November 22, 2017

Re: Comments on Minnesota's decisions for a Certificate of Need and Route permit for Enbridge's proposed Line 3 project, MPUC PL-9/CN-14-916; MPUC PL-9/PPL-15-137.

Dear Judge O'Reilly,

Thank you for the opportunity to submit comments on this very large, complex, and controversial pipeline project proposal. I know that there are thousands of pages of submittals to you as well as transcripts of hearings. Therefore, thank you in advance for reading my comments.

I have specific recommendations regarding this project, but also have another main purpose in mind. That is, to give my opinion on the "big picture" policy issues that are involved regarding Minnesota's decisions as if I am still in government. Of course, I'm sure you have your own "big picture" ideas by now. I hope my perspective could be helpful to you, since, before I retired, I provided recommendations to upper level agency decision makers in positions similar to yours in both Minnesota government and Montana government. The projects were on controversial and politically difficult, and included interstate and international (affecting Canada) projects.

To summarize my recommendation: I have experience with political, policy, and the technical issues on many large projects that have both economic and environmental content, including pipelines. It is my position that while Minnesota's decisions on this proposal are *politically difficult*, the *policy and technical decisions* are not nearly as difficult. If one examines the decision criteria in the Certificate of Need and the Route Permit, and in MEPA, the CN for Line 3 should be denied. There is a high risk to extremely valuable natural resources over the life of the project which will be 50 or more years. Furthermore are alternative projects for delivering oil to the ultimate delivery point—Chicago and eastern oil refineries.

For disclosure purposes, I have advised the group Friends of the Headwaters, and some others, on technical and policy issues regarding the Enbridge proposals since the fall of 2014. However, by choice, even though I was offered to be a paid expert, I have declined to do so. In fact, I wrote major reports to state and federal agencies on the Sandpiper and Line 3 Enbridge proposals months before I became involved with FOH. Attachment 1 of this letter describes my professional experience with pipelines and related policies. I believe this shows that I have been an objective, non-partisan participant in government decisions for many years.

My simple motivation has been that professional experience and knowledge fully convinces me that the Enbridge proposal pipeline location is in the wrong place and that, if the pipeline is needed, it should be built on a route directly to where it is to be used—Chicago area refineries instead of through Minnesota and Wisconsin natural resources areas.

The rest of this comment letter provides a bulleted list of "big picture" topics concerning the main issues to take into account while making decisions on the specific Certificate of Need and Routing criteria. I label them "big picture" since they are relevant to preparing to make decisions, and to the decisions themselves. By necessity, the list describes procedural problems and crucial information deficiencies. These are topics I would include if I was still in government advising an agency head on both policy and environmental decisions on this proposal. To my knowledge, no one in state government has attempted to brief you in this manner.

- A. Big picture: Decisions on the applying the Certificate of Need and Route Permit criteria and Minnesota environmental policies. These are some of the key policies entering into the only overall project permits for Line 3.
- --Subd. 6 of MEPA says that no permit shall be granted when there is likely to be pollution, impairment, or destruction of water, land, and other natural resources when there is a feasible and prudent alternative. This project has a 50 or more year life, and it is proposed to be located in areas where there is not only potential for a billion or more dollars of clean-up costs, but additional damages to natural resources which cannot be cleaned up.
 - --The CN criteria clearly parallel these key elements of MEPA because they contain parallel clauses.
- --This is the first time an EIS on an oil pipeline must meet these environmental criteria for a standalone decision on a CN.
- --These criteria need to be applied with knowledge that the pipeline will be in place for 50 or more years. Third-party damage is one of the leading causes of pipeline oil spills. Furthermore, after being in the ground some tens of years, the pipeline is no longer new. Enbridge conveniently emphasizes that this will be a new state-of-the art pipeline. But given project life considerations, this is erroneous. In other words, the decision criteria should be applied on an aging pipeline, not a new pipeline.
- --If pipeline is truly needed in a broad sense—by looking at the source in Alberta vs refinery needs in the Chicago and locations to the east—a denial of a CN is not a death blow to a project. Enbridge can come back with an application for the direct route to Chicago.
- --A scientifically sound EIS must fully consider impacts over a 50 or more year project life. It must thoroughly look at alternatives. It is the main vehicle to inform the CN and Route Permit state decisions according to Minnesota law, policy, and past practice regarding environmental and socioeconomic impacts.
- **B.** Big picture: Pipeline construction and siting decisions on linear projects are different than single site decisions. Such decisions are quite different than single site decisions because not looking at origin and end points, and crucial segments in between, is irrational from a public policy standpoint. Without examining these two end points—routinely done on HVTL projects—public interest decisions on Line 3 cannot be made.
- --Enbridge is a private pipeline with a vested interest in using its existing facilities, while government decisions are public interest decisions. In the case of this proposal, these interests clash; but the private interest must be subsumed by the public interest.
- --A crude oil "pipeline" as a concept essentially starts as a line between the source of crude oil and the location of refineries. The theoretical "cheapest" location is a straight line between the source and the end purpose. Deviations from this straight line with respect to public policy are done because of environmental and socioeconomic reasons in order to avoid unacceptable impacts. Pipeline companies, when selecting a route to use in a permit application, normally try to anticipate these reasons based on past experience with the permitting agency and their own private interests. The Line 3 project has suffered from state agencies as well as Enbridge in assuming that past practice is "good enough." In the case of Line 3, there are two other reasons for Enbridge deviating from anticipated permitting concerns. These which must be taken into account in CN and Route permit decisions:
 - --Enbridge's private desire to use its existing facilities
 - --Following Minnesota's problematic guidelines of following existing linear features.

--Everyone in the industry knows that the best location for a liquid product pipeline is on flat ground that has lots of roads and fewer environmental and socioeconomic problems. This is because if leaks occur, product does not travel as far and clean-up operations can quickly commence, as compared to hilly terrain with fewer roads and more natural resources.

--A "line" is only as good as its individual segments with respect to overall permit decisions. Therefore, government decisions *must* pay close attention to particularly sensitive individual "line" segments. Because of Enbridge's private desires, and Minnesota's informal policy of following existing linear projects, there are route segments along the proposed locations that are simply unacceptable because of the very high risk, *but that are not avoided* because, in Enbridge's view, routing around them would be extremely difficult for cost and environmental reasons. The LaSalle Creek, lakes, and valley is a clear example. This is discussed in more detail in the impacts section below. In other words, rather than avoid a clearly problematic route segment, Enbridge is betting on obtaining an overall project permit and that allows it to cross this very problematic segment using destructive methods.

- **C.** Big picture: Problems with the unfinished Environmental Impact Statement (EIS) on Line 3. The EIS process will not be completed until the FEIS is declared adequate and, if legal challenges are raised against it, not be completed until legal challenges have been finished.
- --The FEIS is inadequate in many ways. Attached to these comments is the Friends of the Headwaters report on exceptions to the ALJ report, dated November 21 2017. A few of the major problems are listed here that directly pertain to the CN and route permit decision criteria.
- --The line 3 EIS is the first EIS done in Minnesota on an oil pipeline; the DEIS, FEIS, and the ALJ report to the PUC on the adequacy of the FEIS demonstrates this inexperience.
- --The FEIS is silent on major "elephants in the living room" route locations; the LaSalle lakes and valley areas is an example for which I have extensive professional experience with.
- --Cumulative impacts of past pipeline projects as well as reasonable future pipelines in the same locations are not addressed.
 - --Failure to fully consider alternatives other than Enbridge's private interests.
 - --Very high reliance on Enbridge data and analysis without an independent review.
- -Final EIS completed only a short time after 2,800 comments were submitted on the draft EIS; neither FEIS nor ALJ report address comments labelled as substantive (ALJ report commissioned by the PUC to recommend on the adequacy question found the FEIS to be adequate even though it only addressed—and dismissed—10 of the very many comments deemed to be substantive.)
- **D.** Big picture: Alternatives; especially with respect to EIS content. CN and Route Permit Decision criteria as well MEPA rules require great care in addressing alternatives to a project proposal.
- --Alternatives are considered to be the heart of environmental analysis, a key part of any permit decisions, and a key part of the criteria in the pipeline Certificate of Need and Route permit rules.
- --Alternatives that avoid or reduce impacts must be given equal treatment as Enbridge's preferred locations and alternatives.
- --The only alternative that avoids Minnesota high value natural resource areas is SA04; this alternative was not given equal treatment with other routes. DOC created a definition of "system alternative" without defining such a term in rules or in MEQB guidance.

- --Information on alternatives of using existing pipelines to achieve purpose is deficient in the FEIS.
- **E. Big picture: key environmental issues.** Here are some examples of major environmental and socioeconomic issues regarding Line 3. I emphasize these are only examples.
- --There is at least one location on the proposed route where a large oil spill will cause worse damages than the Kalamazoo River spill by Enbridge in Michigan in 2010. This is the LaSalle lakes and valley route segment. In addition, even emplacing the pipeline in this valley has the potential for severe and permanent impacts. This is based on my professional experience at this specific location during the construction of the MinnCan pipeline, and personal experience with other locations with a high degree of wetland soils and groundwater emergent areas. Based on this experience, a pipeline should never be located in this area.
- --Both the Enbridge Mainline Corridor and the Line 3 proposed route are pipeline corridors established before any federal or state environmental laws of consequence were passed. They are very inappropriate locations for an industrial oil facility.
- --Minnesota's informal policy of following existing linear corridors has never been supported with a scientific study of the problems of doing so. This EIS is extremely deficient in not doing such an analysis
- --In spite of many improvements in pipeline construction, there continue to be oil releases from recently constructed pipelines, such as Keystone 1 which is only 7 years old and leaked last week. Oil spill clean-up practices and regulations are allowed to stop when further cleanup becomes impractical, not when there are no longer impacts. Enbridge and other pipeline companies erroneously equate the end of clean-up with "no impact."
- --Information on financial assurance for mitigating future large oil releases in very sensitive areas is absent so far.
- **F.** Big picture: Problems and complexity with public and governmental processes on Line 3. The review of the Line 3 project—as well as Sandpiper—suffers greatly from the fact that Minnesota law and rules on major large pipeline projects are not integrated, and not assigned to the proper agencies. This has led to a nearly incoherent decisions process from the point of view of the public.
- --The administrative hearings concluded *before the EIS on the Line 3 project was complete.* There has been no adequacy determination, which is the end of environmental review. *This* is a troubling violation of past precedents, especially on large past projects such as Polymet. I am not qualified to advise on whether this is a legal violation, but I am fully aware it is not good practice with respect to decision making.
- --The PUC is the Responsible Governmental Unit for the EIS, not Department of Commerce. During the preparation of large complex EISs, an RGU must make many subjective decisions about managing the EIS, selecting consultants, and so forth. Instead, this was done by DOC without consulting the RGU. In fact, Bill Grant, the DOC project manager for the EIS called the PUC a "remote RGU"; recognizing this problem (see EIS issues, below.) As a former EIS project manager, and knowing of the myriad big and small decisions, I was shocked when I heard him say this in a meeting. This problem is ongoing.
- --Administrative hearings on Line 3 conflict with EIS rules and procedures; not all problems are resolved. Hearings have concluded without the benefit of a completed EIS that has been found to be adequate.
- --Units within DOC, DER and EERA kept separate to the detriment of EIS content; DER did not provide EIS information; rather, it held off and put it into the Administrative hearing, even though portions were relevant to EIS content.

- --Prior to MN court decisions ordering an EIS on CN, the environmental review of pipelines, by law, was confined to the route permit, and no EIS was done. Review under the latter rule was much less rigorous, alternatives not studied, no draft of environmental documents was available for public review, and there was no requirement that the DOC answer public comments.
- --MN pipeline rules, rules governing an EIS, and administrative procedures are not very compatible, are confusing to even agency personnel. Another result is that, while there are plenty of opportunities for the public to "say something", there is very little opportunity for the public to be on an equal footing with applicants and have concerns actually addressed.
- --In this specific case, "due process" is opaque to everyone, including Enbridge and agency decision makers.
- --To my knowledge, Minnesota state agencies previously never addressed the potential impacts of oil releases when making decisions on oil pipeline proposals. Obviously, the public is now demanding that this be done.
- --In North America (Canada and the USA) public concern about proposed pipelines didn't start growing until about 10—12 years ago. This has somewhat coincided with some very large oil releases, and with explosions of gas pipelines that killed people. Public concern has also developed because of serious errors with the federal regulators (PHSMA) oversight.
- --A decision was made by DOC that the PCA and DNR, agencies with environmental responsibilities and expertise, would not comment on the DEIS or FEIS. This was written into an MOU. And, this was done in spite of both agencies showing serious concerns in written reports about the proposed Enbridge Line 3 and Sandpiper project locations.
- **G.** In conclusion. Thank you again for the opportunity to comment on this important project. I look forward to my continued attention to it, and desire that Minnesota make the right decisions.

Sincerely,

Pau Stolen 37603 370th AV SE Fosston, MN 56542

ATTACHMENT ONE

Friends of the Headwaters Exceptions to the ALJ Report on the Adequacy of the FEIS. This report is included as a separate digital document sent in as a comment today.

ATTACHMENT 2 SUMMARY OF EXPERIENCE of PAUL STOLEN

Scientific and policy training. MS degree, fisheries and wildlife management. Published scientific papers in major peer-reviewed journals prior to working in government. Graduate classes in NEPA/MEPA policy at the Humphrey School of Public Affairs while in Journalism School at the University Of Minn. One year at the Walter Reed Army Institute of Research in Washington DC studying human and animal diseases under supervision of a civilian scientist, and one year doing medical diagnostic and research work at the US Army 9th Medical Laboratory in Vietnam during the War, 1967-68.

Public policy experience.

- •Studied EIS, NEPA, and MEPA policy under Dean Abrahamson, an expert on these topics at the HH Humphrey School of Public Affairs, University of Minnesota while also attending the University of Minnesota School of Journalism
- •Staff assistant to the Citizens Advisory Committee on Power Plant Siting at the former MN State Planning Agency. This Committee was examining Minnesota's energy facility siting process and making recommendations for correcting problems that had led to the HVTL powerline controversy in the 1970s.
- •Staff work at the Minnesota Legislature Science and Technology Project, including staff for a Joint Committee on Solid and Hazardous Waste, general staff work, and writing a program review of that project.
- •In charge of a major re-write of the environmental portion of rules implementing the Montana Major Facility Siting Act while employed by the State of Montana. These rules covered energy facilities, siting linear facilities (including oil pipelines and HVTL lines), hydropower dams, and a portion of the Certificate of Need decisions on such facilities. The EIS rules for these facilities were contained within these rules. As part of this re-write, I surveyed all US states and Canadian provinces that had EIS rules and siting rules for linear and fixed locations facilities to incorporate measures into the new rules.
- •Developing policy on siting pipelines, and studying impacts of pipelines for the State of Montana, including at the time of being the state expert on that subject

Pipeline experience.

- •Union laborer on the bending crew working for Mannix Construction Company when it was building a segment of Line 3 in 1963 for the Lakehead Pipeline Company.
- •Assistant Project Manager, then Project Manager, responsible for preparing an EIS on the Northern Border Gas Pipeline, a 42 inch pipeline crossing 180 miles of NE Montana. This responsibility included managing public involvement. Author of portions of the EIS.
- •Assistant Project Manager of the Interagency Pipeline Task Force (IPTF), State of Montana. This was a task force created by the Governor of Montana to address the construction of the Northern Border and Northern Tier pipelines. (The latter didn't proceed past the EIS stage completion.)
 - Montana Environmental Inspector during construction of the Northern Border pipeline.
- •Author, IPTF report entitled "Construction of the Northern Board Pipeline in Montana." This report was a response to the large underestimation by the company of the land requirements for the pipeline, and the ensuing public controversy that developed from landowners as well as regulatory problems.
 - Supervisor and primary author of an EIS on a Great Falls to Butte 16 inch gas
- •Project manager of the initial stages of preparing an EIS on an Exxon carbon dioxide pipeline from Wyoming to North Dakota (This project was dropped soon after EIS studies began because of dropping oil prices. The intent was to use carbon dioxide for stripping oil fields.)
- •Responsible for writing portion of rules of Major Facility Siting Act concerning pipeline siting and impacts

- Involvement in several water diversion projects that partially involved water pipelines.
- •Montana state contact for in-state and out-of-state business and policy questions on pipelines.
- •Primary reviewer of several pipeline projects in Minnesota during 1990s regarding ecological and fisheries and wildlife impacts. These included several Enbridge looping projects in its Mainline Corridor, and providing advice for the initial review of pipelines out of my NW Minnesota work area due to inexperience of other staff with pipelines. (Minnesota DNR)
- •Staff role of providing training for MDNR staff reviewing pipelines. Also did such training of DNR staff in 2014 after retirement.
- •Primary MDNR reviewer of a 110 miles long new 36-inch Enbridge pipeline between Clearbrook, Minnesota, and Superior, Wisconsin, the Terrace pipeline expansion project. This involved preparing comments, coordinating with other staff, and being the environmental inspector during construction.
- •Lead reviewer for ecological, fish and wildlife, and wetland impacts during the permitting process for the MinnCan pipeline, a Koch company pipeline from Clearbrook to the refineries south of St. Paul. During the regulatory review, I was the primary author of MDNR comments to the PUC regarding the CEA. During construction, I was the environmental inspector reporting to DNR officials in charge of those subjects.
- •Lead reviewer for ecological, fish and wildlife, wetlands, and rare species topics during the regulatory review of Enbridge's Alberta Clipper and Southern Lights projects. This involved field review with other DNR staff of the entire route from North Dakota to Duluth, and training of other DNR staff that did not have pipeline experience.
- •DNR field environmental inspection duties and contact for conveying DNR requirements at preconstruction conferences for several pipeline projects in the 1990s, including Enbridge projects.
- •Review of Enbridge's Sandpiper and Line 3 projects, as a retired citizen prior to becoming an advisor to Friends of the Headwaters. These activities started in 2014. This also involved providing advice to other parties, when asked.