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VIA Email

Hon. Gretchen Whitmer
Office of the Governor
Lansing, MI

Re: Line 5

Dear Governor Whitmer:

Thank you for taking time to discuss our proposed replacement of the Line 5 Dual Pipelines crossing of the Straits of Mackinac with a tunnel solution and associated plans for additional long-term protection measures of the Straits.

The purpose of this letter is to share how we have and will continue to demonstrate our commitment to the safe operation of Line 5 and protecting the Great Lakes. As we discussed with you and your team, I would also like to re-iterate the importance of concluding a mutual path forward prior to June 20, otherwise we will lose an important near-term work window resulting in a delay of the tunnel timeline.

Line 5 is Critical to Michigan's Energy Needs

Line 5 continues to be a critical source of 540,000 barrels per day of propane and crude oil supply for Michigan and surrounding areas that make up the regional supply network for the State, producing transportation fuels and a myriad of consumer goods, from computers to clothing to cellphones. Any disruption of service on Line 5 would result in an immediate significant regional supply disruption that would impact the State through increased costs, supply shortfalls and reduced competitiveness.

Michigan continues to be one of the largest consumers of propane in the United States; in fact, Line 5 serves an estimated 55% of the state's needs including approximately 65% of the propane used in the Upper Peninsula and Northern Michigan, for which viable alternatives do not exist. The State is a net importer of transportation fuels and the line not only supplies Michigan refining but regional refineries that provide Michigan with various fuels that Michiganders rely on in their day-to-day lives. Refineries served by Line 5 supply a large proportion of the aviation fuel at the Detroit Metropolitan Airport, an important contributor to the State's economy. Line 5 also transports Michigan-produced crude oil to the Detroit refinery and is the safest and most economic option to maximize the competitiveness of the State's crude oil producers.

Line 5 Can Operate Safely for Decades

Line 5 is federally regulated by the Pipeline Hazardous Materials Safety Administration (“PHMSA”). At Enbridge, the Straits pipelines are also subject to the most extensive operating and risk management plan of any section of pipe anywhere in North America. Our program significantly exceeds federal regulatory requirements; that’s because our goal has always been not just to meet, but exceed regulatory standards.

There has never been a leak at the Straits and a 2017 hydro-test of the Straits pipelines strongly validated their continuing fitness. A number of Michigan agencies, PHMSA, the Environmental Protection Agency and the Coast Guard observed the test while undertaking an active role.

Safety measures include the use of an extra heavy-wall thickness pipe; a robust cathodic protection system to prevent external corrosion; anchor devices to counter the effects of water currents; operation of the pipes at very low pressure – approximately 10% of tested capability and less than 25% of maximum operating pressure – in order to provide a safety factor well above that typical of pipelines; and regular inspections, including use of sophisticated in-line inspection tools, divers, and remotely-operated vehicles to confirm the integrity of the crossing.

A number of independent experts have examined the integrity and operation of Line 5 on behalf of the State and our regulator. In 2016, experts contracted by PHMSA reviewed 20 years of Line 5 inspection data. They found that no locations required additional attention in the Straits of Mackinac and that our current inspection frequency is appropriate.

Through discussions and direct involvement of State agencies over the last several years, Enbridge has agreed to undertake additional activities requiring significant capital investment by Enbridge to further enhance the safety of Line 5. These commitments are unprecedented, but we have undertaken them to provide added comfort to the people of Michigan.

- A new crossing of the St. Clair River that puts the pipeline far below the river bed will be completed later this year at a cost in excess of \$20 million. We made this significant financial commitment to provide added comfort to Michiganders despite the fact that the existing crossing is entirely safe.
- A joint effort with State agencies examined other important water crossings along Line 5, resulting in additional measures to bolster protection at key locations.
- A protocol to shut down the line during periods of high wave conditions at the Straits that may prevent the effective deployment of emergency response equipment and personnel.

A Tunnel Makes a Safe Pipeline Virtually Leak-proof

We are fully aligned with your views that the people of Michigan want to ensure the Great Lakes are protected. Despite the safety of the current system, this is exactly why we've committed to the construction and operation of a concrete-walled tunnel 100 feet below the lakebed. This is not only another investment in environmental safeguards, it also reflects our commitment to Michigan families and businesses.

There is no doubt that building a tunnel at the Straits of Mackinac, to contain a replacement section of the Line 5 crossing, is the fastest way to make a safe pipeline even safer and reduce the risk at the Straits to virtually zero. Assuming we are able to move through the permitting process without delay, we believe Enbridge can complete the project in less than five years and we are willing to commit substantial funds – estimated at \$500 million – to see it go forward. Based on discussions with you and your team we have worked to identify opportunities to shorten the timeline and believe we can be permitted and under construction in 2021, with an in-service date of early 2024. Meeting that timeline requires extensive consultation with agencies and communities along with other milestones that must be met, and would need to be initiated next month.

The expected timeline for the tunnel project is as follows:

- 2019 – Pre-design engineering including rock and soil sampling/evaluation
- 2020 - Concurrent contracting and concept development
- 2020 - Tunnel boring machine procurement
- 2020-2021 –Permitting
- 2021-2023 – Boring / Construction
- First half 2024 – Testing and commissioning

Our Board of Directors has reviewed the project and the funding necessary to construct the tunnel and replacement pipeline. We have the Federal and State permits to conduct the necessary 2019 geotechnical program at a cost of \$40 million. This week, we began critical work that will inform the final design of the tunnel. We have crews now stationed at the Straits, and have begun the process of collecting and evaluating rock and soil samples on the south shore. We anticipate that on-water boring/sampling work will begin mid-June. In order to complete the deep-water sampling, Enbridge must secure a vessel in June before we can proceed with this work.

Continuation of these efforts and the related spending is however dependent on an agreement on a path forward with the State. If we cannot meet this timing, we will lose a full year of work, which is inconsistent with the State's objectives to see the crossing replaced as soon as possible.

Operation of the Straits Pipelines Upon Tunnel Completion

Operation of the Line 5 Dual Pipelines would cease immediately following the placement into service of the replacement pipeline in the tunnel, achieving the State's goal of removing the pipelines from service while ensuring the critical energy needs of Michigan are met.

In prior agreements with the State, we made commitments to even greater safeguards in the event the tunnel is not complete by 2024. As part of a broader resolution to this matter, we are willing to review each of these safeguards with the State and advance those that make sense to take effect as soon as practical.

There is Strong Support for the Tunnel

Support for the tunnel is strong. Businesses, citizens, associations, elected officials and union members from across the State have voiced their support for the tunnel because they recognize the additional protection of the Great Lakes that would be secured for decades to come, the criticality of the energy the pipeline provides safely, and the investment that the project brings to Northern Michigan along with related job creation.

These supporters also see the position of those who do not want to see completion of the tunnel and want to see Line 5 shut down as irresponsible.

A State-commissioned report, *Alternatives Analysis for the Straits Pipelines*, concluded the risk of a release into the Great Lakes from a replacement pipeline built within such an underground tunnel would be "negligible" and "un-quantifiably low." That is exactly the risk profile that Enbridge and the State are seeking.

Shutting down a perfectly safe pipeline that provides critical supply would drive energy markets into turmoil within the State resulting in immediate and long-term negative implications to supply, reliability and cost. According to the U.S. Department of Transportation, pipelines are the safest way to move energy. It would take 2,150 tanker trucks – 90 leaving the terminal every hour, 24 hours a day – or more than 800 rail cars each day to deliver the amount of energy carried on Line 5. Is that what we want for Michigan?

Next Steps

We are fully committed to moving forward with the State to see the tunnel constructed as soon as possible. For greater clarity, our spending commitments for this year's work plan ramp up significantly beginning on June 20, and if certain contracts cannot be awarded by then, the 2019 season will be lost, resulting in a delay of at least one year.

Finally, Governor, the tunnel solution is the culmination of several years of independent analysis and extensive engagement between Enbridge and the State. We have an opportunity to provide state-of-the-art protection for the Straits of Mackinac and the Great Lakes while reducing the risk of the crossing to near zero. Enbridge has delivered on all of its commitments along the way and has begun executing the project.

Frankly, it is hard to imagine the State and the people of Michigan would want to go backwards and delay completion of the tunnel. We urge your government to move forward with us expeditiously on the tunnel option, recognizing that the pipeline will need to continue to operate until it is replaced.

Enbridge shares your vision of reducing the risk to the Straits of Mackinac, and we're committed to working with you to realize this vision. I look forward to hearing from you further regarding this important matter.

Sincerely,

A handwritten signature in blue ink, appearing to read "Al Monser". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

