

STATE OF MINNESOTA
BEFORE THE
PUBLIC UTILITIES COMMISSION

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**In the Matter of the Application of Enbridge
Energy, Limited Partnership for a Pipeline
Routing Permit and Partial Exemption for
the Fond du Lac Line 4 Project in
Minnesota on the Fond du Lac Reservation**

MPUC Docket No. PL9/PPL-18-752

**PROPOSED FINDINGS OF FACT,
CONCLUSIONS OF LAW, AND ORDER**

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STATEMENT OF THE ISSUES

Has Enbridge Energy, Limited Partnership (“Enbridge” or “Applicant”) satisfied the factors set forth in Minn. Stat. § 216G.02 and Minn. R. Ch. 7852 for a partial exemption and issuance of a route permit for the Fond du Lac Line 4 Project (“Project”), which would relocate approximately 10 miles of the existing Line 4 pipeline from the center of the existing Enbridge Mainline Corridor (“Corridor”) to the outer edge of the Corridor within the Fond du Lac Band Reservation (“Reservation”)?

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

The Minnesota Public Utilities Commission (“Commission”) concludes that the Applicant has satisfied the applicable legal requirements and the criteria set forth in Minnesota law for a partial exemption and issuance of a route permit, and, therefore, the Commission grants the Applicant a Route Permit.

FINDINGS OF FACT

I. Applicant

1. Enbridge is the Applicant requesting a partial exemption and route permit for the Project. Enbridge is a Delaware limited partnership authorized to do business in the State of Minnesota. Enbridge is a wholly-owned subsidiary of Enbridge Energy Partners, L.P., which is a Delaware limited partnership.¹

II. Description of the Proposed Project

¹ Enbridge’s Route Permit and Partial Exemption Application for the Minnesota Public Utilities Commission (“Application”), Revised March 15, 2019, at 1-5.

2. The proposed Project includes relocating and replacing approximately 10 miles of the existing 48-inch diameter Line 4 pipeline with approximately 10 miles of 36-inch diameter pipeline in the right-of-way adjacent to the existing Enbridge Mainline Corridor. The Project will be located in portions of St. Louis and Carlton Counties within the boundaries of the Reservation.²
3. The Project will parallel the existing Enbridge Mainline Corridor for 100 percent of the proposed Preferred Route. The segment of the existing Line 4 pipeline which will be relocated will be removed after the Project has received regulatory approvals and is constructed, tested, and placed into service.³
4. The Project addresses specific concerns raised by the Fond du Lac Band of Lake Superior Chippewa (“Fond du Lac Band” or “Band”) related to an above-grade segment of existing Line 4 pipe installed through the Reservation in the 1970s. Fond du Lac Band has raised concerns that the above-grade Line 4 segment creates a barrier to the natural water flow across the Reservation and, in some areas, impedes land access for the Band members to gather medicinal plants and other culturally important resources.⁴
5. After thoroughly investigating those concerns and potential alternatives, Enbridge and Fond du Lac Band agreed to relocate and bury the new proposed Line 4 segment within the Reservation adjacent to the current Enbridge Mainline Corridor. Once the Project is complete and the new relocated Line 4 segment is in service, the existing above-grade Line 4 segment will be deactivated and removed. Removal of the existing segment of Line 4 in the Reservation will provide a positive impact on humans and the environment. The positive impacts include removing the physical barrier and enhancing access to Band members who traverse this area and removing the hydrologic barriers to surface flow, allowing future environmental remediation of Fond du Lac Band lands.⁵
6. The Project’s associated facilities include mainline valves, access roads, and cathodic protection equipment. Because the proposed Project will relocate a segment of the existing Line 4 pipeline between two existing mainline valve locations, no new pump stations are proposed as part of the Project.⁶
7. The Project will involve the following valve site work: the removal of an existing mainline valve at the existing milepost (“MP”) 1060 valve site; the installation of a new mainline valve at MP 1062; and the removal and replacement of an existing mainline valve at MP 1070. The valve work at these locations is required to place the valves in the right location for operational needs of the Enbridge Mainline System and to isolate

² Application at 1-1.

³ Application at 1-1.

⁴ Application at 1-1.

⁵ Application at 1-1.

⁶ Application at 1-3.

segments of the pipeline near environmental features identified by the Fond du Lac Band.⁷

8. Eleven temporary access roads and two new operational access roads for the valve sites are proposed along existing trails and roads where public roads do not provide adequate access to the Right-of-Way for construction. These temporary access roads are also planned to be used during the construction of the Line 3 Replacement Project. Enbridge will restore the temporary access roads after construction of the Project is complete. Further, new cathodic protection test stations will be installed along the Project. A cathodic protection test station is a wire or cable attached to an underground metallic structure (i.e., Line 4 pipeline) that is encased in a polyvinyl chloride pipe that extends three to four feet above-grade with a cap.⁸
9. Enbridge conducted an Intelligent Valve Placement analysis for the Project's Preferred Route to ensure that the current and intended valve placement complies with federal law and the operational needs of the Enbridge Mainline System. The valves to be installed will be 36-inch American National Standards Institute 600 weld end by weld end, full port, rising stem gate valves. These valves will be manufactured in accordance with industry standard, American Petroleum Institute Standard 6D "American Petroleum Institute Specification for Steel, Gate, Plug, Ball, and Check Valves for Pipeline Service."⁹
10. The table below (Table 3.3.1-1 from the Application) identifies the Project's pipe specifications:

⁷ Application at 1-3.

⁸ Application at 1-3 and 3-9 and Enbridge Reply Comments (June 14, 2019) at 3.

⁹ Application at 3-5.

Table 3.3.1-1 Fond du Lac Band Line 4 Project Pipe Specifications	
Explanation	Specification
Pipe Size (Diameter)	36-inch outside diameter (NPS 36)
Pipe Type (Grade)	X70 carbon steel pipe manufactured according to American Petroleum Institute (API) Specifications 5L PS2
Pipe Wall Thickness	
Nominal	0.515 inch
Road Bore	0.600 inch
Cased Railroad	N/A
Uncased Railroad	N/A
Horizontal Directional Drill (HDD)	N/A
Estimated Length	10 miles
Pipe Design Factor	0.72
Longitudinal Seam Factor	1.00
Class Location and Requirements	Not applicable (applies to natural gas pipelines)
Coating, mainline	14 mils Epoxy Bonding
Coating, trenchless	40 mils Epoxy Bonding ABR
Specified Minimum Yield Strength (psi)	70,000 psi
Tensile Strength (psi)	82,000 psi

11. The wall thickness will vary between 0.515 inch and 0.600 inch, and length of the pipe sections will be determined on a site-specific basis based on detailed engineering for the final route. The increased wall thickness designed at these crossings is primarily implemented to account for the additional stress caused by exterior loads and additional stress encountered during installation. A minimum wall thickness requirement for pressure containment is calculated for the entire mainline to satisfy the desired Maximum Allowable Operation Pressure, thereby ensuring the entire mainline can withstand normal operating pressure at designed wall thickness. In addition, short lengths of heavier-wall pipe will be utilized at roads and water crossings. The determination of an appropriate pipeline wall thickness is governed by design criteria in the Code of Federal Regulations (“C.F.R.”), which incorporates numerous factors, one such being the pipe design factor, which is a safety factor provided in C.F.R. § 195.106(a). Another such factor, the longitudinal seam factor, is a factor that takes into consideration the method by which the longitudinal weld was completed and can be found in C.F.R. § 195.106(e). The specified minimum yield strength as provided in the table means the amount of stress required to induce permanent deformation of the steel as prescribed by the specification that the pipe was manufactured to. Finally, the tensile strength is the maximum stress that the steel can withstand while being stretched or pulled before breaking.¹⁰
12. The operating pressure of the Project will be up to 1,156 pounds per square inch gauge (“psig”). The maximum operating pressure of the relocated segment of Line 4, based on

¹⁰ Application at 3-3.

Barlow's formula, which is a calculation used to show the relationship between internal pressure, allowable stress, nominal thickness, and diameter, could be 1,440 psig.¹¹

13. Annual average capacity for the Line 4 pipeline is 796 thousand barrels per day. This will not be impacted by the Project.¹²
14. The Line 4 pipeline currently transports predominantly heavy crude oil. The products shipped on Line 4 are not expected to change with the Project in service.¹³
15. The total Project estimated cost is approximately \$100 million.¹⁴

III. Regulatory Permits and Approvals

16. A Certificate of Need is not required for the Project because it is not classified as a large energy facility under Minn. Stat. § 216B.2421, subd. 2., or a large petroleum pipeline under Minn. R. 7853.0010, subp. 14.¹⁵
17. Pursuant to Minn. Stat. § 216G.02, “[a] person may not construct a pipeline without a pipeline routing permit issued by the [Commission].” For the purposes of this Project, a pipeline is defined to include a pipeline that is used to “transport crude petroleum.”¹⁶
18. Pursuant to Minn. Stat. § 216G.02, subd. 4, a route permit issued by the Commission “is the only site approval required to be obtained by the person owning or constructing the pipeline. The pipeline routing permit supersedes and preempts all zoning, building, or land use rules, regulations, or ordinances promulgated by regional, county, local, and special purpose governments.”
19. Permits identified by the Applicant as potentially being required for construction and operation of the Project are identified in Section 6.18 of the Application.
20. Additional details regarding the route and safety features of the Project and route are provided in the Application.

IV. Procedural History

21. On February 25, 2019, the Applicant filed its route permit application pursuant to the partial exemption process in accordance with Minn. Stat. Ch. § 216G and Minn. R. 7852.0600, subp. 1, and 7852.2000.¹⁷

¹¹ Application at 3-4.

¹² Application at 3-7.

¹³ Application at 3-7.

¹⁴ Application at 3-11.

¹⁵ See also Minn. Stat. § 216B.243.

¹⁶ Minn. Stat. § 216G.01, subd. 3.

¹⁷ Application.

22. Also on February 25, 2019, the Fond du Lac Band submitted a letter of support of the Project.¹⁸
23. On February 27, 2019, the Commission issued a Notice of Comment Period on application completeness, setting a comment deadline of March 11, 2019.¹⁹
24. On March 11, 2019, the Department of Commerce, Energy Environmental Review and Analysis (“DOC EERA”) submitted comments recommending that Enbridge provide additional information in the Application. In addition, DOC EERA provided a Sample Route Permit to help inform the review process for the Project.²⁰
25. On March 15, 2019, Enbridge filed a revised Application in response to the DOC EERA recommendations.²¹
26. On March 20, 2019, DOC EERA filed a letter stating that Enbridge’s March 15, 2019, filing addressed its comments and recommendations. DOC EERA recommended that the Commission find the Application complete.²²
27. On April 11, 2019, the Commission issued its Order Accepting Application, Establishing Review Process, and Granting Variances.²³
28. On April 26, 2019, the Commission issued a Notice of Public Information Meetings and Comment Period.²⁴
29. The Applicant published notice of the Application acceptance in the *Duluth News Tribune* and *Pine Knot News* on April 26, 2019. Copies of the Project Application and notice of the public information meetings and the comment period were mailed to local libraries, certain state agencies, local government entities, and affected landowners by April 24, 2019. Notice of the meetings and comment period was also posted to the Commission’s website on April 26, 2019.²⁵
30. The Administrative Law Judge (“ALJ”) conducted two public meetings, one on May 22, 2019, in Brookston, Minnesota, and another on May 23, 2019, in Cloquet, Minnesota.²⁶

¹⁸ Letter, Fond du Lac Band (Feb. 25, 2019) (eDockets Document ID 20192-150599-02).

¹⁹ Notice of Comment Period (Feb. 27, 2019) (eDockets Document ID 20192-150664-01).

²⁰ Environmental Review and Analysis Completeness Comments and Recommendations (Mar. 11, 2019) (eDockets Document ID 20193-150985-01).

²¹ For the purposes of these findings, references to the “Application” will subsequently refer to the revised Application filed on March 15, 2019.

²² Letter, DOC EERA (Mar. 20, 2019) (eDockets Document ID 20193-151228-01).

²³ Order Accepting Application, Establishing Review Process, and Granting Variances (Apr. 11, 2019) (eDockets Document ID 20194-151887-02).

²⁴ Notice of Public Information Meetings and Comment Period (Apr. 26, 2019) (eDockets Document ID 20194-152359-01).

²⁵ Report to the Commission, Office of Administrative Hearings (June 28, 2019) (eDockets Document ID 20196-153980-01) at 1 (hereinafter “Report to the Commission”).

²⁶ Report to the Commission at 1.

31. On May 20, 2019, the Commission filed comments from the Minnesota Pollution Control Agency (“MPCA”) dated May 14, 2019.²⁷
32. On June 13, 2019, the Minnesota Department of Natural Resources (“MDNR”) and Minnesota Department of Transportation (“MnDOT”) submitted comments regarding the Project.²⁸
33. On June 14, 2019, Enbridge submitted a compliance filing and comments responding to the MPCA, MDNR, and MnDOT comments. Enbridge also submitted proposed revisions to the Sample Route Permit provided by DOC EERA.²⁹
34. Following a 50-day public comment period, the hearing record closed on June 14, 2019, at 4:30 p.m.³⁰
35. On June 28, 2019, ALJ Middendorf filed the Report to the Commission, which summarized the public information meetings held regarding the Project.³¹

V. Public and Agency Participation

A. Fond du Lac Band Letter

36. On February 25, 2019, the Fond du Lac Band submitted a letter of support for the Application, noting that the Project is the result of the Band’s requirement that Enbridge address the Band’s concerns over the above-grade segment of 48-inch diameter Line 4 pipeline that runs through the Reservation. The Fond du Lac Band stated that the Project is designed to avoid natural and historic features and, once the new line is in place, old Line 4 will be removed and the land and original water flow restored. The Band further stated that the Project is the best alternative to address the Band’s needs and that the Band fully supports it.³²

B. Public Comments at the Public Meeting

37. The public meetings were lightly attended, with three or four members of the public present at each meeting. No oral testimony was offered at the May 22, 2019, meeting. At the May 23, 2019, meeting, one member of the public spoke. The comments were critical of oil dependence and pipeline construction in general. Further, the speaker objected to the Project because she believes that doing business with Enbridge does not benefit

²⁷ Letter, MPCA (May 14, 2019) (eDockets Document ID 20195-153021-01).

²⁸ Letter, MDNR (June 13, 2019) (eDockets Document ID 20196-153555-01); Letter, MnDOT (June 13, 2019) (eDockets Document ID 20196-153554-01).

²⁹ Compliance Filing, Enbridge (June 14, 2019) (eDockets Document ID 20196-153578-01); Comments, Enbridge (June 14, 2019) (eDockets Document ID 20196-153599-01).

³⁰ Report to the Commission at 1.

³¹ See generally Report to the Commission.

³² Letter, Fond du Lac Band (Feb. 25, 2019) (eDockets Document ID 20192-150599-02).

members of the Fond du Lac Band. The speaker expressed that not all members of the Band agree with the Band's expression of support for the Project.³³

C. Public Comments during the Comment Period

38. No additional comments were received from members of the public during the comment period.

D. Agency Comments

1. *Minnesota Pollution Control Agency*

39. In a letter dated May 14, 2019, the MPCA indicated that it had no comments at that time.³⁴

2. *Minnesota Department of Natural Resources*

40. In a letter dated June 13, 2019, the MDNR provided comments regarding the Project. MDNR requested that Enbridge submit a Natural Heritage Information System ("NHIS") Data Request Form to MDNR for the Project.³⁵

41. MDNR further noted that the Project crosses one MDNR public watercourse – Stoney Brook – for which a license to cross public waters would be required. Similarly, MDNR noted that a license to cross public lands would be required for the Project's crossing of the Fond du Lac State Forest, a portion of which is administered by MDNR.

42. MDNR also recommended that the Project be required to follow the finalized version of the best management practices ("BMPs") identified in the Environmental Protection Plan ("EPP") for the Line 3 Replacement Project. Finally, MDNR recommended that Enbridge identify and use measures to avoid contamination during removal of the existing Line 4 pipeline and ensure proper transport and disposal of hazardous materials.

3. *Minnesota Department of Transportation*

43. In a letter dated June 13, 2019, MnDOT stated that the Project does not directly affect the state trunk highway system. MnDOT noted that Enbridge will need to coordinate with MnDOT regarding oversized loads and any work that may affect MnDOT right-of-way.³⁶

VI. Considerations in Designating Pipeline Route Permit

44. The routing of the Project is governed by Minn. Stat. Ch. 216G and Minn. R. Ch. 7852.

³³ Report to the Commission at 2.

³⁴ Letter, MPCA (May 14, 2019) (eDockets Document ID 20195-153021-01).

³⁵ Letter, MDNR (June 13, 2019) (eDockets Document ID 20196-153555-01).

³⁶ Letter, MnDOT (June 13, 2019) (eDockets Document ID 20196-153554-01)

A. Land Requirements

45. The Project will require the acquisition of new Right-of-Way and temporary workspace on the Reservation. The Project will typically require the acquisition of 20 to 40 feet of new Right-of-Way in uplands, wetlands, and saturated wetland areas. The temporary workspace may vary depending on field conditions but will typically require 140 feet of temporary workspace in upland areas and 115 feet in wetlands and saturated wetland areas, much of which will be disturbed during construction of the Line 3 Replacement Project.³⁷
46. The proposed area necessary for new Right-of-Way varies in width based on the terms of existing easements and the current alignment of existing pipelines or utilities within existing easements. The temporary workspaces will be located adjacent to and contiguous with the proposed new Right-of-Way corridor and will be identified by distinctive staking of construction limits prior to clearing.³⁸
47. Overall, the amount of new Right-of-Way to be acquired is anticipated to be approximately 37 acres, and the Project is anticipated to affect approximately 168 acres of land.³⁹
48. Valves and other aboveground appurtenances will require approximately 0.055 acres. New cathodic protection test stations will be installed along the Project.⁴⁰
49. Typical trench dimensions are identified in Table 3.6.4-1 of the Application. The total amount of soil excavated during construction will be approximately 100,000 cubic yards that will be separated, stored, and then returned to the trench during the Project's backfill operation.⁴¹

B. Depth of Cover

50. In accordance with 49 C.F.R. § 195.248(a), the depth of cover between the top of the pipeline and the ground level, road bed, or river bottom can range between 18 to 48 inches, depending on the location of the pipe and the presence of rock. Based on site characteristics for the Project, these regulations allow a depth of cover for 30 inches. Where a pipeline crosses cultivated agricultural lands, state law requires that a minimum depth of cover of 54 inches be maintained unless waived by the landowner. Because the Project does not cross cultivated agricultural lands, however, this requirement does not apply.⁴²

³⁷ Application at 3-8.

³⁸ Application at 3-8.

³⁹ Application at 3-9.

⁴⁰ Application at 3-9 and Enbridge Reply Comments (June 14, 2019) at 3.

⁴¹ Application at 3-10.

⁴² Application at 3-10 – 3-11.

C. Agricultural Mitigation Plan

51. Because the Project does not cross cultivated agricultural land, an agricultural mitigation plan is not required.

D. Pipeline Safety

52. The Commission is required to set forth rules for the routing of pipelines, and the rules may not set safety standards for the construction of pipelines.⁴³
53. The Commission's route permit does not set safety standards for the design or construction of the pipeline and shall not contravene applicable state or federal jurisdiction, rules, or regulations that govern safety standards for pipelines.⁴⁴
54. Enbridge will own and operate the pipeline under the jurisdiction of the U.S. Department of Transportation ("USDOT"), Pipeline and Hazardous Materials Safety Administration ("PHMSA"), the Commission, and the Minnesota Office of Pipeline Safety ("MNOPS").
55. The USDOT is mandated to prescribe minimum safety standards to protect against risks posed by pipeline facilities under Title 49, U.S.C. Chapter 601. PHMSA administers the national regulator program to ensure the safe transportation of natural gas and other hazardous materials by pipeline. It develops safety regulations and other approaches to risk management that ensure safety in the design, construction, testing, operation, maintenance, and emergency response of pipeline facilities.⁴⁵
56. Title 49, U.S.C. Chapter 601 provides for a state agency to assume all aspects of the safety program for intrastate facilities by adopting and enforcing federal standards. A state may also act as USDOT's agent to inspect interstate facilities within its boundaries; however, the USDOT is responsible for enforcement actions.⁴⁶
57. For the Project, MNOPS is the state agency responsible for ensuring pipeline infrastructure is in compliance with applicable pipeline safety standards.
58. As a crude oil pipeline, the Project's design, construction, maintenance, and operation are regulated by PHMSA under 49 C.F.R. Part 195. Enbridge abides by all PHMSA regulations and works directly with various regional, state, and local agencies, landowners, tribal, and other stakeholders.⁴⁷

VII. Construction Activities, Testing, and Restoration

59. Pipeline construction includes survey and staking of the Right-of-Way, clearing and grading, topsoil stripping and soil segregation, pipe stringing, bending, welding/coating,

⁴³ Minn. Stat. § 216G.02.

⁴⁴ Minn. R. 7852.0200, subp. 2.

⁴⁵ 49 C.F.R. § 60102 – Purpose and General Authority.

⁴⁶ *Id.*

⁴⁷ Application at 4-29.

inspection, trenching, lowering-in, backfilling, hydrostatic testing, cleanup, and restoration and revegetation.⁴⁸

60. Enbridge crews will stake the centerline and exterior boundaries of the construction Right-of-Way. Enbridge and its contractors will also contact Gopher One-Call System to identify and mark the locations of underground utilities.⁴⁹
61. Once the Right-of-Way is staked, traffic control measures are implemented where the Right-of-Way intersects public roads.⁵⁰
62. Next, clearing equipment is brought in to remove existing vegetation.⁵¹ After clearing, temporary erosion control measures will be installed in accordance with the EPP. Timber mats will be installed in wetlands where soil conditions cannot support construction equipment without causing rutting or significant soil disturbance, and mats will be placed at utility crossings where soil conditions are not adequate to support construction loads. Construction workspace will be reduced at wetland crossings.⁵²
63. Topsoil will be stripped and segregated during construction in agricultural lands, residential areas, and other areas as requested by the landowner or as specified in Project plans, commitments, and/or permits.⁵³
64. Pipe specifically fabricated for the Project will be loaded from the pipe yard located near the route in Carlton, Minnesota, onto specialized “stringing trucks” and transported to the construction Right-of-Way. Before excavating the pipeline trench, Enbridge will string individual joints of pipe along the construction Right-of-Way and arrange the pipe to be accessible to construction personnel.⁵⁴
65. A mechanical pipe-bending machine bends individual joints of pipe to the angle needed to accommodate changes in the natural ground contour or pipeline alignment.⁵⁵ After pipes are strung and bent, pipe sections will be welded together and placed on temporary supports next to the trench.⁵⁶ Although federal regulations require only 10 percent of welds to be inspected, Enbridge will field-inspect 100 percent of the welds and will apply coating at welded joints.⁵⁷

⁴⁸ Application at 4-3.

⁴⁹ Application at 4-4.

⁵⁰ Application at 4-5.

⁵¹ Application at 4-6.

⁵² Application at 4-7.

⁵³ Application at 4-11.

⁵⁴ Application at 4-13, 4-14.

⁵⁵ Application at 4-15.

⁵⁶ Application at 4-16.

⁵⁷ Application at 4-17.

66. Construction personnel will then use backhoes and/or ditching machines to excavate a trench that is approximately six feet deep. Construction crews will then use GPS equipment to mark the final position of the pipeline before backfilling.⁵⁸
67. At waterbody crossings, crews will utilize one of the following construction methods: open cut; flume; or dam-and-pump. The method selected for a specific crossing will include erosion control, bank stabilization, and bank revegetation.⁵⁹
68. Road crossings may be completed using several different methods, including using a road boring technique.⁶⁰
69. The trench will then be backfilled to the approximate ground surface elevation.⁶¹ After backfilling, Enbridge will hydrostatically test the pipeline in accordance with PHMSA regulations. This involves filling a segment of the pipeline with water and maintaining a prescribed pressure for a specified amount of time. Hydrostatic test water use and discharge will be consistent with the EPP and applicable permits.⁶²
70. After backfilling is complete, Enbridge will regrade, restore, and decompact as necessary to preconstruction conditions to the extent practicable.⁶³ Topsoil will be re-spread over areas from which it was removed. Permanent soil stabilization efforts will primarily include revegetation of the Right-of-Way.⁶⁴ Enbridge will restore original land grade and contours to the extent practicable and will install permanent erosion control devices to ensure restoration occurs. Revegetation will be conducted in accordance with the EPP, permit requirements, and site-specific landowner requests.⁶⁵
71. After restoration is complete, Enbridge will contact affected landowners to discuss any outstanding issues related to the Project and will work with each affected party to ensure cleanup and restoration conforms to the easement agreement.⁶⁶

VIII. Pipeline Routing

72. Pursuant to Minn. R. 7852.0100, subp. 31, “route” is defined as the proposed location of a pipeline between two endpoints. A route may have a variable width from the minimum required for the pipeline Right-of-Way up to 1.25 miles. In developing the proposed pipeline route, Enbridge evaluated the statutory and rule criteria – Minn. Stat. Ch. 216G and Minn. R. Ch. 7852.⁶⁷

⁵⁸ Application at 4-18.

⁵⁹ Application at 4-20.

⁶⁰ Application at 4-23.

⁶¹ Application at 4-22.

⁶² Application at 4-25.

⁶³ Application at 4-25.

⁶⁴ Application at 4-26.

⁶⁵ Application at 4-29.

⁶⁶ Application at 4-29.

⁶⁷ Application at 5-1.

73. Enbridge and the Fond du Lac Band worked together to identify a Preferred Route for the Project. As part of the route selection process, Enbridge and the Fond du Lac Band considered: (i) the priorities of the Fond du Lac Band, particularly removing the above-grade mounded pipe; (ii) state criteria; and (iii) overall environmental, engineering, and economic factors.⁶⁸
74. More specifically, the Project addresses concerns regarding the above-grade Line 4 segment that is creating a barrier to the natural water flow across the Reservation and, in some areas, impedes land access for Band members to gather medicinal plants and other culturally-important resources.⁶⁹ Accordingly, Enbridge and the Fond du Lac Band focused their route selection process on relocating the approximately 10-mile segment of existing Line 4 between the two existing mainline valve sites located on the Reservation.⁷⁰
75. To limit human and environmental impacts and provide the shortest route, Enbridge and Fond du Lac Band determined that the relocated Line 4 section would need to be installed within the Reservation and parallel the existing Enbridge Mainline Corridor. This paralleling route would also allow the Project to be incorporated into the easement for existing Enbridge pipelines on the Reservation.⁷¹
76. In addition, Enbridge tried to avoid constraints, including: locally-designated environmental protection areas; sensitive habitats; areas with special legal status or where Right-of-Way cannot be acquired and eminent domain may not be exercised; and, public infrastructure. Overall, the Project's Preferred Route follows the Commission's routing criteria, generally avoids constraints, incorporates routing opportunities, and applies appropriate technical guidelines.⁷²
77. The Project's Preferred Route begins near the Reservation border in St. Louis County and extends approximately 10 miles near the end of the Reservation border in Carlton County, Minnesota. Along this route, the Project will share and run parallel to the existing Enbridge Mainline System Rights-of-Way.⁷³ The Project is proposed to be installed 20 to 40 feet away from the Line 3 Replacement Project; the Project will generally be installed at a standard offset of 20 feet in both uplands and wetlands. However, in certain saturated wetland areas, a pipe separation of 40 feet will be necessary.⁷⁴

⁶⁸ Application at 5-1.

⁶⁹ Fond du Lac Band Letter.

⁷⁰ Application at 5-1.

⁷¹ Application at 5-3.

⁷² Application at 5-3.

⁷³ Application at 5-22.

⁷⁴ Application at 5-26.

78. Enbridge's Application identified four additional routing alternatives it considered during the Project's route selection process and explained why none of the four alternatives were preferable to the Preferred Route.⁷⁵

IX. Standard and Criteria for Partial Exemption

79. In deciding whether to grant a partial exemption from pipeline route selection procedures, the Commission must determine that the pipeline project will not have a significant impact on humans or the environment. The Commission must consider the impact of the pipeline project in light of the criteria identified in Minn. R. 7852.0700, subp. 3.

A. Effects on Human Settlement, Existence and Density of Populated Areas, Existing and Planning Future Land Use, and Management Plans

80. Minn. R. 7852.1900, subp. 3(A), requires that when reviewing a pipeline route application, the Commission shall consider the impact of the pipeline on "human settlement, existence and density of populated areas, existing and planned future land use, and management plans."⁷⁶

1. *Human Settlement and Existing and Density of Populated Areas*

81. The Preferred Route generally avoids population centers. However, three municipal boundaries are crossed by the Preferred Route: Arrowhead Township; Perch Lake Township; and Progress Township.⁷⁷
82. As recommended by MnDOT, Enbridge will coordinate any oversize/overweight hauling with MnDOT and will apply for all necessary permits.⁷⁸
83. There are 176 residences within one-half mile of the Project; Enbridge has been working with private landownership impacted by the Project to address their concerns through notification in writing, direct phone calls, and in-person meetings.⁷⁹
84. Construction activities will have temporary direct or indirect impacts to human settlement through construction noise and traffic, which includes the associated access roads.⁸⁰ Enbridge has been working with private landowners impacted by the Project to address their concerns, and contained in the Sample Route Permit are conditions 5.4.2 and 5.4.3 that will require Enbridge to minimize these impacts.

⁷⁵ Application at 5-4 – 5-20.

⁷⁶ Minn. R. 7852.1900, subp. 3(A).

⁷⁷ Application at 6-11.

⁷⁸ Comments, Enbridge (June 14, 2019) at 2.

⁷⁹ Application at 6-12.

⁸⁰ Application at 6-12.

85. Project operations and maintenance will have no long-term effects on human settlements or populated areas.⁸¹
86. Enbridge initiated this Project in response to the request from the Fond du Lac Band, and this Project is intended to improve the environment for the Fond du Lac Band community. One of the purposes of the Project is to meet environmental justice goals on the Reservation.⁸²

2. *Existing and Planned Future Land Use, and Management Plans*

87. Comprehensive land use plans have been established by both Carlton and St. Louis Counties, and the Fond du Lac Band has established a Reservation Strategic Plan. These plans acknowledge the need for and existence of utilities and infrastructure. Because the Project will not establish any new utility corridors but will be co-located with the existing Enbridge Mainline System, the Project will not conflict with these plans.⁸³

B. Natural Environment

88. Minn. R. 7852.1900, subp. 3(B), requires that when reviewing a pipeline route permit application, the Commission shall consider the impact of the pipeline on “the natural environment, public lands, and designated lands, including but not limited to natural areas, wildlife habitat, water, and recreational lands.”⁸⁴
89. Similarly, Minn. R. 7852.1900, subp. 3(G), requires that when reviewing a pipeline route permit application, the Commission shall consider the impact of the pipeline on “natural resources and features.”⁸⁵
90. As detailed in the following findings, the Project is not anticipated to have significant impacts on the natural environment as a result of the design and routing of the Project, as well as the conditions and requirements included in the Sample Route Permit.

1. *Geology*

91. The topography crossed by the Preferred Route is relatively flat. Generally, bedrock along the Preferred Route is far below the surface. Although bedrock can be encountered where horizontal directional drill (“HDD”) installation techniques are used, because the Project will not utilize HDD, bedrock is not expected to be encountered.⁸⁶
92. Enbridge determined that 1,500 feet was a reasonable distance for evaluating mineral resources that could potentially be impacted by the Project, based on consideration of the potential for expansion of existing resources. The Preferred Route does not cross any

⁸¹ Application at 6-13.

⁸² Application at 6-12.

⁸³ Application at 6-20.

⁸⁴ Minn. R. 7852.1900, subp. 3(B).

⁸⁵ Minn. R. 7852.1900, subp. 3(G).

⁸⁶ Application at 6-30.

mined to mineral resources areas. There are two sites, possibly associated with non-metallic resources (one sand pit and one gravel pit) that are approximately 1,500 feet from the construction workspace.⁸⁷

93. The Project will not cross any metallic mineral exploration tracts through the Reservation. Enbridge is not aware of any other county- or state-owned metallic mineral rights crossed by the Project that are actively eased to exploration or production companies. Enbridge expects that further coordination with MDNR will, among other things, identify any additional crossings of Public Lands and Public Waters that will need further encumbrance determinations for metallic, aggregate, and/or peat resources.⁸⁸
94. Construction of the Project will result in minor impacts on topography and geology, including temporary alteration of slopes. After the trench is backfilled, Enbridge will stabilize the Right-of-Way with erosion control measures as necessary.⁸⁹

2. Soils

95. The major land resource areas crossed by the Project generally range from somewhat poorly drained soils with sandy to clayey textures to well or excessively drained soils.⁹⁰ Enbridge identified soil characteristics that could affect or be affected by Project construction, including: highly erodible soils; prime farmland; hydric soils; compaction-prone soils, presence of stones and shallow bedrock; droughty soils; depth of topsoil; and percent slope. Table 6.8.1-2 of the Application provided a summary of significant soil characteristics identified along the Preferred Route by county.⁹¹
96. The Preferred Route crosses approximately 64.1 acres of soils classified as farmland of statewide importance. The EPP describes mitigation measures that will be implemented during construction to minimize impacts to such soils. The Preferred Route also crosses approximately 54.6 acres of soils classified as droughty. Enbridge will minimize impacts of construction on droughty, non-cultivated soils by timely reseeding using species tolerant of dry conditions and applying mulch.⁹²
97. To minimize topsoil disturbance, Enbridge will remove and segregate topsoil as requested by the landowner or specified in Project plans, commitments, and/or permits. The maximum depth of topsoil stripping will be 12 inches. Segregated topsoil and subsoil will be stockpiled separately and replaced in the proper order during backfilling and final grading of the construction workspace. In addition, Enbridge will minimize compaction and rutting impacts by constructing timber mats or using low-ground-weight equipment

⁸⁷ Application at 6-30.

⁸⁸ Application at 6-31.

⁸⁹ Application at 6-32.

⁹⁰ Application at 6-33.

⁹¹ Application at 6-35.

⁹² Application at 6-35 – 6-36.

where warranted, such as in saturated wetland soils. Enbridge will also take steps to mitigate the effects of compacted soils, including deep tilling and/or plowing.⁹³

98. Enbridge will implement erosion control measures to minimize erosion both during and after construction activities as necessary, including: construction of silt fences, installation of slope breakers, temporary sediment barriers, permanent trench breakers, revegetation, and mulching. Enbridge will also implement dust mitigation measures, as needed.⁹⁴
99. In addition, the Sample Route Permit requires Enbridge to develop the following plans or procedures to further avoid, minimize, or mitigate potential impacts: Spill Prevention, Containment, and Control Procedures; Drilling Mud Containment, Response, and Notification Procedures; a Petroleum-Contaminated Soil Management Plan; a Soil Erosion and Sediment Control Plan; and a Fugitive Dust Control Plan.⁹⁵

3. *Water Resources*

100. Water resources within the vicinity of the Preferred Route may include groundwater resources, wetlands, and surface waters.
101. With respect to groundwater, there is one drilling record of wells within 150 feet of the Preferred Route; this well is approximately 85 feet from the proposed workspace. While Enbridge does not anticipate the Project will impact this well, Enbridge will work with the landowner to replace the well if it is found to be within 100 feet of the operational Right-of-Way.⁹⁶
102. Construction of the Project is not expected to have long-term impacts on groundwater resources. Construction activities, such as trenching, backfilling, and dewatering, that encounter shallow surficial aquifers may result in minor short-term and localized fluctuations in groundwater levels within the aquifer. Ground disturbance associated with pipeline construction is limited to surface and very shallow ground layers and only temporary, minor impacts to groundwater are anticipated.⁹⁷
103. Construction dewatering may temporarily impact groundwater levels in proximity to the dewatering location. Dewatering techniques are described in the EPP. In addition, any applicable water appropriations and use permits required under Fond du Lac Band, federal, or state regulations would be obtained. Once construction activities are complete, the groundwater levels are expected to recover quickly to preconstruction levels.⁹⁸

⁹³ Application at 6-36.

⁹⁴ Application at 6-36.

⁹⁵ See Sample Route Permit §§ 4.3.2, 4.3.3, 4.3.4, 4.3.12, and 4.3.13.

⁹⁶ Application at 6-60 – 6-62.

⁹⁷ Application at 6-61.

⁹⁸ Application at 6-61 – 62.

104. Routine operations and maintenance is not expected to affect groundwater resources.⁹⁹
105. With respect to wetlands, in Minnesota, wetland crossings are regulated by the U.S. Army Corps of Engineers (“USACE”) under Section 404 of the Clean Water Act (“CWA”). Wetland impacts associated with the Project will also be regulated by the Fond du Lac Band through the Band’s Standard Wetland Activity Permit under the Band’s Wetlands Protection and Management Ordinance (“WPMO”). Since 1996, the Band has had “Treatment in the Same Manner as a State” under the CWA.¹⁰⁰
106. Because the Project is wholly within the Reservation and the Band has had “Treatment in the Same Manner as a State” under the CWA since 1996, the Project does not require any permits or approvals from the MPCA. Enbridge will apply to the Fond du Lac Band for the necessary water quality-related approvals. Enbridge proposed changes to the sample route permit provided by DOC EERA to reflect this issue.¹⁰¹
107. Enbridge conducted wetland delineation surveys along approximately 91 percent of the Preferred Route. Along the remaining portion of the route, Enbridge used National Wetlands Inventory (“NWI”) data to identify potential wetlands. Based on this analysis, the Preferred Route will cross 37 wetlands, with a combined crossing length of approximately 6.16 linear miles. The Project does not cross wetlands or basins listed on the MDNR Public Waters Inventory, nor does it cross any Outstanding Resource Value Waters (“ORVWs”) designated by MDNR.¹⁰²
108. The following wetland types are found in the Project area: Palustrine emergent (“PEM”) wetlands; Palustrine scrub-shrub (“PSS”); Palustrine forested (“PFO”) wetlands; and Palustrine unconsolidated bottom wetlands. Enbridge will acquire necessary wetland permits from local, state, federal, and Fond du Lac Band agencies. As part of the permitting requirements for USACE and Fond du Lac Band, Enbridge will avoid and minimize impacts on wetlands to the extent possible, restore temporary impacts to wetlands on-site, and provide compensatory mitigation as required by permits.¹⁰³ For example, Enbridge reduced the construction workspace width within saturated wetlands and unsaturated wetlands to 115 feet.¹⁰⁴
109. Temporary construction impacts include: loss of wetland vegetation and wildlife habitat; soil disturbance; and, increases in turbidity and alterations in hydrology. Invasive species were also observed within some saturated wetlands within the Right-of-Way, and Enbridge would follow the procedures identified in the EPP to prevent the spread of invasive species, to the extent possible, within the construction corridor.¹⁰⁵

⁹⁹ Application at 6-62.

¹⁰⁰ Application at 6-63.

¹⁰¹ Comments, Enbridge (June 14, 2019) at 2.

¹⁰² Application at 6-64.

¹⁰³ Application at 6-63 – 6-64.

¹⁰⁴ Application at 6-65.

¹⁰⁵ Application at 6-65.

110. Typical construction in most wetlands will be similar to construction in uplands and will consist of clearing, trenching, dewatering, installation, backfilling, cleanup, and revegetation. Construction activities will be minimized in wetlands and/or special construction techniques will be used to minimize the disturbance to vegetation and soils and to maintain wetland hydrology. Where a wetland cannot support construction equipment, construction activities will be accomplished from timber construction mats or by the use of low ground pressure equipment. Enbridge will also minimize impacts on wetlands by implementing the mitigation measures specified in USACE permits and the Fond du Lac Band WPMO, including the purchase of wetland mitigation credits or other agreed-upon compensatory mitigation.¹⁰⁶
111. After the pipeline is constructed, the Right-of-Way will be maintained free of larger-diameter trees and will limit the reestablishment of the scrub-shrub wetlands and forested wetlands. The Project will thus result in the permanent impacts of approximately 7.6 acres of forested wetland and 6.1 acres of scrub-shrub wetland as these wetland types will be converted to emergent wetland. Approximately 0.03 acre of PSS wetland will be permanently converted to upland area to accommodate the valve installation at MP 1062. Additional temporary impacts to wetlands may result from maintenance activities that require excavation.¹⁰⁷
112. Planned future removal of the existing segment of Line 4 in the Reservation will provide enhanced access to Fond du Lac Band lands by removing the above-ground pipe. The Project will allow water to move naturally across the existing Enbridge Mainline Corridor and restore the wetland hydrology to allow for the long-term restoration of the temporary impacted PEM, PFO, and PSS wetlands.¹⁰⁸
113. The Project will cross three waterbodies, including one stream and two tributaries. One of the three waterbodies, Stoney Brook, is designated as a public water by MDNR. The Preferred Route will not cross any Aquatic Management Area or designated trout streams.¹⁰⁹
114. Enbridge will prepare and submit an application to MDNR to obtain a License to Cross Public Waters permit for the Stoney Brook crossing. No waterbodies crossed by the Project are considered navigable waters, as defined under Section 10 of the Rivers and Harbors Act of 1899. The Project will not cross any waterbodies meeting ORVWs criteria. The Project will not cross any river segments that are listed on the National Rivers Inventory as designated or potentially designated National Wild and Scenic Rivers. The Project will not cross any river segments that are listed as state-designated canoe and boating routes.¹¹⁰

¹⁰⁶ Application at 6-66.

¹⁰⁷ Application at 6-70.

¹⁰⁸ Application at 6-71.

¹⁰⁹ Application at 6-47.

¹¹⁰ Application at 6-76.

115. Within the Reservation boundaries, there are five primary wild rice producing waterbodies. These lakes are not located within the Project area and are not expected to be impacted by the Project.¹¹¹
116. Enbridge's routing analysis and proposed construction procedures minimize wetland and surface water impacts to the maximum extent practicable. Potential impacts on waterbodies will be minimized along the Preferred Route by implementing BMPs described in Enbridge's EPP. Stream banks will be protected from erosion through the use of temporary and permanent soil stabilization techniques. Examples of erosion control techniques include placement of erosion control blankets, mulch, straw bales, bio-logs, silt fence, and prompt seeding following construction activities. Stream banks will be restored to pre-construction grades when practicable and revegetated with appropriate vegetation. Placement of rock rip-rap, geotextile fabric, and other bioengineering techniques may be implemented to stabilize sites inherently unstable.¹¹²
117. It is Enbridge's intention to execute the primary crossing method for each of the three waterbodies. If at the time of construction, the contractor, in coordination with Fond du Lac Band and Enbridge, determines that the primary crossing method is not attainable due to site conditions, the secondary crossing method will be utilized.¹¹³ The pipeline will be installed across the three waterbodies using one of the two primary dry crossing methods: dam-and-pump or flume method.¹¹⁴
118. After the pipeline is installed, the streambed will be restored and the banks will be reconstructed and stabilized with erosion control materials.¹¹⁵ It is anticipated that any impacts to water quality from construction of the Project will be temporary, and the EPP contains measures addressing water quality issues.¹¹⁶
119. Enbridge will hydrostatically test the new pipe to verify its integrity prior to placing the pipeline in service. Enbridge plans on utilizing water from Big Lake (near MP 1066) as a source for appropriating hydrostatic test water. Enbridge will obtain the applicable water appropriation and discharge permits for hydrostatic testing activities. Water used for hydrostatic testing will be discharged on land or returned to the waterbody from which it was appropriated, in accordance with Environmental Protection Agency's National Pollutant Discharge Elimination System permit requirements for the Project and Fond du Lac water quality standards.¹¹⁷
120. In addition, the Sample Route Permit requires Enbridge to develop the following plans or procedures to further avoid, minimize, or mitigate potential impacts: Environmental Protection Plan; Spill Prevention, Containment, and Control Procedures; Drilling Mud

¹¹¹ Application at 6-76.

¹¹² Application at 6-77.

¹¹³ Application at 6-77.

¹¹⁴ Application at 6-78.

¹¹⁵ Application at 6-79.

¹¹⁶ Application at 6-80.

¹¹⁷ Application at 6-81.

Containment, Response, and Notification Procedures; a Soil Erosion and Sediment Control Plan; Winter Construction Procedures; and Wetland and Water Resource Procedures.¹¹⁸

121. Impacts on water quality due to operations and maintenance activities are expected to be temporary (e.g., excavation, mowing), minimal, and site-specific.¹¹⁹

4. *Biological Resources*

122. Enbridge evaluated the occurrence of sensitive plant communities and wild rice waters along the Preferred Route using publicly available data layers from MDNR, including Native Plant Communities (“NPC”), Minnesota Biological Survey (“MBS”) data, designated Calcareous Fens, and Railroad Right-of-Way Prairies. MBS data included a combination of publicly available Sites of Biodiversity Significance (“SOBS”) data and draft SOBS data provided directly to Enbridge by MDNR. Enbridge also used interpretation of aerial photography by professional plant surveyors approved by MDNR to identify sensitive plant communities. The only NPC crossed by the Preferred Route is the Northern Poor Fen (APn91), an acidic peatland system.¹²⁰ There are five Moderate SOBS and two High SOBS crossed by the Project.¹²¹
123. The clearing of herbaceous vegetation during construction will result in short-term vegetation impacts. Enbridge will seed disturbed areas following installation of the pipeline. This active revegetation measure and the anticipated rapid colonization of disturbed areas by annual and perennial herbaceous species will restore most of the herbaceous vegetative cover within the first growing season after construction.¹²²
124. The clearing of woody shrubs and trees will be the primary long-term impact of the Project on vegetation. Woody shrubs and trees will be allowed to recolonize within the temporary construction workspace. However, recolonization of disturbed areas by woody shrubs and trees will be slower than recolonization by herbaceous species. As natural succession proceeds in these areas, it is anticipated that forested communities will eventually reestablish after a number of years.¹²³
125. MDNR maintains a list of state and federally-listed noxious weeds. In addition, the Fond du Lac Band has developed a list of invasive species of concern within the Reservation. Enbridge would address noxious and invasive species in accordance with the EPP and the Band’s Invasive Species Management Plan. Further, Enbridge is working directly with the Fond du Lac Band regarding additional control and management of noxious and invasive plant species. To minimize the introduction and increase of noxious and invasive plants, Enbridge will implement BMPs, including minimizing the time between final

¹¹⁸ See Sample Route Permit §§ 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.10, 4.3.11, 4.3.12, and 4.3.14.

¹¹⁹ Application at 6-82.

¹²⁰ Application at 6-38.

¹²¹ Application at 6-39.

¹²² Application at 6-40.

¹²³ Application at 6-40.

grading and permanent seeding, cleaning construction equipment, and preparing a seeding supplement to prevent the spread of noxious weeds and invasive plants. Enbridge has conducted surveys for terrestrial noxious weeds and invasive plant species in advance of construction activities. This survey information will provide background information to assist in implementing mitigation measures during construction.¹²⁴

126. Although no state-listed plant species occurrences are known within the Project based on Enbridge's consultations with the MDNR for the Line 3 Replacement Project (NHIS search), the Project does cross through an area designated as Northern Poor Fen. Enbridge has completed surveys for rare and sensitive plants along the Preferred Route through this area. No rare or sensitive plant species were documented within the Project workspace located within the Northern Poor Fen.¹²⁵
127. Revegetation will take place following restoration, and seed mixes will be selected in accordance with the EPP and through consultation with the Fond du Lac Band, landowners, or land-managing agencies. Vegetation that grows so that it obscures the visibility of the Right-of-Way for federally required surface condition inspections will be mechanically removed. Herbicides may be used during operations in limited situations, such as to control weedy species. If used, herbicides will be applied by properly licensed individuals and coordinated with the necessary regulators and landowners.¹²⁶
128. The Project crosses aquatic and terrestrial habitat cores and corridors within Minnesota's Wildlife Action Network, which was formulated and detailed in Minnesota's Wildlife Action Plan 2015-2025. Enbridge plans to consult with MDNR regarding minimization of impacts to aquatic and terrestrial habitat areas within Minnesota's Wildlife Action Network. The Project does not cross any Minnesota Audubon-designated Important Bird Areas or any state-designated wildlife management areas.¹²⁷
129. Construction will involve the temporary removal of vegetative cover within the construction workspace. Some smaller and less mobile animals such as amphibians, reptiles, and small mammals may experience direct mortality during clearing and grading activities. Larger and more mobile animals will disperse from the Project Right-of-Way during construction. It is expected that individual wildlife will return to their previously occupied habitats after construction has been completed and suitable habitat has become reestablished. The intensity of construction-related disturbances will depend on the particular species and the time of year during construction. The Preferred Route would enable partial sharing and/or paralleling of the existing Line 3 Replacement Project Right-of-Way along the Enbridge Mainline System, as well as the co-construction with the Line 3 Replacement Project. This would minimize the time of disturbance on the Reservation and the amount of new temporary workspace that would need to be obtained

¹²⁴ Application at 6-40 – 6-41.

¹²⁵ Application at 6-41.

¹²⁶ Application at 6-41.

¹²⁷ Application at 6-43.

for the Project. The majority of the temporary workspace along the Preferred Route will be shared and cleared by the permitted Line 3 Replacement Project.¹²⁸

130. In December 2018, Enbridge initiated consultations with the U.S. Fish & Wildlife Service (“USFWS”) and MDNR for the Project. In addition, due to the co-location of the Project with the Line 3 Replacement Project, the information gathered for the Line 3 Replacement Project was also used to assess potential impacts of the Project. Enbridge will continue to coordinate with these agencies, including MDNR to address its comments on the Project, and the Fond du Lac Band on protected species issues as warranted for the Project.¹²⁹
131. Enbridge identified federally listed species under the federal Endangered Species Act (“ESA”) that could occur within the Project area. One endangered species and three threatened species have the potential to occur in the Project area. No critical habitat is located within the Project area.¹³⁰
132. The Canada lynx (*Lynx canadensis*) is a federally threatened species and a species of special concern in Minnesota. Construction activities may affect Canada lynx by potentially diverting individuals from the workspace area due to noise or presence of humans and equipment involved in construction activities. Due to the extensive range of the Canada lynx and extensive habitat near the Preferred Route, disturbance is expected to be temporary and localized. Construction activities may also impact Canada lynx habitat, which in turn may affect foraging and sheltering behaviors of individual lynx. Due to the abundance of habitat near the Preferred Route, these potential impacts are expected to be localized. Enbridge will minimize potential impacts on Canada lynx individuals and habitat through general Project-based conservation and mitigation measures. In addition, Enbridge will implement the following species-specific conservation measures, as appropriate: Contractors and inspectors will be trained to identify and immediately report sightings of Canada lynx to USFWS; and, if a Canada lynx is sighted by Enbridge’s contractor or Environmental Inspector within the construction workspace, Enbridge will cease construction activities until the individual(s) have left the area.¹³¹
133. The Western Great Lakes Distinct Population Segment of the gray wolf (*Canis lupus*) is federally threatened; the gray wolf has no state-level special status in Minnesota. The threatened status for the gray wolf in the Western Great Lakes Distinct Population Segment was reinstated under the ESA on December 19, 2014. Construction activities may affect the gray wolf by potentially diverting individuals from the workspace area due to noise or the presence of humans and equipment involved in construction activities. Due to the range of the gray wolf and extensive habitat near the Preferred Route, disturbance is expected to be temporary and localized. Additionally, due to the co-location of the Project with an existing Right-of-Way, temporary and permanent impacts

¹²⁸ Application at 6-43.

¹²⁹ Application at 6-50.

¹³⁰ Application at 6-50.

¹³¹ Application at 6-51.

to forested habitat that may be used by gray wolves will be minimized. Enbridge will minimize potential impacts on gray wolves through general Project-based conservation and mitigation measures. In addition, Enbridge will implement the following species-specific conservation measures, as appropriate: Contractors and inspectors will be trained to identify and immediately report sightings of gray wolves to USFWS; and, if a gray wolf is sighted by Enbridge's contractor or Environmental Inspector within the construction workspace, Enbridge will cease construction activities until the individual(s) have left the area and coordinate with the Fond du Lac Band Reservation Business Committee.¹³²

134. The northern long-eared bat ("NLEB"; *Myotis septentrionalis*) is listed as a state species of special concern in Minnesota. The NLEB was listed as threatened under the ESA on May 4, 2015, and the USFWS issued a 4(d) rule that became effective on February 16, 2016. Suitable NLEB habitat includes forest stands in riparian areas, forested ponds, and woodlots made up of potential roosts (i.e., snags and/or live trees ≥ 3 inches diameter at breast height with exfoliating bark, cracks, crevices, and/or cavities). Wooded corridors and other linear features (such as fencerows) and non-forested habitats (including emergent wetlands and adjacent edges of agricultural fields and pastures) are also used by NLEBs for foraging and hunting. Enbridge will identify NLEB maternity roost trees prior to construction and will implement mitigation measures as needed in accordance with the NLEB 4(d) rule. Potential impacts to NLEB may occur if clearing of forested habitat for construction workspace takes place at locations where individuals are breeding, foraging, or raising pups. Enbridge will minimize potential impacts on NLEB and habitat through general Project-based conservation and mitigation measures. If maternity roost trees are identified, Enbridge will implement the following mitigation measures: clearing of known maternity roost trees and trees within 150 feet of known maternity roost trees will not occur between June 1 and July 31; no trees will be removed within 0.25 miles of a known hibernacula at any time of the year; and Project activities will not be conducted within known hibernacula (although it is acknowledged that no NLEB hibernacula currently exist within the Reservation).¹³³
135. Minnesota is home to piping plovers from both the Northern Great Plains and Great Lakes populations, and the species was listed as a state endangered species in 1984. The Project is located within the area of the Great Lakes population. No potentially suitable habitat for the piping plover exists within the Project footprint or the immediate surrounding area, and the species is not expected to occur within the Project area. Therefore, it is anticipated there will be no impact to the piping plover or its habitat as a result of construction or operation of the Project.¹³⁴
136. In the Application, Enbridge identified the following state-listed sensitive species within one mile on either side of the Preferred Route, including access roads and temporary workspace: Least Moonwort; Narrow Triangle Moonwort; Pale Sedge; Slender Naiad;

¹³² Application at 6-52.

¹³³ Application at 6-53.

¹³⁴ Application at 6-54.

Torrey's Mannagrass; and Northern Goshawk. Enbridge will update this information based upon updated results of the most recent NHIS for the Project area.¹³⁵

137. Enbridge has been working throughout Project design to avoid construction in areas where state threatened or endangered plant species are known to occur. If state threatened or endangered plants are unavoidable, Enbridge will apply for an incidental take permit.¹³⁶
138. The northern goshawk (*Accipiter gentilis*) is a state species of special concern. Potential impacts to northern goshawk may occur if clearing of forested habitat for construction workspace takes place at locations where individuals are breeding or foraging. The species may be disturbed during clearing or construction activities due to noise or human presence. Due to the abundance of habitat near the Preferred Route, these potential impacts are expected to be localized. Enbridge will minimize potential impacts to the northern goshawk and habitat through general Project-based conservation and mitigation measures.¹³⁷
139. Field surveys completed in 2018 have identified the following Fond du Lac Band Tribal species of concern occurring within the Project Right-of-Way: black ash (*Fraxinus nigra*), lowbush blueberry (*Vaccinium angustifolium*), sugar maple (*Acer saccharum*), white birch (*Betula papyrifera*), white cedar (*Thuja occidentalis*), and wild rice (*Zizania palustris*). Enbridge is currently working with the Fond du Lac Band regarding specific mitigation.¹³⁸
140. Bald eagle nest aerial surveys were conducted within 0.25 miles of the Line 3 Replacement Project Preferred Route in 2014 and 2015 in accordance with the 2014 Bald and Golden Eagle Nest Survey Protocol. Enbridge also conducted surveys in 2018. No eagle nests were identified within 0.25 miles of the Project during these surveys.¹³⁹
141. The Sample Route Permit requires Enbridge to develop the following plans or procedures to further avoid, minimize, or mitigate potential impacts on biological resources: Environmental Protection Plan; Rare and Sensitive Environmental Resource Procedures; Noxious Weeds and Invasive Species Control Procedures; and Revegetation and Restoration Monitoring Procedures. The Route Permit also includes provisions for the use of environmental inspectors and third party agency monitors.¹⁴⁰

5. Air Quality

142. Construction of the Project is not expected to have a substantial impact on air quality. Construction of the pipeline and associated facilities could result in intermittent and

¹³⁵ Application at 6-54 – 6-55.

¹³⁶ Application at 6-57.

¹³⁷ Application at 6-57 – 6-58.

¹³⁸ Application at 6-58.

¹³⁹ Application at 6-59.

¹⁴⁰ See Sample Route Permit §§ 4.3.1, 4.3.7, 4.3.8, 4.3.9, 4.4.10, 4.4.2, and 4.4.3.

short-term fugitive emissions. These emissions would include dust from soil disruption and combustion emissions from construction equipment. Emissions from construction are not expected to cause or significantly contribute to a violation of any applicable ambient air quality standard.¹⁴¹

- 143. Enbridge will minimize dust generated from construction activities, including wetting soils.¹⁴²
- 144. The Project will not result in operational emission changes because no operational changes are proposed to the Clearbrook Terminal.¹⁴³

6. Noise

- 145. Because the Project involves relocation of an existing pipeline segment, and not the installation of pump stations, a baseline noise analysis was not completed. Noise levels are not anticipated to change because of the Project, and MPCA Noise Standards will continue to be met.¹⁴⁴
- 146. The heavy equipment needed to construct the Project will have an intermittent and temporary impact on existing noise levels in the vicinity of the construction workspace. Enbridge reviewed aerial photography and identified 33 sensitive noise receptors within 500 feet of the construction workspace, and 54 sensitive receptors between 500 and 1,500 feet of the construction workspace. The identified receptors were residential structures. In the vicinity of residential areas, Enbridge's contractor will take reasonable measures to control construction-related noise, including limited pipeline construction activities to daylight hours when possible, maintaining equipment in good working order, and utilizing manufacturer-supplied silencers when available.¹⁴⁵
- 147. Following construction, noise will not be generated by the pipeline during normal operations. A small amount of operational noise will be generated at the valve sites; however, the sound level associated with the operation of the valve sites will be low and not likely perceptible outside of the new Right-of-Way during normal operations.¹⁴⁶

C. Lands of Historical, Archaeological, and Cultural Significance

- 148. Minn. R. 7852.1900, subp. 3(C), states that when reviewing a pipeline route permit application, the Commission shall consider the impact of the pipeline to "lands of historical, archaeological, and cultural significance."¹⁴⁷

¹⁴¹ Application at 6-86.

¹⁴² Application at 6-86.

¹⁴³ Application at 6-86 – 6-87.

¹⁴⁴ Application at 6-16.

¹⁴⁵ Application at 6-16.

¹⁴⁶ Application at 6-16.

¹⁴⁷ Minn. R. 7852.1900, subp. 3(C).

149. Enbridge has completed a traditional, archeological historic properties review for the Line 3 Replacement Project, which includes an evaluation of what also encompasses the Line 4 corridor across the Reservation.¹⁴⁸ In addition, Enbridge has worked with the Fond du Lac Band Tribal Historic Preservation Office (“THPO”) to design and conduct comprehensive tribal historic properties review, and the Fond du Lac Band has led a tribal historic properties assessment on the Reservation as part of a larger assessment along the entire Line 3 corridor (the “TCR Survey”). Enbridge and the Fond du Lac Band have agreed upon procedures for conducting all aspects of the TCR Survey, as well as for handling unanticipated discoveries on the Reservation. Enbridge will continue to consult on these matters throughout every phase of the Project. Additionally, the Fond du Lac Band has completed field work, interviews, and literature review for the TCR Survey. There is one historic feature adjacent to the proposed route that Enbridge has committed to avoid. Therefore, the Fond du Lac Band has informed Enbridge that the preliminary conclusion is that no Traditional Cultural Properties or other historic sites will be impacted by the Project.¹⁴⁹
150. Enbridge has also developed an Unanticipated Discoveries Plan for use during all Project construction activities. The Unanticipated Discoveries Plan prescribes actions to be taken in the event that previously unrecorded archaeological or historic site or human remains are discovered during construction activities, which sets forth the guidelines to be used in the event archaeological resources (including both prehistoric and historical resources) or human skeletal remains are discovered during construction activities. If any cultural resources are identified within the construction corridor or possible archaeological and cultural materials or suspected human skeletal remains are identified during ground disturbing activities within the construction corridor, Enbridge would work with THPO representatives and any other applicable authorities to establish a mitigation strategy for pipeline construction and operation. Moreover, there will be Tribal Monitors, approved and trained by the Band, present during construction to ensure no sites are disturbed.¹⁵⁰
151. In addition, the Sample Route Permit requires Enbridge to develop an Archaeological and Historic Resources Plan and Unanticipated Discoveries Plan. The Route Permit includes provisions for the use of tribal monitors.¹⁵¹
152. As such, the Project will not have a significant impact on lands of historical, archaeological, and cultural significance.

D. Land Use Economies

153. Minn. R. 7852.1900, subp. 3(D), states that when reviewing a pipeline route permit application, the Commission shall consider the impact of the pipeline upon “economies

¹⁴⁸ Application at 6-83.

¹⁴⁹ Application at 6-84 and Fond du Lac Band Letter (Feb. 25, 2019).

¹⁵⁰ Application at 6-85.

¹⁵¹ See Sample Route Permit §§ 4.3.5, 4.3.6, and 4.4.5.

within the route, including agricultural, commercial or industrial, forestry, recreational, and mining operations.”¹⁵²

154. Economies along the Preferred Route include forestry, recreation, and tourism. No commercial or industrial operations are present along the Preferred Route. With respect to recreational economies, the Project will not cross any federal parks or state parks; it will cross approximately 2.3 miles of state forest. The Project will not cross any recreational trails or any canoe or boating routes.¹⁵³
155. Enbridge has not identified any areas crossed by the Project that are in agricultural production. Further, construction of the Project will result in approximately 60.4 acres of impacts to forested areas, of which 10.7 acres are new temporary disturbance associated with the Line 4 pipeline construction. Of the 60.4 acres, 10.6 acres will be converted to permanent impacts for the new Line 4 Right-of-Way that will be maintained free of large-diameter trees and will be disturbed by association with the authorized Line 3 Replacement Project. Although construction of the Project will have temporary and permanent impacts on forested lands, the clearing of the Right-of-Way and workspaces areas will not appreciably reduce the lands available to forestry.¹⁵⁴
156. As such, the Project will not have a significant impact on land use economies.

E. Pipeline Cost and Accessibility

157. Minn. R. 7852.1900, subp. 3(E), states that when reviewing a pipeline route permit application, the Commission shall consider “pipeline cost and accessibility.”¹⁵⁵
158. The total project costs are expected to be at least \$100 million.¹⁵⁶

F. Use of Existing Rights-of-Way and Right-of-Way Sharing or Paralleling

159. Minn. R. 7852.1900, subp. 3(F), states that when reviewing a pipeline route permit application, the Commission shall consider the “use of existing rights-of-way and right-of-way sharing or paralleling.”¹⁵⁷
160. The Project will parallel existing Enbridge pipelines within the existing Enbridge Mainline Corridor for 100 percent of its length.¹⁵⁸

¹⁵² Minn. R. 7852.1900, subp. 3(D).

¹⁵³ Application at 6-11.

¹⁵⁴ Application at 6-12.

¹⁵⁵ Minn. R. 7852.1900, subp. 3(E).

¹⁵⁶ Application at 6-12.

¹⁵⁷ Minn. R. 7852.1900, subp. 3(F).

¹⁵⁸ Application at 3-11.

G. Impact on Natural Resources and Features

161. Minn. R. 7852.1900, subp. 3(G), states that when reviewing a pipeline route permit application, the Commission shall consider the “natural resources and features.”¹⁵⁹
162. The Project’s potential impacts on the natural environment, including natural resources and features, is discussed in Section IX(B) above. As discussed, Enbridge has analyzed the potential environmental effects from the Project and has committed to various avoidance, minimization, and mitigation measures to limit such impacts.

H. Extent Human or Environmental Effects are Subject to Mitigation by Regulatory Control or Permit Conditions

163. Minn. R. 7852.1900, subp. 3(H), states that when reviewing a pipeline route permit application, the Commission shall consider the “extent to which human or environmental effects are subject to mitigation by regulatory control and by application of the permit conditions contained in part 7852.3400 for pipeline right-of-way preparation, construction, cleanup, and restoration practices.”¹⁶⁰
164. The Project’s potential human or environmental effects are mitigated by many factors. First, the Project is subject to permitting and oversight at various levels of government, including this Commission and the permits and approvals that will be required by Fond du Lac Band and other federal, state and local agencies charged with responsibility for management and/or protection of environmental resources. A list of each potential permit or approval that may be required for the Project is included in Section 6.18 of the Application. The Sample Route Permit also includes a number of conditions and requirements to avoid, minimize, and/or mitigate potential impacts.¹⁶¹
165. In addition, the Project is subject to PHMSA’s engineering regulatory requirements and construction and operation requirements.
166. Finally, Enbridge has agreed to continue to work with the MDNR to address the recommendations related to environmental permitting and mitigation plans contained in its June 13, 2019 letter.¹⁶²

I. Cumulative Potential Effects of Related or Anticipated Future Pipeline Construction

167. Minn. R. 7852.1900, subp. 3(I), states that when reviewing a pipeline route permit application, the Commission shall consider the “cumulative potential effects of related to anticipated future pipeline construction.”¹⁶³

¹⁵⁹ Minn. R. 7852.1900, subp. 3(G).

¹⁶⁰ Minn. R. 7852.1900, subp. 3(H).

¹⁶¹ See, e.g., Sample Route Permit §§ 3, 4.4 and 5.

¹⁶² Enbridge Reply Comments at 2 (June 14, 2019).

¹⁶³ Minn. R. 7852.1900, subp. 3(I).

168. Other than the Line 3 Replacement Project and ongoing operations and maintenance on the Enbridge Mainline System, Enbridge is not aware of any anticipated future pipeline construction in the vicinity of the Project.¹⁶⁴
169. The design and routing of the Project and the Line 3 Replacement Project minimizes potential temporary and cumulative impacts. For example, land requirements have been minimized by the Project's Preferred Route, which was selected in coordination with the Fond du Lac Band to primarily share and/or run parallel to the existing Enbridge Mainline Corridor. Enbridge has designed both projects to use workspace within or adjacent to the Corridor and largely within area previously disturbed as part of past Enbridge projects. The Project and the Line 3 Replacement Project would impact similar, and in some cases many of the same, resources that were impacted in previous projects. New resource disturbance has been further minimized by Enbridge's proposed construction schedule and workspace overlap with the Line 3 Replacement Project. As such, the combined impacts from the Project and the Line 3 Replacement Project would not contribute to significant cumulative resource impacts.¹⁶⁵
170. The Project and the Line 3 Replacement Project are not, however, "connected actions." First, neither project would directly induce the other. In other words, although Enbridge may construct the projects concurrently for efficiency and convenience, Enbridge intends to complete the Project as a separate, independent project from the Line 3 Replacement Project. Second, neither project is a prerequisite for the other. Either project may proceed independently of the other. Finally, each project is justified by itself. The justification for the Line 3 Replacement Project has already been fully analyzed by the Commission in Docket No. PL9/CN-14-916. The justification for the Project is to address specific concerns raised by the Fond du Lac Band regarding the above-grade installation of segments of the existing Line 4 pipeline and the impacts these segments have on the area hydrology and Band members' use of the area. In short, the Project would proceed absent the Line 3 Replacement Project, and vice versa. Accordingly, none of the three criteria for "connected actions" apply to the Project and the Line 3 Replacement Project.¹⁶⁶

J. Other Local, State, or Federal Rules and Regulations

171. Minn. R. 7852.1900, subp. 3(J), states that when reviewing a pipeline route permit application, the Commission shall consider the "relevant applicable policies, rules, and regulations of other state and federal agencies, and local government land use laws, including ordinances adopted under Minnesota Statutes section 299J.05, relating to the location, design, construction, or operation of the proposed pipeline and associated facilities."¹⁶⁷
172. As discussed in Section IX(A) above, the Project is consistent with the land use plans adopted by the local jurisdictions which are crossed by the Preferred Route.

¹⁶⁴ Application at 6-92.

¹⁶⁵ Application at 6-93 – 6-94.

¹⁶⁶ Comments, Enbridge (Mar. 15, 2019) at 4.

¹⁶⁷ Minn. R. 7852.1900, subp. 3(J).

CONCLUSIONS OF LAW

1. Any of the foregoing Findings of Fact more properly designated as Conclusions of Law are hereby adopted as such.
2. The Commission has jurisdiction over the Application pursuant to Minn. Stat. § 216G.02.
3. The Project qualifies for review under the partial exemption process of Minn. Stat. § 216G.02 and Minn. R. 7852.0600.
4. The Applicant, DOC EERA, and the Commission have complied with the procedural requirements for a partial exemption from pipeline route selection procedures as set forth in Minn. R. 7852.0600, including publication of application notice in a newspaper in the counties where the pipeline will be located, and mailing the notice and application to required parties, including affected landowners, and holding a public informational meeting and comment period.
5. The Commission has considered all the pertinent standards and criteria in accordance with Minn. R. 7852.0700 relative to its determination for a partial exemption from pipeline route selection procedures and issuance of a pipeline routing permit.
6. The Commission concludes that a route permit for the new pipeline should be conditioned in a number of respects, including imposition of those conditions specified in Minn. R. 7852.3600 and conditions contained in the Sample Route Permit as further modified and agreed to by the Applicant.

Based on the Findings of Fact and Conclusions of Law contained herein and the entire record of this proceeding, the Minnesota Public Utilities Commission makes the following:

ORDER

1. The Minnesota Public Utilities Commission hereby grants Enbridge a partial exemption from the pipeline route selection procedures of Minn. R. Ch. 7852.
2. The Minnesota Public Utilities Commission hereby issues a pipeline routing permit to Enbridge for construction of approximately 10 miles of crude oil pipeline and associated facilities along the route described in Section II. The pipeline routing permit is attached hereto with a map showing the approved route, including a description of the route with a variable width as shown in the map, and the inclusion of conditions and any special conditions.