefit of avoiding the Headwaters of the Mississippi and some of Minnesota's most valuable natural resources.

MODIFY Finding 791:

The facts presented ~~do not establish~~ show that the Keystone XL ~~is~~ could be a more reasonable and prudent alternative to the Project. ~~Although~~ Keystone XL, if built, would transport crude from Western Canada to the United States, particularly the Gulf Coast. ~~It~~ would not serve

Minnesota refineries or PADD II directly, at least not at first, but it would provide benefits to them, again by “freeing up capacity” and therefore reducing the need for apportionment on the Mainline System. ~~In addition,~~ sShippers could well pay more to ship on Keystone XL than the Mainline if they do not have a shipping contract with Trans Canada, but could also pay less if they do have such contracts, can get a lower price, and can avoid “take or pay” penalties. While Keystone XL would not have any negative impacts on the natural and socioeconomic environment of Minnesota (because it is not located in Minnesota), the Keystone XL pipeline will have its own set of environmental and socioeconomic impacts in the U.S., which have been extensively evaluated through a rigorous environmental review and permitting process. ~~Finally,~~ as to reliability, ~~t~~ The fate of the Keystone XL is currently unknown, but it has its permits in place, it has gone through environmental review, it has contracts with a sufficient number of shippers, including the Province of Alberta, and appears likely to proceed if there is sufficient demand to support at least one new oil sands pipeline. As it stands currently, the Keystone XL continues to be a hypothetical, but realistic and prudent, alternative.

MODIFY n. 1703 to Finding 791:

The Applicant claims that ~~The~~ Keystone XL pipeline is over 500 miles longer than proposed Line 3 and would, thus have more impacts. Again, that is not an apples-to-apples comparison. Likely well over half of the oil flowing through a new line 3 will eventually reach the Gulf Coast, through the Enbridge Mainline system in Wisconsin and Illinois, and then Enbridge’s Flanagan South pipeline to Cushing, Oklahoma, and then from Cushing to the Gulf Coast. If those necessary elements are included, then Keystone XL is considerably shorter.

MODIFY Finding 792:

The statute, Minn. Stat. § 216B.243, subd. 3, directs the Commission to consider “possible alternatives” to any new proposed “large energy facility,” and at no point shifts the burden of proof to parties other than the Applicant. In contrast, in review of system alternatives under Minn. R. 7853.0130(B), the party proposing an alternative carries the burden to prove that it is a more reasonable and prudent alternative than the proposed Project. ~~Here, no party has established by a preponderance of the evidence that the Keystone XL is a more reasonable and prudent alternative to the Project. Under the statutory test, Keystone XL would certainly be among the “possible alternatives” that would weaken the Applicant’s “need” case.~~

MODIFY Finding 804:

As set forth above, the party proposing an alternative to a proposed project has the burden, under the rule but not under the statute, to establish, by a preponderance of the evidence that a more reasonable and prudent alternative exists. ~~Both the FOH and DOC DER have failed to satisfy their burdens in this case with respect to SA-04, the Keystone XL, and the Spectra pipeline concept.~~ The evidence ~~also~~ does not establish that a rail or truck alternative to the Project would be more reasonable and prudent.

MODIFY Finding 806:

If the proposed Projects’ sole purpose was to bring Canadian oil to PADD II and the Gulf Coast, each of these alternative pipeline projects could be considered. ~~However~~ Likewise, since a stated purpose of the proposed Project is to reallocate transport capacity on Enbridge’s Mainline System to make the system itself more efficient and economical for Applicant’s customers, these alternative pipeline projects could “free up capacity” on the Mainline and accomplish those

~~purposes as well. Due to its location in Minnesota, upgrades to the Mainline System brings, as byproducts, benefits to Minnesota and Wisconsin refiners. It allows Minnesota and Wisconsin refineries access to more crude of different varieties. In this way, Minnesota's refineries receive a "benefit" from the Project that these other pipeline concepts do not offer to Minnesota.~~

MODIFY Finding 808:

SA-04 would mitigate the environmental risks to Minnesota by locating the pipeline through predominantly agricultural land and away from water-rich resources. It also avoids tribal lands (both the Leech Lake and Fond du Lac Reservations and the 1837 and 1854 Treaty-ceded territories). ~~However, as set forth above, t~~This alternative results in a substantially longer approximately the same length of pipeline, if the Superior to Chicago link is included, also traversing three states, which cannot can be designed to send the additional oil through completely avoid less karst topography than the Project plus the Superior to Chicago link and can almost completely avoid shallow karst altogether. In addition, by taking pressure off the Enbridge Mainline System, SA-04 does ~~not~~ provide ~~any~~ benefits to Minnesota refiners.

DELETE Findings 809 and 810.

V. OVERALL STATE ENERGY NEEDS

MODIFY Finding 829: ~~While t~~The evidence does not show that Minnesota refineries are short on oil supply or that they are unable to meet their current oil needs there is sufficient evidence in the record that the Project will have some positive effects on the state energy needs. This occurs byIf the demand for and supply of western Canada crude oil continues to grow, and no new additional pipeline or other oil transport capacity is added, then a new Line 3 could provide some benefit by reducing or eliminating apportionment on the Mainline System and allowing

Minnesota refineries more ample access to crude of all types. Thus, while the evidence does not establish that Minnesota refineries will be harmed by denial of the Project, ~~the evidence does support a~~ any finding that they can benefit from approval of the Project depends on contingencies—ever-growing demand and supply of oil sands production, no new pipeline or other oil transport capacity coming online—that are highly unlikely to occur. ~~The increase in access to various types of crude oil will allow Minnesota refineries to have more security and greater reliability in their supplies. This, in turn, helps Minnesota’s refineries remain competitive in the marketplace and reduces the cost of refined products for Minnesota consumers.~~

MODIFY Finding 830:

Accordingly, ~~although~~ the Project is not currently necessary for Minnesota to meet its current energy (i.e. crude oil) needs, and the ALJ finds that the Project will only provide some benefits to Minnesota’s refiners ~~and will~~ or contribute to Minnesota refiners’ ability to meet the state’s energy needs in the future if a number of unlikely contingencies occur. ~~This, in turn, should benefit Minnesotans, as consumers of petroleum products.~~

MODIFY Finding 923:

Instead of focusing on the benefits of the Project to Canadian oil producers, Applicant focuses on the benefits to Minnesota and regional refiners. As set forth above, a claimed benefit of the Project is that it would reduce apportionment on the Mainline system – a pipeline system upon which Minnesota and PADD II refiners do, indeed, rely. Reduction in apportionment should provide Minnesota refiners with a better access to more crude and more options for types of crude (light, heavy, etc.) via a pipeline – a more efficient and economic mode of transport for oil.

But the record does not show that current apportionment will continue, particularly if the CAPP projections on which Applicant relies turn out to be overstated, and if other new pipelines from the western Canadian oil sands region, come online, so any claimed benefits from reduced apportionment are speculative at best. Likewise, there is no evidence that Minnesota and regional refiners have in any way been harmed by apportionment in recent months. It would also reduce reliability and integrity issues associated with an aging line that would be subject to numerous repairs and continued reduced capacity. The increased reliability of the system and the accessibility to more and different mixes of oil would better allow Minnesota refiners to remain competitive in the market, which could result in benefits to Minnesota consumers in terms of price for refined products.

VI. INDUCING FUTURE DEVELOPMENT

MODIFY Finding 926:

Finally, as discussed in Section V.C.ii.b above, the Project would provide temporary jobs and indirect and induced economic ~~benefits to~~ activity in the state during the period of construction, as well as ~~the~~ potential for long-term tax benefits to certain northern Minnesota counties. The evidence does not establish a net economic benefit to the state.

VI. SOCIALLY BENEFICIAL USES AND ENVIRONMENTAL QUALITY

MODIFY the first sentence in Finding 929:

In addition to the socially beneficial uses of crude oil, the Project would provide some additional protection for the environment ~~because it replaces~~ if it speeds up retirement of a 50+-year-old pipeline.

DELETE Findings 932 and 933

VII. COMPLIANCE WITH RELEVANT POLICIES, RULES, AND REGULATIONS

ADD new Finding 936.1:

Enbridge's willingness or ability to comply with the law can fairly be questioned. On May 4, 2018, it was reported that Enbridge will pay more than \$1.86 million for failing to conduct timely pipeline inspections as required by its consent decree, including inspections on parts of the Line 5 pipeline in Michigan, and in Minnesota, North Dakota, and Ontario.

ADD n. 2006.1 to new Finding 936.1:

<https://www.detroitnews.com/story/news/local/michigan/2018/05/04/enbridge-feds-fine-line/34566953/>

VIII. PERMIT CONDITIONS

ADD new Finding 1024.1:

The ALJ notes that other federal and state agencies who regulate industries where there is the potential for catastrophic losses have developed a range of financial assurance mechanisms other than corporate guarantees and private insurance. For example, the U.S. Bureau of Land Management (BLM), which oversees hardrock mining leases on federal lands in the western United States, requires financial assurance in the form of a trust fund, an evergreen letter of credit, a surety bond, or equivalent as a condition for receiving a mining lease. The ALJ urges the Commission to evaluate those alternative mechanisms to arrive at a financial assurance condition that will genuinely protect Minnesota's taxpayers and the environment.

IX. CONCLUSIONS OF LAW

MODIFY Conclusion 21:

With respect to whether a more reasonable and prudent alternative to the Project exists, the rule shifts the burden of proof ~~rests upon to~~ parties other than the Applicant who have proposed those alternatives. The statute does not, and the rule's burden-shifting appears to be inconsistent with the statute's direction to consider "possible alternatives," without ever shifting the ultimate burden of proof from the Applicant. If the rule provision governs, T the same preponderance of the evidence standard applies to this analysis. Accordingly, under the rule's burden-shifting, if it is more likely than not that a more reasonable alternative to the Project exists, then the party proposing that alternative has satisfied its burden. In contrast, if the evidence casting doubt on the reasonableness or prudence of such alternative is stronger and more persuasive, then the party proposing the alternative has failed to meet its burden.

MODIFY Conclusion 22:

Applicant has established a reasonable need to ~~replace-decommission~~ the existing line 3 due to its age, the need for repairs, and significant integrity issues.

MODIFY Conclusion 23:

The evidence also establishes that apportionment on the Enbridge Mainline System currently exists for heavy crude, has existed for some time, and will continue to exist in the future, but only if the less-than-credible CAPP forecasts on which the Applicant relies prove to be accurate and no additional pipeline or other oil transport capacity comes on line. If supply and demand for western Canada oil flatten out, or even begin to decline, or if one or more of the already-

permitted pipelines is built, then apportionment on the Enbridge Mainline system will be largely reduced or eliminated because there will be a surplus of oil transport capacity.

MODIFY Conclusion 24:

~~For these reasons,~~ Applicant has not established, by a preponderance of the evidence, that the probable result of denial of the Certificate of Need Application would adversely affect the future adequacy, reliability, or efficiency of the transportation of crude oil supply by Applicant's customers, particularly Canadian crude oil suppliers, or the people of Minnesota and the surrounding region.

MODIFY Conclusion 25:

Minnesota Rule 7853.0130(A) does not itself distinguish among the importance of the need for Applicant, Applicant's customers, and the people of Minnesota and neighboring states. The statute, Minn. Stat. § 216B.243, subd. 3, on the other hand, clearly indicates that the interests of Minnesota consumers are the highest priority. Nor does the rule itself assign the priority of importance between adequacy, reliability, or efficiency of energy supply. The statute, Minn. Stat. § 216B.243, subd. 3, and the legislative findings in Minn. Stat. § 216B.001, however, provide that all three of those factors should be considered together, again as they affect Minnesota consumers. Accordingly, adverse impacts to Applicant's customers is not sufficient by itself to establish need for the Project under this criterion.

ADD new Conclusion 25.1:

Moreover, the PUC is obligated to comply with its substantive obligations under the Minnesota Environmental Rights Act (MERA), Minn. Stat. § 116D.04, subd. 6, not to grant a permit to a project that might cause the pollution, impairment, or destruction of Minnesota natural resources

if feasible and prudent alternatives are available. The PUC also must honor its fiduciary “public trust” obligations to protect Minnesota’s waters.

MODIFY Conclusion 26:

The ALJ further concludes that SA-04 a more would be a more reasonable and prudent alternative to the Project ~~has not been demonstrated by a preponderance of the evidence by parties or persons other than the Applicant, because it would meet the same alleged needs but~~ pose much less risk to environmental and socioeconomic resources.

MODIFY Conclusion 27:

Applicant has not established, ~~however,~~ by preponderance of the evidence, that the consequences to society of granting the certificate of need for the Project, as proposed, are more favorable than the consequences of denying the certificate ~~so long as the Project includes Applicant’s Preferred Route. However, the cost and benefit calculation under Minnesota Rule 7853.0130(C) changes if Applicant replaces Existing Line 3 in its current location (i.e. if the Commission were to select RA-07 as the pipeline route in this case). In such a circumstance, the benefits to Minnesota and regional refiners, and the people of Minnesota, slightly outweigh the risks and impacts of a new crude oil pipeline. If one also considers the additional costs to Minnesota refiners (and~~ consumers) from shipping toll surcharges—estimated at between \$663 million and \$1.1 billion over 15 years—the cost-benefit analysis tilts even more strongly against approving the Project.

DELETE Conclusion 28.

MODIFY Conclusion 29:

Finally, it has not been demonstrated on the record that the design, construction, or operation of the Project will fail to comply with those relevant policies, rules, and regulations of other state and federal agencies and local government. It has been demonstrated that the Applicant has violated those rules on several occasions, and the evidence indicates that the governing rules are not adequate to protect the public. ~~While~~ In addition, the Project does not further the renewable energy and reduction in GHG emissions goals and objectives of the State, ~~the evidence presented does not established [sic] that the Project will fail to comply with applicable laws or rules.~~

MODIFY Conclusion 30:

The Administrative Law Judge hereby concludes that, ~~subject expressly to the selection of RA-07 (in-trench replacement) and the conditions recommended below that the Commission GRANT-DENY~~ Applicant's Application.

ADD an additional bullet in Conclusion 44:

The Commission should evaluate and, as appropriate, require other means of financial assurance (e.g. trust funds, letters of credit, surety bonds) as well as corporate guarantees and private insurance to assure that the funds are available to the State if necessary to respond to an accident, if the Applicant is unable or unwilling to do so.