

MEMORANDUM FOR RECORD

SUBJECT: NEPA and Public Interest Review Scope of Analysis for Enbridge Line 5 Tunnel

1. This document addresses our scope of analysis under the National Environmental Policy Act, 42 U.S.C. § 4321, *et seq.* (NEPA), which is also the scope of analysis for our public interest review. This memorandum identifies the sources and guidance the U.S. Army Corps of Engineers (Corps) used to define the scope of analysis for our review of the proposed Line 5 pipeline tunnel (Tunnel Project) crossing the Straits of Mackinac (Straits) by Enbridge Energy, Limited Partnership (Enbridge), File LRE-2010-00463-56-A19, with respect to specific considerations identified by the public, federally recognized Tribes (Tribes), consulting parties, and cooperating agencies. This document does not represent a comprehensive list of sources used by the Corps to define the scope of our NEPA analysis and public interest review; rather it identifies particular sources that respond to specific concerns raised by commenters. In this document, we revise and expand on our findings on scope of analysis as documented in a memorandum of April 26, 2021. We summarize and respond to specific comments in the enclosed comment and response document.
2. Enbridge's Line 5 is an existing 645-mile-long pipeline, originally constructed in 1953, that carries light crude oil and natural gas liquids between Superior, Wisconsin and Sarnia, Ontario. At the Straits, the 30-inch Line 5 pipeline splits into two 20-inch pipelines, known as the dual pipelines, which are buried at water depths less than 65 feet and are supported or rest on the lakebed at greater depths. The proposed project involves replacing the approximate 4-mile dual Line 5 pipelines crossing the Straits with a new 30-inch pipeline. A 21-foot-diameter tunnel would be constructed in bedrock underneath the Straits to house the new pipeline, approximately in the alignment of the west leg of the dual pipelines.
3. Commenters to our public notice, public hearing, EIS scoping process, cooperating agency and consulting party meetings, and Tribal consultations have raised questions related to scope of analysis considerations of: a) the Line 5 tunnel crossing of the Straits of Mackinac versus consideration of the entire Line 5 pipeline; b) whether connected actions on Line 5 exist; c) issues related to engineering, design, and safety; d) oil spill risk, potential impacts, and response; e) temporal consideration; f) geographic, economic, social and cultural considerations for scope; g) cumulative impacts; and h) operational activities. Each of these concerns is addressed below.

- a) Straits Crossing vs. Entire Line 5. We reviewed the applicable NEPA regulations to determine whether to consider the proposed project as a linear project and whether to consider the 4-mile section of Line 5 crossing the Straits of Mackinac or consider the entire 645-mile Line 5 pipeline.

The Corps' scope of analysis is determined in accordance with the Corps' NEPA regulations at 33 C.F.R. Part 325, Appendix B. Section 7(b)(1) identifies situations where a permit applicant may propose a specific activity which is merely a component of a larger project and where the district engineer should establish the scope of an EIS to address the impacts of not only the applicant's proposed specific activity requiring a permit, but also those portions of the entire, larger project over which the district engineer has sufficient control and responsibility to warrant review. Here, no such larger pipeline project exists, nor does the district engineer have sufficient control and responsibility over Line 5 to warrant review of the entire pipeline.

Section 7(b)(3) explains:

For those regulated activities that comprise merely a link in a transportation or utility transmission project, the scope of analysis should address the Federal action, *i.e.*, the specific activity requiring a DA permit and any other portion of the project that is within the control or responsibility of the Corps of Engineers (or other Federal agencies).

For example, a 50-mile electrical transmission cable crossing a 1 1/4 mile wide river that is a navigable water of the United States requires a DA permit. Neither the origin and destination of the cable nor its route to and from the navigable water, except as the route applies to the location and configuration of the crossing, are within the control or responsibility of the Corps of Engineers. Those matters would not be included in the scope of analysis which, in this case, would address the impacts of the specific cable crossing.

Conversely, for those activities that require a DA permit for a major portion of a transportation or utility transmission project, so that the Corps permit bears upon the origin and destination as well as the route of the project outside the Corps regulatory boundaries, the scope of analysis should include those portions of the project outside the boundaries of the Corps section 10/404 regulatory jurisdiction. To use the same example, if 30 miles of the 50-mile transmission line crossed wetlands or other "waters of the United States," the scope of analysis should reflect impacts of the whole 50-mile transmission line.

At 33 CFR 330.2(i) the definition of “single and complete project” states:

For linear projects, the ‘single and complete project’ (i.e. single and complete crossing) will apply to each crossing of a separate water of the United States (i.e. single waterbody) at that location; except that for linear projects crossing a single waterbody several times at separate and distant locations, each crossing is considered a single and complete project. However, individual channels in a braided stream or river, or individual arms of a large, irregularly-shaped wetland or lake, etc., are not separate waterbodies.

Here, the proposed construction of a new tunnel and replacement pipeline for the 4-mile section of the Line 5 Straits crossing does not constitute a major portion of the 645-mile pipeline, nor does it bear “...upon the origin and destination as well as the route of the project...” as the proposed construction would not change Line 5’s origin, destination, or route. The proposed project is distinct from the linear project examples in the regulations cited above in that the full project involves only a single waterway crossing, and work does not extend beyond what may be needed to construct the crossing. Though a Corps permit is required for construction of a pipeline tunnel crossing the Straits, this does not give the Corps sufficient control and responsibility to warrant review of the entire pipeline. The Corps’ scope of analysis includes only the potential effects of the activities at the Straits crossing for the requested permit.

The Corps’ has determined that federal control and responsibility is limited to the Straits crossing. Line 5 is an existing, privately owned pipeline, which does not require federal approval for siting or approval of its route, and the overall pipeline itself is not a larger federal action. Therefore, the Corps’ scope of analysis is appropriately limited to the proposed crossing of the Straits of Mackinac, including the construction activities associated with the crossing.

- b) Connected Actions. We also considered whether other federal actions on Line 5 may be connected actions that should be evaluated in the same EIS. Commenters suggested that the Corps should consider all other projects that may be permitted on Line 5 in the future, including maintenance activities; the passage of Line 5 through U.S. Forest Service land requiring special use permits; and an application under review by the Corps’ St. Paul District, to reroute an approximately 20-mile long segment of the Line 5 pipeline with a new 41-mile segment in Wisconsin (Reroute Project). The proposed Reroute Project is located approximately 300 miles from the proposed Tunnel Project.

The 1978 CEQ NEPA regulations at 40 C.F.R. § 1508.25 (a)(1)¹ define connected actions as those that:

- (i) Automatically trigger other actions which may require environmental impact statements.
- (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously.
- (iii) Are interdependent parts of a larger action and depend on the larger action for their justification.

Neither the Tunnel Project nor the Reroute Project automatically trigger the other. Issuance of a permit for one project would not cause or require the applicant to undertake the other, and neither project requires the other to occur simultaneously or in advance to proceed. Although both proposed activities would replace segments of Line 5, each project addresses its own independent purpose and the specific situation that precipitated it (namely, for the Reroute Project, the desire to route Line 5 around the Bad River Reservation in Wisconsin, and for the Tunnel Project, agreements between the State of Michigan and Enbridge to seek alternatives to the existing pipelines on the Straits lakebed). These projects are not proposed as a coordinated effort to upgrade or expand the entire Line 5 pipeline. The two actions are not interdependent parts of a larger federal action that depend on the larger action for their justification. The overall operation of Line 5 is not a larger federal action on which the proposed projects depend for their justification.

Moreover, the Corps does not have approval authority for the overall pipeline siting, route, or operation. Rather, the action the Corps is considering for each discrete project is the issuance of a permit for structures and work in navigable waters of the U.S. under Section 10 of the Rivers and Harbors Act of 1899 and discharges of fill into waters of the U.S. under Section 404 of the Clean Water Act. Permit denial would not constitute denial of the pipeline itself or its operation; rather, it entails denial of authorization for the jurisdictional structures, work, and/or discharges in the location and configuration proposed. Denial of a permit for one project may result in a shift or change (e.g., alternative routes or configurations for that specific project area) but may not necessarily impact the continued operation of Line 5.

Similarly, future maintenance projects on other segments of Line 5 and special use permits for passage through U.S. Forest Service (USFS) lands are not connected actions to the proposed Tunnel Project. Future

¹ The Corps is evaluating this application under the 1978 NEPA regulations, because Enbridge submitted its Tunnel Project permit application on April 8, 2020, and the Corps initiated its NEPA review before the 2020 NEPA regulations' September 14, 2020, effective date.

maintenance projects may require federal permits if they are conducted on federal land or in jurisdictional waterways, but many such projects outside of these areas would not require federal authorization. These maintenance projects and special use permit proposals would serve specific purposes unrelated to that of the proposed Tunnel Project, and the Tunnel Project does not rely on these projects for its utility. These projects are generally separate and distinct efforts to address maintenance needs and right-of-way requirements. They are not part of a larger coordinated effort related to the Tunnel Project, and they do not bear on the independent utility of the proposed Tunnel Project.

With respect to whether the Tunnel Project and Reroute Project constitute connected actions, the Corps' scope of analysis for this permit review is limited to the proposed crossing of the Straits, including the associated construction activities on either side of the crossing. Other existing portions of Line 5 are not within the control or responsibility of the Corps, nor do the two proposed projects meet the CEQ's connected actions definition at 40 C.F.R. § 1508.25(a)(1). Therefore, other portions of Line 5 are not within the scope of our analysis for this permit review.

- c) Project Design and Engineering Considerations. We considered the extent to which project design and engineering considerations may be within our scope of analysis, with respect to both the proposed project and the existing dual pipelines. We note that the Pipeline and Hazardous Materials Safety Administration (PHMSA) is the federal agency with responsibility for ensuring that pipeline construction meets applicable federal safety standards.

The Corps' regulations regarding safety of impoundment structures provide insight on questions of engineering and safety, which are analogous to our consideration of the proposed tunnel. According to 33 C.F.R. 320.4(k), non-federal applicants may be required to demonstrate that structures "...comply with established state dam safety criteria or have been designed by qualified persons and, in appropriate cases, that the design has been independently reviewed (and modified as the review would indicate) by similarly qualified persons." Section 325.1(d)(6) further clarifies that "No specific design criteria are to be prescribed nor is an independent detailed engineering review to be made by the district engineer." Likewise here, the applicant must be able to demonstrate that the proposed project complies with the applicable federal safety standards and that its design has been reviewed by qualified persons, but the district engineer will not designate specific design criteria, nor will he make an independent, detailed engineering review of the proposed project or its components.

In addition, 33 C.F.R. Part 325, Appendix A includes general conditions the Corps is required to include in all issued individual permits. General Condition 2 requires the permittee to "...maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit."

Appendix A also requires individual permits to include the following, which reduces the Corps' liability and places the responsibility on the permittee:

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:
 - a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
 - b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
 - c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
 - d. *Design or construction deficiencies associated with the permitted work.*
 - e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided. (emphasis added)

Project design and engineering is the responsibility of the applicant and its consultants. The Corps may independently determine if there are safety concerns from a public interest review standpoint that warrant additional information from the applicant. The Corps may review the requested information to ensure that it appears reasonable but will not conduct an independent technical analysis.

The integrity of the dual pipelines is beyond the scope of our analysis. Enbridge is responsible for ensuring that its structures meet the applicable requirements, including PHMSA's federal safety standards. The existing dual pipelines are not the subject of the permit application currently under review, except to the extent Enbridge proposes to replace them and decommission them after completion of the project. Corps' authorization is not needed for continued operation of the existing dual pipelines, and the Corps will not

independently review the integrity of the dual pipelines as part of our analysis of Enbridge's permit application.

In summary, the Corps may consider engineering and design of the proposed work to a limited extent in its NEPA review or public interest review and will do so where applicable.

- d) Oil Spill Risk, Potential Impacts, and Response. We have considered the extent to which oil spill risk, response, and the potential impacts of an oil spill may be within the scope of our analysis.

The Headquarters, U.S. Army Corps of Engineers decision document for the 2017 reissuance of Nationwide Permit 12, dated December 21, 2016, states:

The Corps does not regulate oil and gas pipelines, or other types of pipelines, per se. For utility lines, including oil and gas pipelines, our legal authority is limited to regulating discharges of dredged or fill material into waters of the United States and structures or work in navigable waters of the United States, under section 404 of the Clean Water Act and section 10 of the Rivers and Harbors Act of 1899, respectively. We do not have the authority to regulate the operation of oil and gas pipelines, and we do not have the authority to address spills or leaks from oil and gas pipelines. General condition 14, proper maintenance, requires that NWP activities, including NWP 12 activities, be properly maintained to ensure public safety... In addition, we do not have the legal authority to regulate the construction, maintenance, or repair of upland segments of pipelines or other types of utility lines. For example, for a recent oil pipeline (e.g., the Flanagan South pipeline), the segments of the oil pipeline that were subject to the Corps' jurisdiction (i.e., the crossings of waters of the United States, including navigable waters of the United States, that were authorized by the 2012 NWP 12) was only 2.3% of the total length of the pipeline; the remaining 97.7% of the oil pipeline was constructed in upland areas outside of the Corps' jurisdiction. Interstate natural gas pipelines are regulated by the Federal Energy Regulatory Commission. The Federal Energy Regulatory Commission also regulates some electric transmission projects.

There are other federal laws that address the operation of pipelines and spills and leaks of substances from pipelines. Those laws are administered by other federal agencies. Under the Natural Gas Pipeline Safety Act of 1968, the Department of Transportation (DOT) regulates pipeline transportation of natural gas and other gases. The DOT also regulates the transportation and storage of liquefied natural gas. Under the Hazardous Liquid Pipeline Safety Act, the DOT regulates pipeline

transportation of hazardous liquids including crude oil, petroleum products, anhydrous ammonia, and carbon dioxide. The DOT administers its pipeline regulations through the Office of Pipeline Safety (OPS), which is in its Pipelines and Hazardous Materials Safety Administration (PHMSA). Specific to oil pipelines, the PHMSA is responsible for reviewing oil spill response plans for onshore oil pipelines.

Oil spills are also addressed through the Oil Pollution Act of 1990, which is administered by the U.S. Environmental Protection Agency and the U.S. Coast Guard. Under the Oil Pollution Act of 1990, EPA is responsible for addressing oil spills occurring in inland waters and the U.S. Coast Guard is responsible for addressing oil spills in coastal waters and deepwater ports. The U.S. EPA has issued regulations governing its oil spill prevention program, and requires oil spill prevention, control, and countermeasures, and facility response plans (see 40 CFR part 300 and 40 CFR part 112). Oil spill prevention, control, and countermeasures are intended to ensure that oil facilities prevent discharges of oil into navigable waters or adjoining shorelines. Their facility response plan regulations require certain facilities to submit response plans to address worst case oil discharges or threats of a discharge. The U.S. Coast Guard has the authority to ensure the effective cleanup of oil spills in coastal waters and require actions that prevent further discharges of oil from the source of the oil spill. Activities regulated under section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act that are determined by the U.S. EPA or U.S. Coast Guard to be necessary to respond to discharges or releases of oil or hazardous substances may be authorized by NWP 20.

Similarly, the Headquarters, U.S. Army Corps of Engineers decision document for the 2021 reissuance of a modified Nationwide Permit 12, dated January 4, 2021, states, “Since the Corps does not regulate the release of oil, natural gas, or products derived from oil or natural gas, it is not required to perform a detailed analysis of the effects of those possible future leaks or spills because those leaks or spills are not an effect of the Corps’ proposed action (see definition of ‘effects or impacts’ at 40 CFR 1508.1(g)).”

The Corps does not consider the risk of an oil spill to be within the scope of its analysis beyond the general engineering, design, and safety considerations described in item (c) above. The adequacy of oil spill response plans or capabilities and the potential impacts of an oil spill are beyond the Corps’ scope of analysis.

- e) Temporal Consideration. We considered the expected duration or lifetime of the proposed project as it applied to the scope of analysis. Commenters

expressed concerns regarding the extent to which the proposed new segment would perpetuate the use of Line 5 overall; the long-term integrity and design life of the pipeline, including spill risk over time; and the duration of transport and use of fossil fuels and associated impacts on climate change. As discussed above, these factors are not within the Corps' scope of analysis. For the purposes of the Corps' impact analysis, we consider that the proposed project would likely operate for the foreseeable future (e.g., through at least 2050, based on U.S. Energy Information Administration projections on continued demand for petroleum products), and operational impacts would continue if the tunnel and replacement pipeline segment continue to operate beyond that point.

- f) Geographic, Economic, Social and Cultural Considerations for Scope. Commenters suggested that the Corps should not restrict its scope of analysis to the footprint of the proposed project; rather, it should define the scope of analysis with consideration of impacts to geographic, environmental, cultural, and economic factors of the region. We concur with the commenters. In defining the scope of analysis, we identify activities that are within the Corps' jurisdiction as well as upland activities over which the Corps has sufficient control and responsibility to warrant federal review, as defined in 33 C.F.R. Part 325, Appendix B, section 7(b). We define these activities in item 4, below, and will consider the impacts of these activities, wherever they may extend. While the project may impact geographic, environmental, cultural, and economic resources that may be defined broadly over the region, the EIS scope does not necessarily expand to encompass all activities or infrastructure within the geographic extent of those resource areas. That is, the activities considered within our scope of analysis will define the geographic range for consideration of impacts, not vice versa. As part of the EIS, the Corps will document the affected environment, including relevant geographic, environmental, economic, social, and cultural characteristics of the areas potentially affected by the project. The affected environment will provide a baseline for evaluation of impacts.
- g) Cumulative Impacts. In considering the scope of analysis for cumulative impacts of the proposed project, we will evaluate the extent to which the activities associated with the Straits crossing may contribute to cumulative effects when considered together with past, present, and reasonably foreseeable actions. We will define the geographic range for consideration of cumulative impacts at a later point in our review, based on the expected impacts of the proposed activities at the Straits crossing, with a broader consideration of the resources that may be impacted. As discussed above, the continued operation of Line 5 is beyond the scope of our review, and we will not review the direct, indirect, or cumulative impacts of the operation of Line 5 overall.

Based on our review of comments submitted to date, we are not aware of any potential impacts of the proposed Tunnel Project that would extend so far as to overlap with impacts of the proposed Reroute Project in Wisconsin. These two projects are geographically distant and would not cause impacts with additive or synergistic effects that would require consideration together as cumulative actions, as defined in 40 C.F.R. § 1508.25 (a)(2).

h) Operational Activities. The Corps' NEPA scope of analysis and Public Interest Review include consideration of the environmental impacts of the intended use of the structure, including operation and maintenance activities associated with the proposed replacement pipeline and tunnel. However, some operational activities are not within the Corps' authority to regulate, including transportation of oil or natural gas liquids through the pipeline. For example, the Corps does not have authority over the operation of the existing dual pipelines and cannot compel Enbridge to shut down or change the manner of operation or the products transported. In addition, the extraction, transportation of the pipeline products beyond the Straits crossing, and the eventual use of the products are not within the Corps' control and are therefore outside the scope of analysis. The Corps' review of construction and operational impacts of the project is limited to the Straits crossing, and the Corps' review of greenhouse gas emissions will focus on tunnel construction and operation activities at this crossing.

4. In summary, the Corps' scope of analysis for our NEPA review and our public interest review includes the construction of the tunnel between the tunnel boring machine entry and exit portals; installation of structures within the tunnel; associated construction activities, equipment use, and materials staging within the limits of disturbance, including site restoration; transport and disposal of spoils material; select operation and maintenance activities related to the tunnel and structures within it; and decommissioning of the existing dual pipelines by abandoning them in place. We will consider the direct, indirect, and cumulative impacts of these activities and their reasonable alternatives, subject to the considerations discussed above.



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Enclosure

Enbridge Line 5 Tunnel – Comment and Response on Scope of Analysis

This document summarizes comments from cooperating agencies, consulting Tribes, Section 106 consulting parties, and the public related to the Corps' scope of analysis under NEPA and our public interest review. Comments are summarized by topic, where appropriate.

Straits Crossing vs. Entire Line 5

1. Comment: The EIS scope must include the entire Line 5 pipeline and not just the crossing at the Straits of Mackinac. Were it not for the applicant's desire to continue using Line 5, the tunnel project would not exist.

Response: The Corps' scope of analysis is limited to the Straits crossing, in accordance with the Corps' NEPA implementation regulations at 33 C.F.R. Part 325, Appendix B. There is not sufficient federal control and responsibility over other portions of Line 5 to consider it part of the action under consideration. Furthermore, we are not aware of proposed work on other segments of Line 5 aside from the proposed reroute around the Bad River Reservation in Wisconsin. As described in our Memorandum for Record of June 28, 2023, NEPA and Public Interest Review Scope of Analysis for Enbridge Line 5 Tunnel (MFR), these actions are separate, unconnected actions concerning modifications of discrete sections of Line 5.

2. Comment: The EIS should consider project scope and timing related to the entire operational lifespan of Line 5. The EIS should describe how the proposal fits into the context of the overall Line 5 pipeline, originally constructed in 1953. Such information could help explain which actions are connected to the proposed project. This includes:
 - Provide information on: (1) how long a pipeline built in 1953 is expected to safely function; (2) which portions of Line 5 have already been replaced, and why; (3) which portions are planned to be replaced or not, why, and when.
 - Discuss expected changes to the structural integrity of the 1953 pipeline over time.
 - The EIS should address how long Enbridge expects a 70-year-old pipeline to last before larger scale replacement must take place.

Response: As discussed in the MFR, the Corps' scope of analysis is limited to the Straits crossing, in accordance with 33 C.F.R. Part 325, Appendix B. The Corps lacks authority over the siting, route, integrity, or continued operation of Line 5. The comment above relates to pipeline integrity, which is not within our scope of analysis. The Pipeline and Hazardous Materials Safety Administration (PHMSA) has jurisdiction over pipeline safety matters, and Enbridge is required to comply with PHMSA's regulations and safety standards. Furthermore, the Corps only has permitting authority over the small segments of Line 5 where Enbridge has proposed the Straits tunnel and where it plans to reroute the tunnel in Wisconsin. The Corps has no authority to oversee or control the remaining hundreds of miles of the privately owned pipeline. Given the Corps' limited authority, this comment is not relevant to defining connected actions in this case, as it relates largely to private actions on a privately owned pipeline.

3. Comment: The scope of the EIS should be shaped by the environmental concerns as put forth by the public including cultural resources, Indigenous rights, water resources, accident scenarios, and climate change. The EIS should evaluate potential impacts not only in the construction footprint (effects of pipeline construction) but also in lands and waters potentially impacted by spills and/or explosions along the full length of Line 5.

Response: In defining the scope of analysis, we identify the activities that are within the Corps' jurisdiction as well as upland activities over which the Corps has sufficient control and responsibility to warrant federal review, as defined in 33 C.F.R. Part 325, Appendix B, paragraph 7(b). Once we identify these activities, we review the impacts of these activities wherever they may extend. We will evaluate impacts of the proposed project on cultural resources, Indigenous rights, water resources, and, to a limited extent, climate change. However, the Corps does not consider the risk of an oil spill to be within our scope of analysis beyond a general review of the reasonableness of general engineering, design, and safety considerations associated with the proposed project. Impacts to climate change due to upstream extraction and downstream use of the pipeline products are also beyond the scope of our analysis.

Connected Actions

4. Comment: Connected actions are "closely related and therefore should be discussed in the same impact statement." Actions are connected if they: "[a]utomatically trigger other actions which may require environmental impact statements"; "[c]annot or will not proceed unless other actions are taken previously or simultaneously"; or "[a]re interdependent parts of a larger action and depend on the larger action for their justification." Projects are "connected" where they lack independent utility. Further, where projects are concurrently pending before an agency, proposed by the same company, and logically interdependent, they may be connected.

Ensure that the EIS discusses reasonably foreseeable projects along other portions of the Line 5 pipeline that would be undertaken only if this proposed project is permitted. This includes other actions along Line 5 that require federal approval, including the Line 5 Segment Relocation Project that is being considered for special use permits currently and/or imminently pending before the U.S. National Forest Service.

The project is dependent on the approval of the proposed Relocation Project and the reauthorization of multiple Forest Service special use permits. The Relocation Project and National Forest segments are necessary to supply the fuels to be transported by the proposed project. Oil from Alberta, Canada will not be able to reach its destination in Sarnia, Ontario via the project without the oil flowing through the segments of Line 5 traversing around the Bad River Reservation and through the pipeline as it crosses the Chequamegon-Nicolet National Forest, the Ottawa National Forest, and the Hiawatha National Forest. If any one of these projects is not permitted, the product will not reach the Straits and there will be no purpose for the tunnel project. Each segment of the pipeline cannot proceed without the other. The Relocation Project, special use permits, and this project are interdependent parts of the entire Line 5 and depend on each other and the continued operation of Line 5 for their justification.

Connected actions for the Line 5 Tunnel project also include maintenance to Line 5 (e.g., integrity digs, pipeline exposures, maintenance to pump stations and Enbridge's Superior Terminal, valve leaks, etc.), pipeline leaks, and long-term hydrologic changes. The EIS discussion should include past spills and ruptures associated with Enbridge's assets, spill modeling for a rupture in the Straits, and spill modeling for future inland and Great Lakes oil spills. Other connected actions that rely on Line 5's continued operation across the Straits include legal proceedings and associated permitting processes in the Chequamegon-Nicolet National Forest and on Bad River Band's reservation. Any meaningful NEPA review cannot ignore impacts connected to the extraction sites of the hydrocarbons that Line 5 transports, pipeline infrastructure and refineries associated with

Line 5, maintenance/construction associated with Line 5, refineries for Line 5 products to be processed, and the final source of consumption for those Line 5 affiliated products. Health effects to the Aamjiwnaang First Nation, who are surrounded by hydrocarbon infrastructure that use Line 5 products, should also be included.

The EIS should account for the extended operation of Line 5 over the next decades if not centuries, especially given that Enbridge has continued to operate the Line 5 dual pipeline in the straits for 69 years, which is 19 years beyond their structurally sound lifetime (50 years).

Construction of a new, larger pipeline contained within a tunnel implies a commitment to the indefinite, long-term operation of Line 5. The replacement of the pipeline into the Tunnel would expand the life of one stretch of the Line 5 pipeline but fails to address the many other weaknesses along the entirety of the pipeline. The need for upgrades to and rebuilds of the rest of 70-year-old portions of Line 5 may be causally connected and necessary for the proposed tunnel to remain in operation.

Response: The MFR details our findings that the Line 5 Reroute Project around the Bad River Reservation in Wisconsin and special use permits by the U.S. Forest Service are not connected actions to the proposed Tunnel Project.

The Corps does not have approval authority for the overall pipeline siting, route, or operation. Rather, the action the Corps is considering is the issuance of a permit for structures and work in navigable waters of the U.S. and discharges of fill into waters of the U.S. associated with each project. Denial of a permit for one project may result in a shift or change (e.g., alternative routes or configurations for that specific project area) but may not necessarily impact the continued operation of Line 5.

The Corps does not have authority over the operation of Line 5, and continued operation of Line 5 is beyond the scope of this analysis. Continued operation may entail future maintenance projects in other locations on Line 5, but these are not proximately triggered by the Corps' action. Maintenance activities on other segments of Line 5 are beyond the scope of our analysis. Other factors associated with the overall operation of Line 5, including upstream extraction and downstream processing and use of the pipeline's products, as well as the risks and impacts of oil spills on other segments of Line 5, are also beyond the scope of our analysis.

Affected Environment

5. Comment: USACE should consider an expanded magnitude of scale for the EIS to capture the scale and complexity of the proposed project and the range of stakeholders and interests in the region. The scope of the project should be defined by the environmentally, culturally, and economically understood definition of the Straits region, which includes the Lakes Michigan-Huron watershed.

Response: As part of the EIS, the Corps will document the affected environment, including relevant geographic, environmental, economic, social, and cultural characteristics of the areas potentially affected by the project. The affected environment will provide a baseline for evaluation of impacts.

Activities Under Consideration

6. Comment: The EIS must clearly define the new roads that would be constructed, the existing roads that would be improved, and assess the impacts of these activities. The EIS should also identify which roads would be used in the future by Enbridge to conduct maintenance on the pipeline as these would be considered permanent features of the pipeline.

Response: The Corps' scope of analysis for the Line 5 Straits crossing includes construction and improvement of temporary and permanent roads needed for construction, operation, and maintenance activities associated with the Straits crossing.

7. Comment: An estimated 364,000 cubic yards of fill plus the required bentonite additive is an enormous quantity of material to discard from the project area. The disposal routes and locations should be evaluated under both the NEPA EIS and the National Historic Preservation Act (NHPA) Section 106 review. The amount of bentonite and the disposal timeline and method needs to be evaluated. Bentonite poses threats to both aquatic and terrestrial life if not promptly and properly handled. The EIS must analyze if it is possible for the applicant to safely keep the bentonite out of the air and water.

Response: The EIS and Section 106 review will both consider transport and disposal of spoil and associated materials.

8. Comment: USACE should consider the extraction, processing, transportation, refinement, delivery, and end use of the product.

The EIS must clearly delineate the geographic scope of the supply and demand of the Project. Detail exactly how much of each substance, raw or refined into other petroleum products (e.g., propane) that Line 5 supplies to Michigan versus elsewhere. Enbridge must provide this information to USACE so that it can properly evaluate the short and long term "economic advantages and disadvantages of this proposal" to the people of Michigan and the greater Midwest and Great Lakes regions.

Response: USACE will consider activities associated with construction and operation of the Straits crossing and will evaluate the impacts of these activities, wherever they may extend. Extraction, transport (outside of the Straits crossing), refining, and use are not within the scope of analysis, and we will not analyze lifecycle greenhouse gases and climate change effects for these activities.

Cumulative Impacts

9. Comment: The EIS should discuss other projects that may be permitted on Line 5 in the future and consider the cumulative impacts of these projects.

Cumulative actions are actions "which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement." Where multiple proposed actions are pending before an agency at once, the agency should consider the cumulative and collective impacts of those actions. To adequately describe the cumulative and indirect effects in the EIS, the safe operational life of both the pipeline and tunnel, the potential other utilities to be housed in the tunnel, the effects of short-term and long-term tunnel operations and pipeline failure all need to be studied. The EIS should include a meaningful cumulative review to identify:

- The area in which the effects of the proposed project will be felt;
- The impacts that are expected in that area from the proposed project;
- Other actions—past, present, and proposed, and reasonably foreseeable—that have had or are expected to have impacts in the same area;
- The impacts or expected impacts from these other actions; and
- The overall impact that can be expected if the individual impacts are allowed to accumulate.

The EIS should describe the combined impacts of the pipeline reroute with other proposed projects in the area. Transmission line reroutes and access road construction are examples.

Response: As discussed above, our scope of analysis includes only the activities associated with the Line 5 crossing of the Straits of Mackinac. Our cumulative impact analysis will be scaled based on this scope of analysis to consider impacts of other actions that may occur in the same impact area.

10. Comment: The cumulative and indirect effects of the EIS must be thoroughly explored for each alternative including but not limited to the impact of vibrations, noise, traffic, dust, light, operational effects (e.g., seepage), viewsheds to cultural resources, archaeological sites, waters, ecosystems, and landscapes. Also, the indirect and cumulative affects analysis area must be sufficient to adequately study and model these effects. The loss of access to land and waters and disruption to the ability to exercise cultural lifeways and Treaty rights resulting from each alternative should be described in the EIS.

Response: The EIS will evaluate the direct, indirect, and cumulative impacts of the proposal and reasonable alternatives in relation to each identified type of potential impact. The scope of the review will be commensurate with the expected magnitude of the impact.

Challenges to the Operation of Line 5

11. Comment: The USACE must consider that Enbridge is operating Line 5 illegally through the Straits of Mackinac and through the Bad River Reservation in Wisconsin.

Response: The Corps will consider the impacts of activities associated with the Straits crossing. Operation of the pipeline through the Bad River Reservation, permit review of a pipeline segment rerouted around the reservation, and surrounding litigation are not within the scope of our review for the proposed tunnel project.

Regulatory Oversight

12. Comment: It is especially important that USACE review those aspects of the project that have not been thoroughly considered by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) or Michigan Public Service Commission (MPSC). Both of these agencies have undertaken rather limited reviews of this proposal. Therefore, key elements of the proposed design, environmental and climate impacts, and planned construction protocols have not been reviewed.

Response: The Corps independently defines its scope of analysis based on its regulations and authorities. We will consider existing information available to inform our analyses and may request or develop additional information and analyses where adequate information is not currently available. We may use information developed as

part of the EGLE and MPSC reviews, and we will independently identify and address the information needs for our review.

13. Comment: If sections fall outside of USACE jurisdiction, then the project should halt for lack of regulatory oversight until a solution is created.

Response: The Corps will review Enbridge's application for the proposed project that is within its jurisdiction and in accordance with its regulations and authorities. The Corps does not have authority to suspend the review based on actual or perceived gaps in federal authority.

Pipeline Safety

14. Comment: The EIS should include an independent study of the safety of the dual pipelines scheduled to keep operating during permitting process and tunnel construction.

The EIS must review construction, design, maintenance, and safety precaution proposals through a benchmark review of other pipeline/tunnels currently in use worldwide.

Response: The Corps does not have authority over the operation of the existing dual pipelines or pipeline safety features associated with them. The Pipeline and Hazardous Materials Safety Administration (PHMSA) is the federal agency with responsibility for ensuring that pipeline construction meets applicable federal standards.

Project design and engineering is the responsibility of the project sponsor and its consultants. The Corps may independently determine if there are safety concerns from a public interest review standpoint that warrant additional information from the applicant. The Corps may review the requested information to ensure that it appears reasonable, but the Corps does not conduct an independent technical analysis.

Energy Needs

15. Comment: The scope of the EIS must weigh all options to meet energy needs for next 40 years.

Response: We identified the project purpose and need in a separate memorandum, dated June 28, 2023. We will evaluate reasonable alternatives that may meet the project purpose and need in detail in the EIS. The comment assumes a purpose (namely, to meet energy needs at some geographic scale) that is substantially broader than the purpose and need we identified for the proposed project, which focuses on the Straits crossing.

Cultural Resources

16. Comment: The EIS scope should address possible impacts to the Straits region as one of the most prominent cultural landscapes in the state of Michigan. The Straits contains an extremely high concentration of terrestrial and submerged archaeological, and above-ground cultural sites, as well as being considered an apparent Traditional Cultural Property (TCP) among Indigenous communities in the Great Lakes region.

Response: The Corps will evaluate impacts to cultural resources in accordance with our responsibilities under Section 106 of the NHPA and as part of our NEPA review. Our

review will include consideration of terrestrial and submerged archaeological sites, architectural/above-ground resources, and a traditional cultural landscape that may encompass the project area. Additional traditional cultural properties may be identified and evaluated as part of our review as well. The Corps will continue to engage Section 106 consulting parties in this review.

State Liability

17. Comment: The proposed tunnel structure is supposed to be deeded to the Mackinac Straits Corridor Authority upon completion. What liabilities does the authority in the state inherit? Will it be responsible before its eventual removal? Is there a funding that needs to be set aside by Enbridge and trust? Will the multipurpose tunnel create new liability should electric utility lines be installed, which could lead to a spark leading to an explosion with the oil leaking into Lakes Michigan and Huron?

Response: The Corps does not have authority over the terms and conditions of any agreement between Enbridge and the State of Michigan regarding the tunnel. Responsibilities and liabilities associated with the State's agreement with Enbridge are beyond the Corps' scope of analysis.

Section 106 of the National Historic Preservation Act (NHPA)

18. Comment: The EIS should include also cultural resource surveys for all the disposal sites. Due to the high concentration of underground cultural resources, even existing quarries or previously disturbed areas should be surveyed. Many quarry sites within the state of Michigan pre-date the NHPA or NEPA and are unlikely to have been previously surveyed before establishment and operation.

Response: The Corps will identify historic properties that may be affected by the undertaking, as required under Section 106 of the NHPA. We will consider the potential for archaeological resources to remain in the disposal locations and may request archaeological surveys, in accordance with the Advisory Council on Historic Preservation's 2007 Archaeology Guidance.

19. Comment: The EIS should consider if the disposal sites are quarries or industrial locations that are over 50 years old and could be National Register of Historic Properties (NRHP) eligible sites. A visual impact and viewshed analysis should also be conducted of the materials proposed to be deposited at disposal sites.

Response: The Corps will consider whether the disposal sites may be eligible for listing in the NRHP and will evaluate impacts of the undertaking, including visual impacts, as appropriate under the NRHP and NEPA.

Ownership of Spoils

20. Comment: The EIS needs to determine who "owns" the Michigan bottomland fill removed from the tunnel construction.

Response: According to information provided by the Michigan Department of Environment, Great Lakes, and Energy, Enbridge is responsible for disposal of the material. The State of Michigan did not express interest in claiming ownership of the material.