



National Wildlife Federation

Great Lakes Regional Center

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August 27, 2018

To: Governor Snyder, Michigan Pipeline Safety Advisory Co-Chairs Grether and Creagh

From: Mike Shriberg, Ph.D.
Great Lakes Regional Executive Director, National Wildlife Federation
Member, Michigan Pipeline Safety Advisory Board

Re: Response to Request for Final Recommendations on Enbridge Energy's Line 5

Thank you for the continuing privilege of serving as a member representing conservation organizations on the Michigan Pipeline Safety Advisory Board (PSAB). As per the request of co-chairs Grether and Creagh, this memo provides written recommendations on the future of Line 5. While these comments are being submitted individually and on behalf of the National Wildlife Federation (NWF), I also support the comments of Jennifer McKay and Chris Shepler.

I appreciate that the state has solicited formal and informal input before making a "final" agreement with Enbridge Energy on the Line 5 Straits crossing. The process to derive the original agreement led to a lack of trust in the outcome given the closed door nature of the original agreement, consulting only one non-governmental member of the PSAB – Enbridge Energy.

The most important consideration in the future of Line 5 and in the future of any agreement is one which has not received attention thus far in a process where all of the information and reports have been funded by Enbridge Energy: What is in the best interests of the state of Michigan?

The risk analysis conducted by the consortium of universities did an outstanding job of modeling a range of scenarios. Even with unrealistically optimistic "worst case scenarios", the outcomes speak for themselves and equate to devastation for the Great Lakes, our economy and our way of life. These results should be weighed against the Coast Guard's admission during Congressional testimony that it is not "semper paratus". Moreover, as the PSAB process has unfolded, Enbridge has proven itself to not be a reliable and transparent partner, as the state pointed out specifically in multiple PSAB meetings. What we know is that the Straits section of Line 5 was designed for 50 years and is currently in its 65th year of operation. We also know that Line 5 has lacked the necessary structural supports for significant lengths of times, that coating has been damaged and still not repaired, that Line 5 has been hit by an anchor just recently, that visual images show a rusty pipeline encrusted in biota, and that Line 5 has multiple incurable easement violations.

Unfortunately, the alternatives analysis by Dynamic Risk – which has been largely discredited by all parties – made major errors in perspective, assumptions, data acquisition and outcomes. As detailed in a letter to the PSAB at the time from 5 members

(Shriberg, McKay, Hupp, Meadows and Shepler), Dynamic Risk's report had severe methodological flaws (such as miscalculation of "worst case spill" scenario and failure to accurately assess spill risk and impacts), lacks key information and came to incorrect or inadequate solutions. However, the most significant error was one of perspective: Dynamic Risk assumed, for reasons that are not clear, that the state had a responsibility to ensure that all of Enbridge's product was still transported through Michigan even if Line 5 was no longer in the service. In other words, Dynamic Risk did not assess what products and services of Line 5 are actually utilized in the state. Therefore, Dynamic Risk ignored alternatives that are beneficial for Michigan and provide substitutes for the services that Line 5 provides to the state if they were not easily scalable for all of Line 5's products.

The sum of the Enbridge-funded analyses are a low probability of a very high consequence event. The PSAB has debated the error bars around the probabilities and consequences but not the basic premise. The question that was never addressed by the Enbridge-funded reports are what are the benefits and costs of Line 5 to the state of Michigan. Therefore, NWF – with funding from the C.S. Mott Foundation – contracted with the leading independent experts (London Economics International - LEI) to analyze what the impacts to Michigan would be if Line 5 were to be decommissioned. These three reports are now submitted for the record and can be summarized as follows:

- 1) *Assessment of alternative methods of supplying propane to Michigan in the absence of Line 5:* LEI found that the lowest cost alternative to Line 5 to supply propane to the Upper Peninsula is to either truck product or utilize rail from Superior, WI to Rapid River, MI. The cost impacts to consumers would be "lost in the noise of typical propane price volatility" and would be in the range of \$.05/gallon. The impact on the Lower Peninsula "may be negligible". There would be no likely risk to energy security or long-term propane supply as supply is growing faster than demand in the U.S. The potential small price increase for the Upper Peninsula could, in NWF's analysis, be easily made up for with a small increase in energy assistance dollars so that Michigan propane consumers wind up with a positive impact from Line 5 decommissioning. The LEI report is the detailed and authoritative source on propane, and directly contradicts the improper assumptions and calculations in Dynamic Risk's report, which did not focus on propane alternatives for Michigan.
- 2) *Michigan's crude oil production: Alternatives to Enbridge Line 5 for transportation:* LEI found that the small volume of Michigan crude oil production that utilizes Line 5 to get to market could utilize trucking directly to Marathon refinery instead. While this could increase costs by approximately \$1.31/barrel for northern Michigan oil and less for central Michigan oil. This change is small compared to normal price volatility and "would be lost in the noise of typical crude oil price volatility". Moreover, if Line 5 were decommissioned, this oil would be in higher demand and, therefore, producers may be able to pass along the cost increase to refineries or other buyers.
- 3) *Michigan's refining sector: Alternatives to Enbridge Line 5 for transportation:* LEI found that there is enough excess capacity in other crude oil pipelines to make up for any losses at Detroit and Toledo-area refineries if Line 5 were to be decommissioned. However, downstream users have apportionment rights so the Detroit and Toledo-area refineries would need to supplement current supplies

with Michigan-produced crude oil as well as Bakken crude oil delivered by rail. The total cost increase to customers would be a fraction of a cent/gallon for consumers, which would be “lost in the noise of typical weekly gasoline price volatility”.

These new analyses come to an important conclusion: Michigan has substitutes for the services provided by Line 5. When compared with the \$2 - \$6 billion or more in costs plus inestimable cultural and aesthetic losses due to a spill, the choice is clear. There is no substitute for the Great Lakes and our way of life but there are clear and easy substitutes for the services that Line 5 provides to Michigan. Therefore, the state must begin the process of decommissioning Line 5. The Governor has the authority and responsibility to initiate this process immediately. NWF’s recommends a phased approach:

Phase I – October 2018 – May 2019: Protect Michigan’s interests while initiating decommissioning

The state should immediately begin the process to revoke the easement based on multiple incurable violations and lack of “due care”. By beginning this process while preparing the alternatives outlined by LEI, the state would minimize any potential economic disruption. While initiating procedures to terminate the easement, the state could reach a stronger agreement with Enbridge for the next 8 months. As recommended by the majority of non-governmental stakeholders on the PSAB, the new agreement should:

- 1) Replace the definition of “Sustained Adverse Weather Conditions” with a new term “Significant Adverse Maritime Conditions” defined to include all maritime conditions based upon the identified sea state capabilities and operational limitations of watercraft and equipment that would prevent or significantly impair the effective containment and recovery of spilled oil or significantly exacerbate the spread of spilled oil. This should include “conditions in which median wave heights in the Straits of Mackinac over a continuous 60-minute period are greater than 3 feet based on ‘Near-real Time Data’ or in its absence ‘Modeled Data,’” because this is the limit of emergency response equipment.
- 2) Add in a clause that Line 5 cannot operate until it is independently verified that all damage from the anchor strike has been repaired and that there are no remaining gaps in coating, including from new structural supports.

These changes need to be made under a revised agreement while proceeding with terminating the current easement. Under no circumstance should the state agree to a new easement.

Phase II – June 2019 – May 2024: Implement alternatives to Line 5 while continuing assessment of long-term solution to Enbridge’s export desires

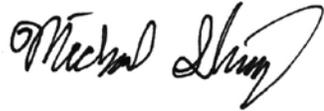
The substitutes for Line 5 should be in place by June 2019, thus allowing for a decommissioning prior to the winter of 2019/2020. During this next phase, the state should continue any finalization of plans for an alternative for Enbridge’s export plans to transport oil and natural gas liquids through the state, including an assessment of a “utility tunnel”. This assessment is best conducted when the state is already utilizing alternatives for state needs and, thus, is in a strong negotiating position with the utility companies for their non-Michigan needs.

Phase III – June 2024 – 2050: Implement long-term solution if needed

If the state and utility companies determine there is a public benefit and safe plan for a “utility tunnel” or other solution that does not cross the Great Lakes bottomlands, this is a reasonable timeframe for completion. Currently, the debate over a tunnel or trench is a diversion from the short-term and medium-term interests of the state, which are clearly not served by the Straits section of Line 5.

I look forward to a robust discussion of these recommendations. Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Shriberg". The signature is fluid and cursive, with a large, sweeping flourish at the end.

Mike Shriberg