



ENMAX Power Corporation

**Transmission Lines 138-1.80L and 138-1.81L
Underground Transmission Cable Replacement**

September 15, 2017

Alberta Utilities Commission

Decision 22769-D01-2017

ENMAX Power Corporation

Transmission Lines 138-1.80L and 138-1.81L

Underground Transmission Cable Replacement

Proceeding 22769

Application 22769-A001

September 15, 2017

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1 Decision summary

1. In this decision, the Alberta Utilities Commission must decide whether to approve an application from ENMAX Power Corporation to replace the underground transmission cables and associated components on the portions of transmission lines 138-1.80L and 138-1.81L that are located underground, and align the new transmission line 138-1.80L cable with the transmission line 138-1.81L cable in a double-circuit duct bank in downtown Calgary (the proposed project). After consideration of the record of the proceeding, and for the reasons outlined in this decision, the Commission finds that approval of the proposed project is in the public interest, having regard to the social, economic and other effects of the proposed project, including its effects on the environment.

2 Introduction and background

2. ENMAX Power Corporation (ENMAX), pursuant to Permit and Licence 20072-D02-2015,¹ is the operator of the 138-kilovolt (kV) transmission line 138-1.80L from the ENMAX No. 28 Substation to the ENMAX No. 1 Substation in the city of Calgary. ENMAX, pursuant to Permit and Licence EN98-34,² is the operator of the 138-kV transmission line 138-1.81L from the ENMAX No. 1 Substation to the ENMAX No. 20 Substation in the city of Calgary.

3. ENMAX filed an application with the AUC for approval for the proposed project, pursuant to sections 14, 15 and 19 of the *Hydro and Electric Energy Act*. The application was registered as Application 22769-A001 on June 28, 2017.

4. The Commission issued information requests on July 13, 2017, and ENMAX responded to those requests on July 17, 2017.

5. On July 13, 2017, the Commission issued a notice of application, with a deadline of August 3, 2017, for persons to file a submission regarding their objections, concerns, or support in relation to the application. The notice was sent directly to all landowners, occupants and residents within the first row of buildings adjacent to the proposed project site. The notice was also published on the AUC website and notification was automatically emailed to eFiling System users who had chosen to be notified of notices of application issued by the Commission. The Commission issued two additional notices in response to updated stakeholder and address lists

¹ Transmission Line Permit and Licence 20072-D02-2015, Proceeding 20072, Application 20072-A001, October 27, 2015.

² Transmission Line Permit and Licence EN98-34, Application 970516, January 5, 1998.

provided by ENMAX, on July 17, 2017 and then on August 11, 2017. The deadline for submissions was amended to August 25, 2017.

6. On August 1, 2017, the Commission received a statement of intent to participate from Metro Ford Sales Ltd. (Metro Ford). Metro Ford indicated that entrances to its business were situated in the middle of the proposed project. Metro Ford indicated that any disruptions to the entrances would have a serious effect on its business, customers, and employees, and asked to be included in the construction planning. ENMAX filed a response to Metro Ford's submission and indicated that ENMAX was fully committed to communicating the construction plan and collaborating directly with Metro Ford. Metro Ford subsequently filed a letter stating that it was satisfied with ENMAX's response to its concerns.

3 Discussion

7. The underground cables for transmission lines 138-1.80L and 138-1.81L are located between ENMAX No. 1 Substation at 738 9th Avenue S.W. and the overhead structure west of 14th Street on 9th Avenue S.W., south of the Greyhound bus terminal. ENMAX stated that the underground cables for transmission lines 138-1.80L and 138-1.81L are 41 and 40 years old, respectively, and that each cable had reached its life expectancy. ENMAX conducted maintenance tests on the transmission cables for transmission lines 138-1.80L and 138-1.81L and found that both cables have deteriorated. Specifically, the cable sheath jackets are in poor condition, leaving the aluminum sheath susceptible to corrosion. As such, ENMAX proposed to salvage nine kilometres of the old transmission cables, which were oil-filled, and install nine kilometres of new cross-linked polyethylene cables.

8. ENMAX stated that the transmission line 138-1.80L cable was installed within a City of Calgary bridge, the 8th Street Bridge, and that the cable had a sheath fault that would be difficult to repair if it remained within the bridge. As such, ENMAX proposed to align the new transmission line 138-1.80L cable with the new transmission line 138-1.81L cable, along 8th Avenue S.W., and remove the existing transmission line 138-1.80L cable along 9th Avenue S.W. In order to accommodate the transmission line 138-1.80L cable within the existing transmission line 138-1.81L cable alignment, ENMAX proposed to install 1.5 kilometres of double-circuit concrete-encased duct bank.

9. Transmission line 138-1.80L is located between 4941 50th Street, S.W., in the southwest quarter of Section 1, Township 24, Range 2, west of the Fifth Meridian, and 738 9th Avenue, S.W., in the northeast quarter of Section 16, Township 24, Range 1, west of the Fifth Meridian. Transmission line 138-1.81L is located between 738 9th Avenue, S.W., in the northeast quarter of Section 16, Township 24, Range 1, west of the Fifth Meridian, and 2508 Bowness Road, N.W., in the northeast quarter of Section 18, Township 24, Range 1, west of the Fifth Meridian.

10. ENMAX conducted a participant involvement program to inform all potentially affected landowners, occupants, and residents of the proposed project. On May 9, 2017, ENMAX distributed information packages to 245 landowners, occupants and residents located within the first row of buildings adjacent to the proposed project site. ENMAX also engaged in personal one-on-one visits for occupants, residents and landowners adjacent to the proposed project from May 12, 2017 to June 1, 2017. Between May 9, 2017 and May 11, 2017, ENMAX contacted

eight stakeholders through email. ENMAX indicated that eight stakeholders raised concerns during the engagement process, all of which regarded construction effects and access. To mitigate the concerns, ENMAX stated it would communicate the construction plan and schedules with stakeholders so that stakeholders would be aware of any disruptions.

11. ENMAX indicated that it did not anticipate any adverse environmental effects as a result of the proposed project. ENMAX stated that both existing underground cables for transmission lines 138-1.80L and 138-1.81L would be removed by open excavation, tested for polychlorinated biphenyl content and disposed of according to applicable federal and provincial regulations. Furthermore, a soil handling plan would be developed to ensure the proper disposal and handling of all soils encountered and would address areas where historic land use near the proposed project area indicated potential for contamination.

12. ENMAX stated that the proposed project would have no effect on existing noise levels and would comply with Rule 012: *Noise Control*. Any noise from the proposed project would be intermittent and would comply with the City of Calgary noise bylaws.

13. ENMAX indicated that the project cost would be part of its Transmission Capital Maintenance program and estimated it to be approximately \$27 million (within +10 to +30 per cent/-10 to -20 per cent accuracy). Construction for the proposed project is expected to take six months to complete and has a proposed in-service date of November 30, 2018.

4 Findings

14. The Commission is satisfied that ENMAX's application complies with the information requirements prescribed in Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations and Hydro Developments*. The Commission accepts ENMAX's submission that the proposed project is necessary to replace aging underground transmission cables, and notes that the proposed project is a part of its Transmission Capital Maintenance program.

15. The Commission is satisfied that the participant involvement program undertaken by ENMAX meets the requirements of Rule 007. The Commission notes that ENMAX has committed to sharing its construction plan and schedules with stakeholders that have expressed concerns with construction impacts. The Commission notes that there are no outstanding public or industry concerns from directly and adversely affected persons on the record of this proceeding, and expects ENMAX to carry forward its commitment to collaborate with stakeholders in order to mitigate any potential concerns or effects to stakeholders during the construction phase of the project.

16. The Commission finds that the proposed project will result in minimal environmental effects through the testing of old underground transmission cables for polychlorinated biphenyl content and the development of a soil handling plan. The Commission also accepts ENMAX's confirmation that the proposed project will have no effect on existing noise levels and will comply with both the Commission's Rule 012: *Noise Control* and applicable City of Calgary bylaws.

17. Based on the foregoing, the Commission considers the application to be in the public interest in accordance with Section 17 of the *Alberta Utilities Commission Act*.

5 Decision

18. Pursuant to sections 14, 15 and 19 of the *Hydro and Electric Energy Act*, the Commission approves Application 22769-A001. An amendment to the permit and licence for transmission line 138-1.81L is not required because there is no change to the existing transmission line alignment. The underground cables for transmission line 138-1.80L currently run along 9th Avenue S.W. and will be realigned with transmission line 138-1.81L along 8th Avenue S.W. The existing map in Permit and Licence 20072-D02-2015 for transmission line 138-1.80L incorrectly shows the transmission line along 8th Avenue S.W. Accordingly, an amendment to the permit and licence for transmission line 138-1.80L is also not required as the current map on the permit and licence will show the correct alignment after the completion of the project.

Dated on September 15, 2017.

Alberta Utilities Commission

(original signed by)

Henry van Egteren
Commission Member