

Via eFiling

January 6, 2020

Scott Ek
Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

RE: Line 3 Project second revised FEIS Comments

PUC Docket Number: PL-9/CN-14-916 and PL-9/PPL-15-137

Dear Mr. Ek,

Thank you for the opportunity to comment on the adequacy of the revised environmental impact statement (EIS) for Enbridge's new line 3 project. This comment is submitted on behalf of Friends of the Headwaters (FOH), a volunteer-based nonprofit organization based in central Minnesota with members who live, work, and play near the proposed pipeline route.

FOH of course joins the chorus asking for additional time to comment. In the best of circumstances, any comment period over the December holidays, when many members of the public travel or cannot spend time with materials like this, is problematic. In this case, the situation is even worse because copies of the second revised EIS were not made immediately available to members of the public without speedy online access, and so they have had even less time to provide input to the PUC. FOH members report that the Park Rapids Public Library did not receive the thumb drives with the second revised FEIS until Monday, December 30, 2019.

FOH also objects to the uncertain scope of the comments in the PUC's notice or notices. There are two different versions of the December 9, 2019 "Notice of Availability, Public Comment Opportunity, and Written Comment for the Revised Final Environmental Impact Statement on the Line 3 Replacement Project" on the e-docket page. One limits the scope of comments only to the question of whether the second revised environmental impact statement is

adequate, and the first paragraph discusses only the question of “potential impact of an oil spill into the Lake Superior watershed.” Likewise, the PUC’s October 8, 2019 Order Finding Environmental Impact Statement Inadequate on Remand, which directs the staff to set up a comment period after DOC-EERA comes back with revisions, only mentions the Lake Superior watershed issue that was the focus of the court’s order. But another version of the December 9 notice expands the scope of comments to include all of the ultimate issues in the line 3 docket: (1) Is the revised FEIS adequate? (2) In light of the revised EIS, what action should the Commission take on the application for a certificate of need for the Line 3 Replacement Project? (3) In light of the revised FEIS, what action should the Commission take on the application for a pipeline routing permit for the Line 3 Replacement Project? Obviously, questions (2) and (3) assume in advance that the answer to question (1) is yes since, if the revised FEIS is not adequate, the PUC does not have the authority to decide on Enbridge’s CN or RP applications. The suggestion is that the PUC has predetermined to find the revised FEIS adequate, and then, at the same time, reissue the CN and RP decisions, or substantially the same decisions, it did previously. This is at best confusing and at worst unfair.

We believe a clearer and more robust process is in order. In addition to an extended comment period and clarification of the scope of comments, we suggest that the PUC order that the revised EIS adequacy be briefed by the parties to address (1) whether the revised EIS adequately corrects the “Lake Superior watershed” problem identified by the court of appeals; and (2) whether there is new information or changed circumstances since the first FEIS that must be evaluated before the revised FEIS can be deemed adequate. After those issues are briefed and argued, the PUC can either send the revised FEIS back to DOC-EERA to correct the remaining shortcomings, or it can hold the revised FEIS adequate and take its chances on appeal. Only

when the PUC, the other state agencies, and the public have a revised EIS in place that meets the standards in the Minnesota Environmental Policy Act (MEPA) should the PUC begin to consider whether to grant or deny Enbridge's application for a CN or an RP, including potentially whether the record should be reopened to consider additional evidence on new information and changed circumstances.

With those procedural objections in place, the balance of this comment from FOH will focus on the substantive issues with the revised EIS and why the PUC should find it inadequate.¹ The revised EIS does not meet the "adequacy" standard in the Minnesota Environmental Policy Act (MEPA) for two general reasons:

1. The analysis of the potential impact of an oil spill into the Lake Superior watershed added to the document does not adequately address the concerns that drove the court of appeals decision last June. The revised EIS:
 - Evaluates the wrong site, and does not consider the risks of a major spill if it happened closer to the St. Louis estuary and closer to the Lake;
 - Apparently assumes that a Minnesota environmental review cannot lawfully evaluate the potential environmental effects in Minnesota of construction occurring outside the state, an assumption recently rejected by the Minnesota court of appeals;
 - Assumes, based only on Enbridge's assertions, that any spill in the Lake Superior watershed would be fully controlled within 13 minutes of discovery, thereby greatly underestimating the volume of oil that could be released in a

¹ Of course, the identification of problems with the revised FEIS overlaps substantially with the identification of problems with the now invalid certificate of need and routing permit, and the reasons those applications should be denied, even if the PUC does find the revised FEIS adequate under NEPA.

worst case scenario, as defined by the Pipeline and Hazardous Materials Safety Administration (PHMSA) and the EPA;

- Assumes that any oil spill will be fully controlled within 24 hours, and therefore underestimates the potential reach and damage of an oil spill;
- Limits its analysis to “fate modeling,” i.e. estimating the travel distance of spilled oil, instead of using newer models like the Line 5 study in Michigan to make a genuine risk assessment of potential spill impacts in the Lake Superior watershed.

2. The revised FEIS also ignores significant changed circumstances and new information since the bulk of the FEIS was completed back in 2017. Before it can decide on Enbridge’s applications, the PUC, the other state agencies, and the public need to know the impact of the following:

- The continuing domestic and indeed global oil glut and lack of need for tar sands oil to produce refined petroleum products;
- The continued depression of crude oil prices, particularly for tar sands oil, at or below break-even prices, the ongoing divestment from and refusal to insure tar sands facilities, and new evidence that that situation will continue well into the future;
- The Province of Alberta’s decision to cap production to try to prop up oil prices and keep that cap in place through 2020;
- The growth in U.S. crude oil production, more than enough to satisfy domestic demand, with higher-quality oil and lower costs of production;

- The implementation or significant progress of alternatives posing little or no additional risk to Minnesota’s environment: expansion of the capacity of Enbridge’s current Mainline pipelines, the likely doubling of the capacity of the Dakota Access Pipeline (DAPL), which Enbridge co-owns, the restoration of federal permits for the KeystoneXL project, the takeover of the Trans Mountain Expansion Project (TMEP) by the Canadian federal government, the expansion of rail transportation and the development of “neatbit,” tar sands oil in solid form that can be transported with minimal risk of leaks;
- Enbridge’s decision to shift from its open access/monthly bidding policy for its Mainline pipelines to a take-or-pay contract scheme, thereby eliminating pipeline “apportionment;”
- The leak history of the new (less than ten years old) Keystone pipeline, similar in many ways to the proposed line 3, and the inability of new technology to prevent those occurrences;
- New evidence that new pipelines have been having three or four times as many significant leak problems as older pipelines;

As a result, neither the PUC nor the other state agencies with permitting responsibility have what they need to make environmentally informed decisions on the line 3 proposal. These issues should be fully explored in a revised or supplemental EIS and may ultimately require the consideration of additional evidence.

I. THE REVISED EIS GREATLY UNDERESTIMATES THE POTENTIAL CONSEQUENCES OF A SPILL IN THE LAKE SUPERIOR WATERSHED.

A. To study the potential impacts of a spill in the Lake Superior watershed, DOC-EERA should have included at least one water crossing site closer to the Lake and the St. Louis River estuary.

When the Minnesota court of appeals reversed the decision of the Public Utilities Commission (PUC), its primary concern was that, even though the proposed line 3 pipeline project travels directly through the Lake Superior watershed to Enbridge's terminal very near the Lake itself, the EIS for the line 3 project did not evaluate the impact of a major oil spill in the Lake Superior watershed. The court found that omission rendered the EIS "inadequate" under the Minnesota Environmental Policy Act (MEPA), and sent it back to PUC (and, in turn, DOC-EERA) to fill that gap, so the public, the PUC, and ultimately a reviewing court would have a genuine appreciation of the risks to Lake Superior, the St. Louis River estuary, and the rest of the Lake Superior watershed.

The site DOC-EERA and its consultant chose to discuss, however—the Little Otter Creek crossing site—significantly understates those potential risks and consequences. As the revised FEIS describes, a spill at that location could easily reach the St. Louis River and the potential amount of oiled shoreline and oil in the water could well do considerable damage. Yet, to provide a fair picture, DOC-EERA should have chosen or included at least one alternative closer to the Lake and closer to the St. Louis estuary, where a spill would be more likely to reach the River and even to reach the Duluth-Superior Harbor and Lake Superior itself.

The Little Otter Creek site is approximately 15 miles from the St. Louis Estuary, 27 miles from the Duluth-Superior harbor, and 32 miles from Lake Superior proper, and the Fond du Lac dam stands between that location and the estuary and, in turn, the Lake. As the EIS has always acknowledged, the proposed pipeline will, however, cross watercourses that are much closer, such as the Pokegama and Little Pokegama Rivers, which flow into the St. Louis River estuary.

Obviously, distance matters. A major oil spill thirty miles from a protected resource poses a smaller risk than one five miles away. And, of course, many of the revised FEIS's conclusions about the limited risk to Lake Superior and the St. Louis estuary are based on the oil from a spill either dissipating or being controlled along the relatively long distance from the Little Otter Creek crossing. Nothing in the revised FEIS or the consultant's report suggests that a spill closer to the Lake or closer to the estuary would not pose a substantially greater risk. Consequently, their site selection predetermined a limited-risk outcome that does not reflect the actual potential risk to these critical natural resources.

B. There was no lawful reason for the revised FEIS to refuse to consider potential oil spills at water crossings in Wisconsin that could have dramatic environmental effects in Minnesota.

The revised FEIS acknowledges those watercourse crossings, and does not attempt to deny that a major spill at one or more of those locations could have devastating consequences on the Lake and the estuary. Instead, the revised FEIS makes three essentially legal arguments why those sites were not considered, none of which have any merit.

First, the revised FEIS says that it could not lawfully consider a spill from a line 3 segment in Wisconsin, even though much of the impact would fall on Minnesota. That is of course the same argument the Minnesota court of appeals recently rejected in *In re Minnesota Power's Petition for Approval of the EnergyForward Resource Package*, 2019 WL 7042812 (Minn. Ct. App. Dec. 23, 2019). In that case, the PUC argued that it did not have jurisdiction, or could not constitutionally exercise jurisdiction, to do environmental review of a natural gas power plant in Superior, Wisconsin, very close to Enbridge's Superior pipeline terminal. The PUC acknowledged that Minnesota Power needed Minnesota PUC approval of its "affiliated interest" agreement with its Wisconsin subsidiary to operate the Superior facility, and that the

facility could have negative environmental impacts on Minnesota, but concluded that it could not lawfully commence a MEPA environmental review of the project. The court rejected that argument, and made it clear that if an out-of-state project needs Minnesota agency approval and could have significant environmental effects in Minnesota, an agency not only can but must do an environmental review that meets MEPA's requirements.

The same rationale applies here. The Minnesota PUC never had the authority to prevent the Wisconsin segment of the new line 3 from being constructed, but it has always had the authority to determine whether any oil would run through it. And, as in the *Minnesota Power* case, no one denies that a major oil spill where the proposed line 3 crosses watercourses in Wisconsin could have a significant effect on Minnesota's environment. Clearly, then, those crossings could lawfully have been reviewed in this revised FEIS.

Without that perceived legal barrier, there is little basis to challenge the idea that, in order to assess the potential environmental impact of a line 3 spill on the Lake Superior watershed, the drafters should have chosen one or more of the Wisconsin watercourse crossing locations to get a fairer assessment of a "bad case" scenario. Those crossings are much closer to the Duluth-Superior Harbor² and Lake Superior itself, and it is quite likely that a major spill at those sites could reach the Lake. By choosing a site much further from the Lake, with a dam along the way, the revised FEIS creates the impression that the resources of greatest concern to the court of appeals would be in little danger. That simply is not the case.

² The revised FEIS also suggests that because Duluth-Superior Harbor is an industrial area, there is little reason to worry about a spill that could easily travel there and potentially from there into Lake Superior proper. The impact on the Harbor, and the effect the Harbor might have on the fate of an oil spill would, of course, be among the topics to be considered if DOC-EERA is directed to analyze one or more of the sites closer to the Lake and nearer the estuary.

The second legal, or quasi-legal, argument made in the revised FEIS for refusing to consider the closer sites is the notion that DOC-EERA and the PUC have some kind of an obligation to defer to the environmental impact statement prepared for the Wisconsin Department of Natural Resources (WDNR) when they evaluated the Wisconsin segment of the Sandpiper pipeline proposal.³ With all due respect to the capacity of the Walker Administration's DNR, the fact is that the Wisconsin Sandpiper EIS did *not* assess the impacts of a spill in the Lake Superior watershed. In section 8.4-2, the Wisconsin EIS expressly acknowledges that it made *no* attempt to assess "[t]he specific impacts of an oil spill in the St. Louis estuary and Duluth Harbor." [P. 8-15]. It expressed the hope that the Large Lakes Laboratory at UMD might come up with something that might "eventually be useful for addressing spill impacts in the future." *Id.* It also noted that the Minnesota *DOC-EERA* had commissioned site-specific spill modeling for the project that could be helpful to Wisconsin, but determined that they could not wait for that to be completed before issuing their EIS. So, we have WDNR avoiding the issue by deferring to DOC-EERA, and now DOC-EERA avoiding the issue by deferring to an analysis the WDNR never did. Even if they had, there would be under no circumstances any legal obligation to defer to a Wisconsin environmental review.

The third legal or quasi-legal argument is that the Wisconsin portion of the proposed new line 3 has already been built, and therefore review of potential spill consequences from those segments are now somehow moot. That does not make sense. If the Minnesota PUC (or the DNR or the MPCA) were to deny Enbridge's applications and no new line 3 is built across Minnesota to Superior, then there will not be oil running through the Wisconsin segment, those

³ The link to the Wisconsin DNR's Sandpiper/line 3 EIS from August 2016 is dnr.wi.gov/files/PDF/pubs/ea/EA0229.pdf

assets may well be stranded, and the environmental risk to Minnesota will be largely eliminated. That is more than enough to maintain a live controversy.

C. The revised FEIS’s spill volume calculations assume that discovery of a spill would be immediate, that all automated systems will work as planned, that the valves would be closed no later than 13 minutes after discovery, and that full-bore rupture would be totally under control within 24 hours. Those assumptions are way too rosy.

The revised FEIS calculates the maximum volume of oil hypothetically released by assuming that any substantial spill would be discovered immediately, that the line would continue to pump oil for no more than ten minutes after the initial release, and that it would then take no more than three minutes to close all the necessary valves and shut down the line. Revised FEIS section 3.1. Those assumptions are overly optimistic.

First, the belief that Enbridge’s automated systems—its Computational Pipeline Monitoring (CPM) system, its Supervisory Control and Data Acquisition (SCADA) system, its automated valve-closing systems—will always work as intended is factually unfounded. The Independent Risk Analysis for the Straits Pipelines (Enbridge Line 5), led by Michigan Tech and completed in September 2018, (the “Line 5 study”), which assessed the risks of a spill in the Straits of Mackinac, found way too many instances in the recent past where automated systems failed.⁴ Automated detection systems—CPM and SCADA systems—only discover leaks in a small percentage of actual cases; most spills are reported by employees, contractors, or members of the public at or near the site. Human error often defeats the technology. And the study cited evidence that due diligence is not as vigorous when an automated system is present, and that

⁴ The Line 5 study is available online at mipetroleumpipelines.com/document/independent-risk-analysis-straits-pipelines-final-report. The discussion of these assumptions is in “Task A: Identifying and Analyzing the Duration and Magnitude of a “Worst-case” Spill or Release of Oil or Other Product from the Straits Pipelines into the Environment,” at 32-55. Section A.2.5.1 assesses spill/leak detection time, A.2.5.2 decision and isolation time, and A.2.5.3 manual valve closing time

there is an unjustified belief that an automated system is less susceptible to an accidental leak. Line 5 study, at 42-43.

Second, the legal standards for risk planning do not allow companies to assume that automated systems will work either. EPA guidelines for risk management plans (RMPs) require operators to assume “complete failure in which no safety equipment works except for passive measures such as drains, dikes, and dams, with weather conditions assumed to be the worst possible.” EPA, Risk management program guidance for offsite consequences analysis (2009), <https://www.epa.gov/sites/production/files/2013-11/documents/oqa-chps.pdf>. PHMSA rules, 40 C.F.R. § 194.105, governing “worst case discharges,” require that a pipeline’s “maximum release time in hours, plus the maximum shutdown response time in hours” be “based on historic discharge data.” *Id.* § 194.105.b.1. In Enbridge’s case, the most relevant historic discharge date would likely be that for the Kalamazoo spill in 2010, where detection and shutoff took 17 hours, but the Line 5 study concluded that it would be satisfied with a 2-hour scenario, based on Enbridge’s estimates of how much time it might take to get to a site and manually shut valves if the automated system failed. Two hours is a reasonable conservative assumption; thirteen minutes is not. In two hours, about 32,000 barrels of oil could spill out of the proposed line 3, still less than the over 40,000 barrels that spilled out of the existing line 3 in 1991. Any fate modeling should use those numbers

The approach the Line 5 study took was to assess the potential impacts of several different “tiers” of spills or leaks, ranging from smaller leaks where the technology works on down to large ruptures where the technology fails. That is what this revised FEIS needs to do, if it is to meet the adequacy standard in MEPA, particularly with respect to the Lake Superior watershed.

Likewise, the assumption that any spill will be controlled in 24 hours is also overly optimistic. The U.S. Coast Guard has conceded that it is *not* prepared to address a major oil spill in the Great Lakes. It took Enbridge much longer than 24 hours to bring the Kalamazoo spill under control. The Line 5 study concluded that shoreline cleanup of a spill in the Straits of Mackinac could continue for months to up to two years. Line 5 study at 115. Any assessment of how far oil from a spill could travel should not only use different volume assumptions, but also a more extended time period before “control” can be assumed. The Line 5 study again provides a much more realistic approach. They calculated the amount of oiled shoreline distances and oiled surfaces at a series of time intervals—1, 2, 4, 6, 10, 15, 20, 30, and 60 days. Under some scenarios, a hypothetical spill stopped spreading after a relatively brief time period; in others, the maximum impact happened at the 60-day mark. They also went beyond describing the company’s response capability and made time estimates of how long cleanup would take under several different assumptions. Without that kind of analysis, there is no way to assess the level of damage that might occur, but that analysis is not included in the revised FEIS.

D. The revised FEIS does not assess what the public health and safety impacts or the ecological effects would be if there were a major oil spill in the Lake Superior watershed. It does not assess potential measures to restore affected natural resources, including what they might cost, and it makes no attempt to quantify the potential natural resource and economic damages.

As explained above, the “fate modeling” results included in the latest revisions to the FEIS are fundamentally flawed because the site choice was poor (and unjustifiably so), and the assumptions about the potential volume and duration of a spill were too optimistic. Simply sending the FEIS back to DOC-DER for another fate modeling exercise at another location with different assumptions will not, however, elevate the FEIS to the standard required by MEPA.

Once site-specific fate modeling is completed, the next step is to assess the site-specific public health and safety and ecological impacts. If, for example, the decision is to evaluate a 32,000 barrel spill at the Pokegama River crossing and to trace where that quantity of different types of oil might go under different conditions over a period of several months, then what the PUC and the public need to know is what would be the impact of that kind of spill at that site. The revised EIS has, to date, not provided that information. Instead, there is a listing of resources in the area in a different section and general statements about the potential impacts of oil spills elsewhere, but nowhere is there an analysis of what would happen at the site. Would drinking water supplies in the greater Duluth-Superior area be threatened? Would there be significant air quality effects for people living or working near the spill? What kind of fish and wildlife would likely be affected, as the oil moves into the St. Louis River estuary? What fish and wildlife might be affected if oil moved into the harbor or the lake?

Then, once those site-specific impacts are identified, an adequate analysis would describe what site-specific response would look like, what could go wrong, what the likely cost would be. The economic value of the health and safety and natural resources damages can then be estimated. And then, the potential costs of whatever restoration measures might be on the list of options can be assessed.

Only with that information and analysis can one come away with a useful understanding of the potential impact of a major oil spill in the Lake Superior watershed, which is what the court of appeals insisted the environmental review for this project provide. The document as it stands suggests that even a much smaller spill, quickly brought under control, further away from the estuary and the Lake, could have devastating consequences for the sensitive resources near the St. Louis River and in and near Jay Cooke State Park. But even then, the revised EIS does

not include the site-specific assessment of potential impacts, costs, and damages that models like the Line 5 study in Michigan provided.

The PUC narrowed the scope of the revisions required without taking public input, and then, it turns out DOC-EERA and Enbridge's consultants narrowed it further to be able to assure the public and get the headlines that a major oil spill in the Lake Superior watershed would not likely reach the Lake. That is not a fair and complete assessment, and it does not meet the standard set by MEPA, or by the court of appeals.

II. THE REVISED EIS DOES NOT ADDRESS MATERIAL NEW INFORMATION AND CHANGED CIRCUMSTANCES SINCE THE ORIGINAL EIS WAS PREPARED IN 2017. THAT VIOLATES THE REQUIREMENTS OF MEPA AND THE EQB'S ENVIRONMENTAL REVIEW RULES.

The law requires government agencies to supplement environmental impact statements whenever "there is substantial new information or new circumstances that significantly affect the potential environmental effects from the proposed project that have not been considered in the EIS or that significantly affect the availability of prudent or feasible alternatives with lesser environmental effects." Minn. R. 4410.3000, subp. 3(A)(2). Since the EIS for this project was substantially completed in 2017, with the "technical reports" dated January 2017, fully three years ago, there is a great deal of new information, and changed circumstances have arisen that must be assessed and evaluated before an EIS in 2020 can meet the standard of adequacy.

A. Prudent or feasible alternatives with lesser environmental effects

Review of potential alternatives with a smaller environmental footprint is at the heart of any adequate environmental review. Since the FEIS was completed back in 2017, and indeed since the contested case hearing over the certificate of need and routing permit was concluded,

several alternatives to a new line 3 that would pose fewer and smaller risks to Minnesota have moved forward:

- Enbridge has announced “Mainline optimizations” to increase the capacity of the existing Mainline system by 350,000 barrels per day in 2019 and 2020, adding to its addition of 1.1 million barrels per day to Mainline capacity upstream of Superior between 2013 and 2017;⁵
- Enbridge, Energy Transfer Partners, Phillips 66, and Marathon Petroleum are in the process of obtaining permits to expand the capacity of the Dakota Access Pipeline (DAPL) in spring 2020. DAPL carries light crude from the Bakken formation, to Enbridge terminals in Illinois. The expansion would be from 570,000 bpd to 1.1 million bpd;⁶
- The Canadian federal government has taken over the Trans Mountain Expansion Project (TMEP) from KinderMorgan, and construction commenced in early December 2019. TMEP will add 590,000 bpd capacity to the existing 300,000 bpd pipeline from the Alberta tar sands region to a terminal on the Pacific Coast;⁷
- TC Energy’s KeystoneXL pipeline, which will add 830,000 bpd to the capacity of the existing Keystone pipeline to carry Alberta tar sands oil to Cushing, Oklahoma, received its cross-border permit in March 2019. There remains a federal lawsuit in U.S. District Court for the District of Montana, but the judge denied requests for a temporary

⁵ Enbridge, The Enbridge Mainline: Mainline System Capacity, enbridge.com/reports/2019-liquids-pipelines-customer-handbook/mainline. See Appendix A.

⁶ “Dakota Access Pipeline operator plans large capacity expansion,” *Bismarck Tribune* (June 20, 2019)

⁷ “Pipeline construction begins on TMEP,” *Pipelines International* (Dec. 4, 2019), pipelinesinternational.com/2019/12/04/pipeline-construction-begins-on-TMEP. See Appendix B.

injunction on December 20, 2019, and the company plans to restart pre-construction activities in spring 2020;⁸

- Test shipments of so-called “neatbit,” a solid, non-flammable form of bitumen, by rail began in September 2019 between the tar sands region and Prince Rupert sound, where it is loaded onto container ships, destined for Asian ports;⁹
- Canadian crude oil exports by rail to the US increased to over 10 million barrels per month in October 2019.¹⁰ There are also preliminary plans to build a new rail connection from Alberta to existing deepwater ports in Alaska, where bitumen can then be shipped to Asia. The “A2A” proposal would add a million to million and a half barrels per day capacity to the existing rail infrastructure.¹¹

B. New assessments of tar sands demand and economics

Since the first version of the FEIS was completed, the economics of the tar sands industry have deteriorated further, with now four straight years of losses on every barrel.¹² There has been no increase in demand to push oil prices to a level where tar sands extraction is profitable. US light tight crude oil supplies, which are much more competitive, continue to rise, even though US refineries are essentially maxed out. The most recent report from the Canadian Association of Petroleum Producers (CAPP) acknowledges that US demand for Canadian oil will continue to

⁸ TC Energy, Keystone XL Pipeline, tcenergy.com/operations/oil-and-liquids/keystone-xl/

⁹ “First shipment of semi-solid bitumen on its way to China,” *JWN Energy* (Sept. 26, 2019), <https://www.jwnenergy.com/article/2019/9/first-shipment-solid-bitumen-its-way-china/>. See Appendix C.

¹⁰ US Energy Information Administration, Petroleum & Other Liquids: Movement of Crude Oil and Selected Products by Rail, https://www.eia.gov/dnav/pet/PET_MOVE_RAILNA_A_EPC0_RAIL_MBBL_M.htm. See Appendix D.

¹¹ “Will Rail Be Key to Exporting Canada’s Tar Sands Oil to the World?,” *Desmog* (October 2, 2019), desmogblog.com/2019/10/02/rail-exporting-canadian-tar-sands-oil. See Appendix E.

¹² “Why Canadian Tar Sands Oil May Be Doomed,” *Desmog* (October 25, 2019), desmogblog.com/2018/10/25/Canadian-tar-sands-oil-financial-losses; See Appendix F.

decrease, and that they are counting on making that up in Asian markets by getting their produce to the US Gulf Coast.¹³

Newer longer-term projections are even less favorable. BNP Paribas Asset Management projected in August 2019 that the oil industry will need a long-term break-even oil price for gasoline of \$9 to \$10 per barrel to remain competitive. “We conclude that the economics of oil for gasoline and diesel vehicles versus wind- and solar-powered EVs are now in relentless and irreversible decline, with far-reaching implications for both policymakers and the oil majors.”¹⁴

In addition, more insurers have announced plans to discontinue coverage of tar sands facilities, most recently the Hartford.¹⁵

C. Alberta oil production curtailment

The projections of production and supply increases for Canadian tar sands oil used to justify the line 3 project have proven unfounded due to government action in Canada. On December 2, 2018, Alberta imposed oil production limits on its producers to try to boost prices. Initially, production was reduced by 325,000 barrels per day, about 8.7%, and then production was allowed to slowly increase. On August 20, 2019, Alberta announced that it was extending the production limits until the end of 2020.¹⁶

D. Enbridge shift from open source to take-or-pay contracts for Mainline

¹³ CAPP, 2019 Crude Oil Forecast, Markets and Transportation (November 2019), capp.ca/wp-content/uploads/2019/11/338843.pdf. See Appendix G.

¹⁴ “Wells, Wires, and Wheels – EROCI and the Tough Road Ahead for Oil, *BNP Paribas Asset Management* (Aug. 2, 2019), <https://investors-corner.bnpparibas-am.com/investment-themes/sri/petrol-eroci-petroleum-age/>. See Appendix H.

¹⁵ “The Hartford to limit insurance for fossil fuel companies,” *Washington Post* (Jan. 2, 2020).

¹⁶ Oil Production Limit: A temporary limit of oil production to defend Alberta jobs and protect the value of Alberta’s resources, alberta.ca/oil-production-limit.aspx (accessed January 3, 2020). See Appendix I.

Enbridge is shifting from its monthly allocation system to a take-or-pay contract system, requiring shippers to commit to long-term (8 to 20 years) contracts for up to 90 percent of the capacity of its Mainline pipelines. Enbridge began a 60-day “open season” or bidding period on August 2, 2019, but the Canadian Energy Regulator (formerly the National Energy Board) ordered it terminated on September 27, 2019, insisting that Enbridge first submit a tariff application. Enbridge submitted its new tariff application to the CER on December 19, 2019.¹⁷ Their plan is to conduct a 60-day “open season” or bidding period in July 2020. That will largely eliminate any issues regarding “apportionment,” “air barrels,” or capacity arbitrage, which were part of the rationale for the line 3 proposal.

E. Enbridge corporate reorganization and financial assurance

On May 17, 2018, Enbridge Inc. announced that its intention to acquire all public equity of, to “roll up” Enbridge Energy Partners, LP.¹⁸ According to Enbridge, Inc.’s 2018 10-K, at the end of 2018, an unnamed wholly owned subsidiary of Enbridge Inc. did indeed purchase all the stock of Enbridge Energy Partners, LP, the entity that is the permit holder for the proposed new line 3. Enbridge Energy Partners, LP therefore no longer has assets to cover the costs of an oil spill, which may make it even more critical to put Enbridge, Inc. itself on any state permits.

A late 2019 report prepared for the State of Michigan concluded that Enbridge Energy Partners LP would not be able to address the costs of a Line 5 spill in the Straits of Mackinac, that Enbridge’s use of Enbridge Inc. assets for financial assurance verification purposes was

¹⁷ “Enbridge Files Regulatory Application in Support of Contracting its Mainline Pipeline System,” *MarketWatch* (Dec. 19, 2019), [marketwatch.com/press-release/enbridge-files-regulatory-application-in-support-of-contracting-its-mainline-pipeline-system-2019-12-19-1720210?mod=mw_quote_news](https://www.marketwatch.com/story/enbridge-files-regulatory-application-in-support-of-contracting-its-mainline-pipeline-system-2019-12-19-1720210?mod=mw_quote_news). See Appendix J.

¹⁸ “Enbridge Inc Proposed Restructuring – Business Update Call,” *Thomson Reuters StreetEvents* (May 17, 2018), https://www.enbridge.com/~/_media/Enb/Documents/Investor%20Relations/2018/SimplificationofCorporateStructure_May172018_Transcript.pdf. See Appendix K.

misleading, and recommended that Michigan insist on obtaining an indemnity obligation from Enbridge Inc., the Canadian holding company, for all the obligations under its agreements.¹⁹

F. New information on greater risk of spill/leak incidents with newer pipelines

Much of the rationale for a new line 3 is the notion that a new pipeline must be safer than an old pipeline. That does not appear to be the case, according to newly available data and incident reports, and any adequate EIS must assess why newer pipelines have such a poor record.

A late 2018 study reported that, according to PHMSA data, which is based on pipeline industry self-reporting, there were 3,509 hazardous liquid (crude oil, refined petroleum products, and natural gas liquids) pipeline incidents between January 1, 2010 and November 14, 2018. They involved 24 injuries, 10 fatalities, 2,471 evacuees, 111 fires, 14 explosions, and damages of over \$2.6 billion.

The greatest number of incidents, about one-third of the total, occurred with pipelines less than 10 years old, more than 3 and one-half times as many as the next closest bin (40 to 50 years old). New pipeline incidents were attributed to equipment failure (61%), incorrect operation (21%) and corrosion (7%). The report's authors conclude that "[o]perators of new hazardous liquid routes are failing at an alarming rate," with "[p]ipelines installed in previous decades [] not subject to this degree of failure."²⁰

The continuing spill and leak problems with the Keystone pipeline, which was put into service in 2010, is the most conspicuous example. In November 2017, around 4,700 barrels

¹⁹ American Risk Management Resources Network, LLC, *An Analysis of the Enbridge Financial Assurances Offered to the State of Michigan* (Oct. 29, 2019), https://www.michigan.gov/documents/ag/Master_Michigan_Enbridge_10_29_final_670367_7.pdf. See Appendix L.

²⁰ Fractracker Alliance, "Pipeline Incidents Continue to Impact Residents" (Dec. 7, 2018), fractracker.org/2018/12/pipeline-incidents-impact-residents. See Appendix M.

leaked in Marshall County, South Dakota, and in late October 2019, another 9,120 barrels leaked in Walsh County, about 60 miles northwest of Grand Forks, North Dakota.²¹ The causes are not yet determined.

This is the usual situation where the need to supplement an EIS arises—after appeals when an agency decision is reversed in the courts and sent back for further consideration. In that time, new information is developed and circumstances change. We submit that it would be a mistake for the PUC to conclude that its only job is to find the narrowest possible way to address the immediate concerns of the court of appeals, and to forget its ongoing legal obligation to make sure that the environmental review for this project is current and thorough, and meets the requirements of NEPA.

FOH therefore recommends that the PUC send the second revised EIS back to DOC-EERA both to do a more useful analysis of the potential impacts of a major spill in the Lake Superior watershed and to address the new information and changed circumstances that have come to light since the original FEIS was prepared in 2017.

Thank you for your consideration,

/s/ Scott Strand
Scott Strand (#0147151)
Environmental Law & Policy Center
60 South 6th Street, Suite 2800
Minneapolis, Minnesota 55402
(612) 386-6409

Attorney for Relator Friends of the Headwaters

²¹ “Leak in Keystone pipeline spills 9,000 barrels of oil in North Dakota,” *NBC News* (Nov. 1, 2019), nbcnews.com/news/us-news/leak-keystone-pipeline-spills-9-000-barrels-oil-north-dakota-n1074991. See Appendix N.