



ENMAX Power Corporation

Home Road Transmission Lines 69-15.62L/21.61L
Replacement Project

October 16, 2019

Alberta Utilities Commission

Decision 23981-D01-2019

ENMAX Power Corporation

Home Road Transmission Lines 69-15.62L/21.61L Replacement Project

Proceeding 23981

Applications 23981-A001 and 23981-A002

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1 Decision summary

1. In this decision, the Alberta Utilities Commission considers whether to approve applications from ENMAX Power Corporation to alter two existing transmission lines and replace seven transmission structures along Home Road in the city of Calgary (collectively, the project).
2. After considering the record of the proceeding, and for the reasons outlined in this decision, the Commission finds that ENMAX has satisfied the requirements of Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations and Hydro Developments*, and that, in accordance with Section 17 of the *Alberta Utilities Commission Act*, approval of the project is in the public interest, having regard to the social, economic, and other effects of the project, including its effect on the environment.

2 Introduction

2.1 Project description

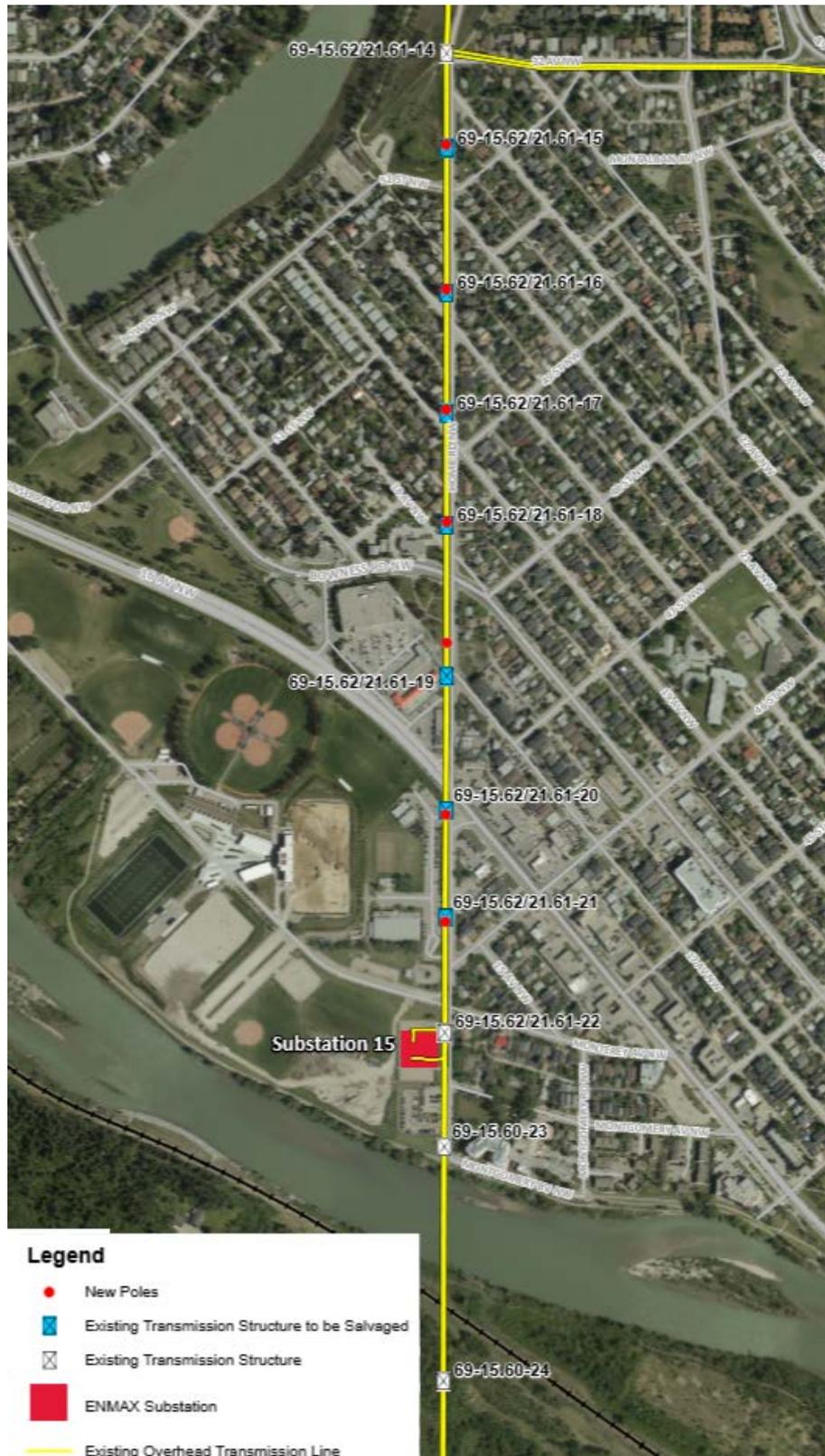
3. ENMAX owns, operates and maintains the existing 69-kilovolt (kV), double-circuit transmission lines along Home Road (transmission lines 69-15.62L and 69-21.61L), which are presently supported by steel lattice structures. ENMAX applied to the AUC for approval under sections 19 and 21 of the *Hydro and Electric Energy Act* to replace seven steel lattice structures and alter transmission lines 69-15.62L and 69-21.61L between 32nd Avenue N.W. and ENMAX No. 15 Substation, as shown in Figure 1¹ below.
4. More specifically, ENMAX seeks approval to replace the seven identified steel lattice structures with steel monopoles within the existing transmission line alignment and to make associated alterations to transmission lines 69-15.62L and 69-21.61L. The project also includes alteration of the under-strung distribution circuit co-located on the transmission lines' structures. The proposed monopoles range in height from 25 to 35 metres, which would result in an increase in height from the existing lattice structures of five to 14 metres. ENMAX indicated that the project is necessary to address clearance violations under current electrical code requirements and associated safety and reliability issues.
5. The total estimated cost of the project is \$2.3 million² and all costs would be to the account of ENMAX's transmission customers.³

¹ Excerpted from Exhibit 23981-X0004, Appendix D - Project Drawings and Maps, PDF page 1.

² Transcript, Volume 1, page 132, lines 3-14.

³ Exhibit 23981-X0001, ENMAX Application, PDF page 24, paragraph 51.

Figure 1: Proposed transmission line alterations along Home Road⁴



⁴ Exhibit 23981-X0004, Appendix D - Project Drawings and Maps, PDF page 1, modified by Commission staff by zooming in and moving legend location.

2.2 Hearing process

6. The Commission provided notice of ENMAX's application in accordance with Rule 001: *Rules of Practice*, and received statements of intent to participate from local residents and the Montgomery Community Association. The Commission granted standing to John Quinton, Robert Johnston, Linda and Bruce McDonald, David Baker, the Montgomery Community Association, Hana Malek, Marilyn Wannamaker, Karim Shaarbafi, Masoumeh Saiyar, and Michael Algra.⁵ The No Montgomery Monopoles group (NMM) was formed by a number of interveners to whom the Commission had already granted standing. Registered parties are listed in Appendix A.

7. The Commission held a public hearing on September 10 and 11, 2019, in Calgary, Alberta. The hearing was attended by ENMAX and members of NMM. No other interveners registered appearances at the public hearing. Hearing participants are listed in Appendix B.

2.3 The Commission's consideration of the application and structure of the decision

8. Relevant to the Commission's consideration of this application are sections 14, 15, 19 and 21 of the *Hydro and Electric Energy Act*. In accordance with Section 17 of the *Alberta Utilities Commission Act*, the Commission must assess whether the project is in the public interest, having regard to its social, economic, environmental and other effects.

9. As noted, ENMAX requested approval to alter two existing transmission lines and seven existing steel lattice structures (with respect to the latter, their replacement with seven monopoles that are five to 14 metres taller than the existing structures). In such an application, the AUC's public interest assessment focuses on any incremental effects associated with the proposed amendments. Specifically, in this proceeding, the Commission must consider any incremental effects resulting from the change in transmission structure, type, placement and height along an approximately one-kilometre segment of the existing transmission line right-of-way.

10. The Commission considers that the public interest will be largely met if an application complies with existing regulatory standards, and the project's public benefits outweigh its negative impacts.⁶ The Commission must also determine whether an applicant has met the requirements of Rule 007. An applicant must also obtain all approvals required by other applicable provincial or federal legislation.

11. In Section 3 of this decision, the Commission considers arguments advanced by NMM concerning the sufficiency of the application and project purpose, more specifically: the absence of a needs identification document; whether the project is a guise for the eventual upgrade of the transmission lines to 138 kV; and an alleged deficiency in the application given the relief requested. In Section 4, the Commission considers the project and alternatives to it. The Commission's consideration of the social, economic and environmental effects of the project,

⁵ Exhibit 23981-X0040, AUC ruling on standing and request for additional information; Exhibit 23981-X0052, Further ruling on standing; Exhibit 23981-X0071, AUC ruling on standing. Names listed in order of receipt of statements of intent to participate.

⁶ EUB Decision 2001-111: EPCOR Generation Inc. and EPCOR Power Development Corporation 490-MW Coal-Fired Power Plant, Application 2001173, December 21, 2001, page 4.

and whether ENMAX has satisfied the requirements of Rule 007 is detailed in Section 5 and following.

3 Sufficiency of the application and project purpose

3.1 Needs identification document exemption

3.1.1 Views of ENMAX

12. In its application and in response to arguments advanced by NMM that the ENMAX application is deficient given the absence of a needs identification document, ENMAX submitted that the project qualifies for a needs identification document exemption in accordance with Section 1.4.1(a) of Rule 007. Section 1.4.1(a) of Rule 007 states:

A needs identification document application is not required for:

- (a) Maintenance upgrades, enhancements or other modifications to a transmission facility proposed by a TFO or market participant if the maintenance upgrade, enhancement, or other modification improves the efficiency or operation of the transmission facility but does not materially affect transmission facility capacity.

13. ENMAX stated that Section 1.4.1(a) of Rule 007 sets out three conditions required for an exemption. The first is that the project work must be for transmission facility maintenance upgrades, enhancements or other modifications. The second is that the project must improve the efficiency or operation of the facility. The third is that capacity must not be materially affected.

14. ENMAX argued that the project meets all three conditions. First, the project would be a maintenance upgrade, or in any event, a type of modification fulfilling the first condition.⁷ Second, resolving the clearance violations to ensure the safe and reliable operation of the transmission facilities improves the operation of the transmission lines. In ENMAX's view, improvements are broader than improvements to the physical electrical flow and include safety and reliability enhancements.⁸ Third, ENMAX submitted that the evidence is clear that the capacity of the transmission lines would not materially change as a result of the project.⁹

15. ENMAX further submitted that requiring a needs identification document for the project would be a significant departure from past Commission practice and would set a different precedent and standard for transmission facility owners and the Alberta Electric System Operator (AESO) going forward.¹⁰

3.1.2 Views of NMM

16. In NMM's view, a needs identification document exemption is not applicable to the project. NMM submitted that the application and supporting documents do not provide sufficient evidence that the project is a maintenance upgrade or an enhancement.

⁷ Transcript, Volume 2, page 232, lines 2-4.

⁸ Transcript, Volume 2, page 233, lines 9-18.

⁹ Transcript, Volume 2, page 233, lines 19-25.

¹⁰ Transcript, Volume 2, page 234, lines 16-20.

17. NMM further submitted that the second condition is not met as the project proposes to use the same conductors and the same nominal operating voltage of 69 kV. As a result, in NMM's view, it is unclear how the operation of the transmission facilities would be improved by the project.¹¹

18. NMM conceded that the re-energization of the distribution circuit as a result of the project may be considered an improvement to the operating condition of the distribution line, but argued that the application is with respect to the transmission lines and not the distribution line.

3.1.3 Commission findings

19. Section 34 of the *Electric Utilities Act* requires a needs identification document where the AESO determines that an expansion or enhancement of a transmission system is or may be required to meet the needs of Alberta. Section 11.1 of the *Transmission Regulation* provides that needs identification documents are not required for proposals described in a Commission rule. Section 1.4.1(a) of Rule 007 sets out the circumstances where a needs identification document exemption applies.

20. The Commission agrees with both parties that three conditions must be met to qualify for a needs identification document exemption under Section 1.4.1(a) of Rule 007:

- (i) The project must be a maintenance upgrade, enhancement or other modification.
- (ii) The project must improve the efficiency or operation of the transmission facilities.
- (iii) The project must not materially affect transmission facility capacity.

21. The Commission has considered the nature of the project as well as the plain language meaning of Section 1.4.1(a) of Rule 007 and has determined for the following reasons that ENMAX's application qualifies for a needs identification document exemption.

22. First, leaving aside whether the project is a maintenance upgrade or enhancement, the Commission finds that the meaning of "other modification" is sufficiently broad to include the project. Condition (i) is satisfied on this basis. Second, the Commission accepts ENMAX's evidence that the project will bring the transmission lines into compliance with the Canadian Standards Association (CSA) Standards and increase safety to proximate buildings. On that basis, the Commission accepts ENMAX's argument that the project will improve the operation of the transmission lines and that Condition (ii) is satisfied. Third, the Commission accepts ENMAX's evidence that the fixed terminal and transmission line equipment preclude operation at a higher capacity, thereby satisfying Condition (iii).

23. As the project is exempt from the requirement for a needs identification document under Section 1.4.1(a) of Rule 007, the application is not deficient based on the absence of such a document.

¹¹ Transcript, Volume 2, page 274, lines 10-14.

3.2 Project purpose

3.2.1 Views of ENMAX

24. ENMAX stated that the existing transmission lines are not compliant with the *Alberta Electric Utility Code* and related CSA Standards (such as *C22.3 Overhead Systems*) requirements due to insufficient clearance between: (i) the transmission lines and two proximate buildings; and (ii) the transmission lines and the underbuilt distribution line that is co-located on the transmission line structures.¹²

25. ENMAX explained that the violations exist because subsequent to the construction of the transmission lines in 1960, new buildings were constructed in proximity to the existing transmission lines and CSA Standards were updated.¹³ Ken Hawrelko, vice-president of special initiatives for ENMAX, testified that the distribution line was likely in place prior to the transmission lines being constructed; however, ENMAX's records do not go back that far.¹⁴

26. ENMAX submitted that the existing clearance violations are both a safety concern and a reliability issue. With respect to safety, Mr. Hawrelko submitted that if someone were to be on the roof of one of the proximate buildings, there is a risk of making contact or near contact with the transmission lines which could result in injury or death from a transmission line flash.¹⁵ With respect to reliability, Mark Campbell, manager of project engineering for ENMAX, testified that the under-strung distribution line has been de-energized due to the lack of clearance between the transmission and distribution lines and that as a result, reliability has been negatively impacted for customers in the area.¹⁶

27. To comply with CSA Standards, ENMAX proposed to replace seven steel lattice towers with taller steel monopoles. It asserted that the taller structures would address both the clearance between the transmission lines and the two proximate buildings and between the transmission lines and the underbuilt distribution line allowing the distribution line to be re-energized.

28. ENMAX indicated that its internal transmission standards include using steel monopoles designed for 138-kV transmission lines. The use of standardized structures results in cost savings. It also gives ENMAX the ability to efficiently meet increased future demand with minimal disturbances given the limited facilities work that would be required to operate at 138 kV.¹⁷

3.2.2 Views of NMM

29. Members of NMM did not dispute that the existing transmission lines are in violation of the CSA Standards. However, they submitted that ENMAX is using the CSA Standards as a guise for the eventual upgrade of the transmission lines to 138 kV.¹⁸

¹² Transcript, Volume 1, page 19, lines 13-22.

¹³ Exhibit 23981-X0013, 2019-01-18-EPC Responses to AUC IRs, PDF page 24, EPC-AUC-2019JAN11-009.

¹⁴ Transcript, Volume 1, page 100, lines 11-17.

¹⁵ Transcript, Volume 1, page 135, lines 10-18.

¹⁶ Transcript, Volume 1, page 114, lines 8-17.

¹⁷ Exhibit 23981-X0083, 2019-07-12-EPC-Home Road Reply Evidence, PDF pages 7-8, paragraph 16.

¹⁸ Transcript, Volume 2, page 284, line 18 to page 285, line 2.

30. NMM provided several reasons in support of this position, including:
- The efficiencies and increased reliability to be gained by converting the transmission lines to 138 kV.¹⁹
 - The proposed steel monopoles being built to 138-kV standards.
 - The existence of similar violations in the community of Varsity that would require 138-kV structures to be constructed.
 - The AESO’s 2009 North Calgary Area Transmission Project (NCAT), which contemplates an upgrade to 138-kV for the transmission lines.
 - The “ISO Tariff 12” tab of Appendix B-1 of the application that contained a total customer contribution decision (CCD) cost of \$8.8 million²⁰ and included a transformer addition as part of the project.

3.2.3 ENMAX’s reply

31. ENMAX responded that there is no evidence on record to support NMM’s view that the project is a precursor to upgrading the transmission lines to 138 kV. ENMAX confirmed that the NCAT project was cancelled by the AESO and that there is no currently anticipated need to convert the northern Calgary 69-kV system to 138 kV.²¹

32. ENMAX also explained that the inclusion of the \$8.8 million total cost in the “ISO Tariff 12” tab of Appendix B-1 of its application was an error and that it should have been zeroed out in the template. ENMAX testified that the tab has no relevance to the project and a transformer replacement is not part of the project.²²

33. ENMAX submitted that it has not yet determined what form of resolution would be appropriate to address existing clearance violations in the community of Varsity, but suggested that any option would be context specific.²³

34. In its reply evidence, ENMAX stated that “[d]espite the flexibility afforded by the application of the [ENMAX] Transmission Standards in the circumstances, [ENMAX] cannot operate the project at 138 kV without direction from the AESO and approval of the AUC.”²⁴ In addition, as further discussed below, ENMAX explained that neither the cost nor height differentials between the 69-kV and the proposed 138-kV structures are significant.

¹⁹ Transcript, Volume 2, page 283, lines 1-10.

²⁰ Exhibit 23981-X0002, Appendix B-1 ENMAX Transmission Lines 15.62L and 21.61L Realignment, ISO Tariff 12 tab, December 11, 2018.

²¹ Transcript, Volume 1, page 85, lines 2-11.

²² Transcript, Volume 1, page 92, lines 15-20.

²³ Transcript, Volume 1, page 78, lines 1-15.

²⁴ Exhibit 23981-X0083, 2019-07-12-EPC-Home Road Reply Evidence, PDF page 8, paragraph 17, July 12, 2019.

3.2.4 Commission findings

35. The Commission accepts the uncontroverted evidence that the existing transmission lines are in violation of the clearance requirements contained in the *Alberta Electric Utility Code* and the related CSA Standards, resulting in both safety and reliability issues. The Commission further accepts the ENMAX evidence that the project will resolve the related clearance violations, allow for the re-energization of the under-strung distribution line, and alleviate the existing safety and reliability concerns.

36. The Commission finds no evidence to substantiate NMM's claim that the project is being used as a guise to upgrade transmission lines 15.62L and 21.61L to 138 kV. Firstly, the Commission notes that the NCAT project was cancelled by the AESO and that neither ENMAX nor the AESO have identified a need or intention to upgrade the transmission lines to 138 kV. Further, as acknowledged by ENMAX, any future upgrade of the transmission lines to 138 kV would require a needs identification document application by the AESO and an application to the Commission for approval as a new project.

37. Second, the Commission is not satisfied that evidence that the proposed replacement structures are monopoles that will be built to 138-kV standards, NMM's assertion of increased efficiencies and reliability with a 138-kV line or NMM's speculation about the community of Varsity, are sufficient to support NMM's claim that there is a hidden motive for the project. As explained in the section that follows, the Commission accepts ENMAX's explanation that the installation of 138-kV structures is an efficient and cost-effective use of its resources and reasonable in the circumstances.

38. Finally, the Commission does not accept NMM's argument that the inclusion of an \$8.8 million CCD cost item in ENMAX's application is evidence of a future or covert intention to convert the transmission lines to 138 kV. The Commission accepts the testimony of ENMAX's witnesses²⁵ that this cost item was included as a result of human error and is entirely unrelated to the application.

3.3 Alleged deficiency based on relief requested

3.3.1 Views of ENMAX

39. In response to arguments advanced by NMM, ENMAX acknowledged that in its application it stated that the existing permits and licences would not require any amendments as a result of the project.²⁶ However, it also pointed out that its application requested that the Commission provide "any related declarations or exemptions that may be necessary, to complete the project."²⁷ In ENMAX's view, this request is broad enough to include a request for amendments to existing permits and licences should the Commission consider amendments to be necessary.

²⁵ Transcript, Volume 1, page 91, lines 2-21.

²⁶ Exhibit 23981-X0001, ENMAX application, paragraph 10.

²⁷ Exhibit 23981-X0001, ENMAX application, paragraph 61.

3.3.2 Views of NMM

40. NMM argued that ENMAX’s application contains material deficiencies that render the application inadequate and these deficiencies include a failure to request amendments to the existing permits.²⁸ NMM submitted that the existing permits and licences require amendment as they do not reflect the 138-kV specifications of the monopole structures. Rather, the permits state: “(a) the transmission line shall be designed, built for, and operated at a nominal voltage of 69-kV.”

3.3.3 Commission findings

41. Whether new permits and licences are required for a given project will depend on the language contained in the existing permits and licences as well as the specific nature of an applied-for project before the Commission.

42. In this case, the existing permits and licences state that “the transmission line shall be designed, built for, and operated at a nominal voltage of 69-kV.”²⁹ The definition of “transmission line” in the *Hydro and Electric Energy Act* includes supporting structures. ENMAX’s evidence is that the proposed monopole structures will be designed and built for 138 kV rather than 69 kV. Given that the existing permits and licences would not reflect the specifications of the new transmission structures, the Commission finds that new permits and licences are required for the project.

43. The Commission acknowledges NMM’s argument that ENMAX should have specifically applied for amendments to the existing permits and licences. Nevertheless, ENMAX requested “any related declarations or exemptions that may be necessary, to complete the project.” Further, the Commission is empowered under Section 8(5) of the *Alberta Utilities Commission Act* to grant “partial, further or other relief in addition to, or in substitution for, that applied for.”

44. While the Commission expects applicants to specifically seek all necessary approvals required for any applied-for project, given the nature of the proposed alterations, the Commission does not find ENMAX’s failure in this case to specifically request amendments to its permits and licences to be fatal to its application.

4 Project alternatives

4.1 Views of ENMAX

45. In its application, ENMAX submitted that it only considered “like-for-like” options that would replace the existing overhead lines with new overhead lines in the same alignment. It indicated that it considered one other “like-for-like” option; however, this option was not advanced as it would have resulted in taller structures than those proposed in the project. As

²⁸ Transcript, Volume 2, page 265, line 23 to page 266, line 2.

²⁹ Transmission Line Permit and Licence U2014-203, Proceeding 3233, Application 1610588, June 10, 2014, Paragraph 3(a) and Transmission line Permit and Licence U2014-376, Proceeding 3389, Application 1610808, September 4, 2014, paragraph 2(a).

such, ENMAX's application did not include project alternatives for the Commission's consideration.

46. In its reply evidence ENMAX addressed two options suggested by interveners; an underground option and relocation of the transmission lines.³⁰

47. Regarding the underground option, ENMAX stated that its practice is to locate transmission lines overhead unless an underground option is warranted. ENMAX provided examples of the factors it assesses when considering if an underground route option is warranted:

- Relative cost of the underground route, which is typically up to 10 times more expensive than an overhead line.
- Physical space and land available to accommodate an overhead line.
- Electrical and operational clearances available for an overhead line.
- Relative technical constraints.
- Incremental stakeholder impacts associated with an overhead line, including whether the project is a new transmission line or the replacement of an already constructed transmission line.

48. In ENMAX's view, underground options should not be considered where an overhead line is technically feasible, constructible, and would not result in unacceptable incremental impacts. ENMAX stated that the cost of the underground option in this case would be in the range of \$23.4 million (plus/minus 30 per cent) compared to the estimated \$2.3 million (plus 20 per cent, minus 10 per cent) to construct the project. ENMAX concluded that there is no basis on which it could justify the underground option. ENMAX also stated that there is no municipal or other governmental directive that requires an underground alignment.³¹

49. Concerning the option to relocate the transmission lines, ENMAX submitted that it would be inappropriate to consider this option given that it would require a new alignment which would result in new disturbances to stakeholders along that new alignment and higher costs. ENMAX further submitted that relocation would not eliminate impacts on stakeholders in Montgomery, as the transmission lines would still require routing through the community.³²

50. Another alternative discussed at the hearing was the use of monopole structures designed for 69 kV transmission lines instead of the proposed monopole structures designed to a 138-kV standard. Mr. Campbell provided the following explanation for why ENMAX chose 138-kV structures over 69-kV structures:

So the adoption of those 138-kV construction standards does not materially affect either the height or the cost of those structures or the project. With regards to height to, you know, shrink the towers down and use 69-kV hardware and insulators, you would save less than 1 metre of height on these structures all in. So by using the 138-kV construction

³⁰ One such relocation option proposed by NMM was relocating the transmission lines along Shaganappi Trail.

³¹ Exhibit 23981-X0083, 2019-07-12-EPC-Home Road Reply Evidence, PDF page 11, paragraphs 32-35.

³² Exhibit 23981-X0083, 2019-07-12-EPC-Home Road Reply Evidence, PDF page 13, paragraphs 40-44.

standards, we're able to maintain our existing pole placements, maintain the use of our standard 138-kV hardware and insulators, which is important should the transmission line ever need to be repaired or restored. Those are materials that we keep in our warehouses so that we can respond quickly and effectively to any damage to the transmission line.³³

4.2 Views of the interveners

51. Members of NMM, as well as Hana Malek who was not represented by NMM,³⁴ supported an underground option for the project and suggested that ENMAX should have proposed this alternative. Michael Algra, a member of NMM, stated:

...it's very surprising to me knowing that underground transmission lines is a very viable option, and, from my perspective, could meet most of the concerns that we have. I was very surprised to see that even the inclusion of it with a reference to cost and construction feasibility was not included in the submission. I know there's been other projects that ENMAX has done downtown where both options were included for above ground and below ground and the costs were included for both. And so I would have liked to see that same comparison as well as an indirect comparison of what impacts to the community, the property values, to all the aspects that I mentioned, would be influenced if they were to put them underground.³⁵

52. NMM also suggested that there were opportunities for ENMAX to co-ordinate with the City of Calgary (the City) and other agencies to relocate the line underground while other work was being performed on Home Road. Robert Johnston, also a member of NMM, testified that there was a "total lack of cooperation and coordination between City Waterworks, City Roads, City Parks, and ENMAX," and questioned why ENMAX did not take the opportunity to locate the line underground when the City dug up and repaved Home Road.³⁶

53. Members of NMM also supported the relocation of the transmission line. Ms. Wannamaker, a member of NMM, suggested in her evidence that ENMAX should explore a route using the City's transportation utility corridor near Shaganappi Trail, and questioned whether there were opportunities to co-ordinate the City's plans for the roadway with relocation of the line.³⁷

4.3 Commission findings

54. The Commission has previously recognized that in some circumstances, there may exist only one viable route or reasonable option for proposed transmission facilities. In such circumstances, it is essential that the applicant provide as much information as possible to explain why other, potential alternatives were either not considered or were eliminated from consideration. Based on ENMAX's responses to the Commission's information requests and the testimony of ENMAX witnesses, the Commission accepts ENMAX's explanation for why its application proposed only one option for the Commission's consideration.

³³ Transcript, Volume 1, page 76, line 19 to page 77, line 7.

³⁴ Exhibit 23981-X0039, Malek SIP, April 29, 2019.

³⁵ Transcript, Volume 1, page 151, lines 7-21.

³⁶ Transcript, Volume 1, page 165-166, lines 24-11.

³⁷ Exhibit 23981-X0068, AUC from Wannamaker June 17 2019, PDF page 8.

55. More specifically, the Commission is satisfied that ENMAX's proposal of one option on a "like-for-like" basis is reasonable given that (i) the project is intended to address specific clearance issues associated with a small number of existing transmission structures located in a relatively densely populated area of the city of Calgary, (ii) the existing transmission lines have been in place since the 1960s, and (iii) no route change is required. In these particular circumstances, the Commission considers that ENMAX was not required to develop business cases or to otherwise formally explore every possible option, provided that it engaged meaningfully with stakeholders, and gave reasonable consideration to suggested alternatives and potential mitigation. The Commission's findings on ENMAX's participant involvement program are detailed in Section 5 below; its findings concerning ENMAX's evidence on the alternatives proposed by the interveners is addressed in the paragraphs that follow.

56. With respect to the proposed use of 138-kV structures, the Commission finds that this is a prudent approach when compared to using 69-kV structures, whether steel monopoles or wood poles. The available evidence does not support that the use of 69-kV structures has any added benefits in the circumstances of this application, while the use of standardized 138-kV structures creates efficiencies in repairing or restoring the lines, as indicated by Mr. Campbell. Regardless, the Commission notes that members of NMM did not appear to support any 69-kV alternative and instead argued only in favour of either undergrounding or relocating the transmission lines.

57. Concerning the underground option, the Commission is satisfied that ENMAX offered a persuasive explanation for why the cost of the underground option is neither reasonable nor prudent. Likewise, the Commission finds that ENMAX offered a reasonable and persuasive explanation for why relocation of the lines is not warranted, namely that a new alignment would result in new disturbances to stakeholders along the new alignment as well as higher costs and would not eliminate impacts on stakeholders in Montgomery, in any event.

5 Participant involvement program

5.1 Views of ENMAX

58. ENMAX stated that it developed and executed a participant involvement program that met the notification and consultation requirements set out in Rule 007. The participant involvement program included distribution of project-specific information packages to all landowners, residents and occupants located in the first row of development surrounding the project. ENMAX also posted information about the project on its public website. And, in response to concerns and comments received from stakeholders, ENMAX held an open house to provide an additional venue for communication with stakeholders.³⁸

59. ENMAX further explained that it conducted personal engagement with stakeholders through door-knocking activities and that two separate attempts were made to connect with stakeholders within the first row of development. If contact was not made, the project-specific information package was left at the residence.

60. In response to Ms. Wannamaker's concern that the open house was not held in the Montgomery community but rather in the adjacent community of Bowness, ENMAX

³⁸ Exhibit 23981-X0001, ENMAX Application, PDF page 21, paragraph 36.

acknowledged that it had advertised the open house as occurring in “your community” but stated that it provided the correct address in any event. ENMAX did not believe that there was confusion among stakeholders about the location of the open house, noting that Ms. Wannamaker was one of 18 stakeholders who attended.³⁹

61. In addition to consulting with area residents, ENMAX stated that it engaged with various departments of the City. ENMAX submitted that it consulted with the City to understand if there were opportunities to co-ordinate work, but the City indicated that it had no current plans for upgrades along Home Road.⁴⁰

62. ENMAX submitted that its participant involvement program allowed stakeholders to understand the project and its potential impacts and gave them an opportunity to voice their concerns. In support of this assertion, ENMAX indicated that, in response to concerns from Linda and Bruce McDonald, it had shifted the location of one of the proposed structures to mitigate visual impacts to their satisfaction.⁴¹

5.2 Views of NMM

63. NMM members expressed the view that the participant involvement program was less than satisfactory. Mr. Johnston asserted that “[t]here has not been enough effort in this proposal to engage these Stakeholders, to inform them of their rights, nor have they been given enough time [to] respond.”⁴² Masoumeh Saiyar stated in her statement of intent to participate that she was “not convinced yet if the taller powerline is needed as there is no transparent technical information for [the] public.”⁴³

64. Ms. Wannamaker questioned whether ENMAX had engaged with the community to the extent required, noting that no open house had been held in the community of Montgomery.⁴⁴

65. Mr. Johnston attended the open house conducted by ENMAX and stated that on his way out, an ENMAX employee indicated that she wanted to reach out to him. Mr. Johnston provided the following testimony regarding ENMAX’s level of engagement after the open house:

However, I don't remember her name, but she did indeed reach out and suggested that we could have a conference call or we could get together and discuss it. And to tell you the truth, I hadn't expected to hear anything more from ENMAX.

...

So I had a few more meetings with them, but the tone had certainly changed. The tone had now been that ENMAX was now not quite sure whether this was a maintenance project or if this was a code issue or if this was a transmission upgrade. There was less information forthcoming, and more of the information was giving me issues of why the project couldn't be done rather than how can we make it work.

³⁹ Exhibit 23981-X0083, 2019-07-12-EPC-Home Road Reply Evidence, PDF pages 27-28, paragraph 103.

⁴⁰ Exhibit 23981-X0053, 2019-06-07-EPC Responses to WAN IRs, EPC-WAN-2019MAY31-003, PDF page 3, June 7, 2019.

⁴¹ Exhibit 23981-X0083, 2019-07-12-EPC-Home Road Reply Evidence, PDF page 22, paragraph 70.

⁴² Exhibit 23981-X0047, Letter to Enmax, page 2.

⁴³ Exhibit 23981-X0065, Statement of intent to participate – Masoumeh Saiyar, June 17, 2019.

⁴⁴ Exhibit 23981-X0050, questions regarding the project, May 31, 2019.

5.3 Commission findings

66. Rule 007 requires that a participant involvement program be conducted before a facility application is filed with the Commission. It is a fundamental component of any facility application and applicants must fulfill the public notification and consultation requirements under Rule 007, without exception.

67. In Decision 2011-436, the Commission commented that effective public consultation achieves three purposes: (i) it allows parties to understand the nature of a proposed project; (ii) it allows the applicant and the intervener to identify areas of concern; and (iii) it provides a reasonable opportunity for the parties to engage in meaningful dialogue and discussion with the goal of eliminating or mitigating to an acceptable degree the affected parties' concerns about the project.⁴⁵

68. The Commission finds that the participant involvement program conducted by ENMAX meets the informational requirements of Rule 007 in the following ways:

- Project-specific mail-outs to stakeholders were distributed.
- An open house was held in response to concerns expressed by stakeholders.
- Door-knocking activities were conducted on two separate occasions.
- ENMAX engaged individually with stakeholders, notably the McDonalds and Mr. Johnston in an effort to alleviate concerns.

69. The Commission recognizes that some members of NMM expressed frustration with the location of the open house in the adjacent community and dissatisfaction with the participant involvement program as a whole. The Commission is nevertheless satisfied that ENMAX's participant involvement program met the purposes of consultation articulated above. That is, through the above measures specifically, and as a result of ENMAX's participant involvement program as a whole, parties were provided sufficient information to understand the nature of the project, identify areas of concern, and had a reasonable opportunity to engage in dialogue with the goal of eliminating or minimizing those concerns.

6 Health and safety

6.1 Traffic and pedestrian safety

6.1.1 Views of ENMAX

70. In response to traffic-safety concerns from stakeholders, ENMAX requested information from the City regarding the frequency or likelihood of traffic strikes on immovable structures along Home Road. The City advised that the risk of striking a power pole along Home Road was

⁴⁵ Decision 2011-436: AltaLink Management Ltd. and EPCOR Distribution & Transmission Inc. – Heartland Transmission Project, Proceeding 457, Application 1606609, November 1, 2011, page 57, paragraph 283.

considered low and that any such strikes were of low severity resulting in property damage only.⁴⁶

71. ENMAX noted that the City did not require any mitigation along Home Road with respect to public safety and asserted that the proposed steel monopoles are stronger than the existing steel lattice structures with very low risk of collapse, including as a result of a vehicle strike. ENMAX also stated that in the residential areas along Home Road, the structures would be relocated at least five metres north of their existing locations resulting in increased distance from intersections and therefore reduced likelihood of visual impairments on drivers.⁴⁷

72. ENMAX argued that it is the mandate of the City, not of ENMAX or the Commission, to undertake and assess traffic planning along Home Road. ENMAX noted that the City directs the transmission line alignment through the utility alignment permit process and that traffic safety is a consideration in that regard.⁴⁸ ENMAX submitted that the proposed monopoles would not impact sidewalk widths⁴⁹ and that there was no evidence on record regarding plans to widen the sidewalks along Home Road.⁵⁰

73. ENMAX further submitted that there was no evidence to suggest any additional safety risk as a result of the project and that further mitigation associated with the project was unnecessary to improve safety.⁵¹

6.1.2 Views of NMM

74. NMM members expressed concern with the project's potential effect on traffic and pedestrian safety and asserted that ENMAX's failure to adequately consider the safety and accessibility of Home Road should be considered a material deficiency in the application. NMM member Mr. Baker provided photographs⁵² of recent accidents and noted a high frequency of collisions on the hillside section of Home Road, particularly during winter conditions. NMM stated that several houses have had guardrails or concrete barriers placed in front of them due to the frequency of accidents.

75. In NMM's view, the monopoles would be at risk of being struck by vehicles and collapsing, especially if a fully loaded bus or delivery truck were to collide with a structure.⁵³ NMM members also stated that the proposed structures along Home Road would create visibility issues due to their opaque nature, resulting in a safety hazard:

If you're trying to get your car and turn out of the street onto Home Road, you can't necessarily see cyclists coming down the street, you can't see cars coming down the street because there's this massive thing here.⁵⁴

⁴⁶ Exhibit 23981-X0083, 2019-07-12-EPC-Home Road Reply Evidence, PDF page 23, paragraph 75, July 12, 2019.

⁴⁷ Transcript, Volume 2, page 262, lines 2-6.

⁴⁸ Transcript, Volume 2, page 262, lines 17-20.

⁴⁹ Transcript, Volume 1, page 139, lines 23-25.

⁵⁰ Transcript, Volume 2, page 261, lines 4-8.

⁵¹ Transcript, Volume 2, page 262, line 25 to page 263, line 4.

⁵² Exhibit 23981-X0067, AUC Response Final, PDF pages 2-3.

⁵³ Transcript, Volume 1, page 148, lines 13-20.

⁵⁴ Transcript, Volume 1, page 194, lines 18-22.

76. NMM asserted that Home Road is a highly congested, frequently travelled and dangerous road. As such, NMM was concerned that ENMAX had not included a detailed safety section in its application and that no traffic study was conducted.⁵⁵ NMM also submitted that the current sidewalks along Home Road are already less than standard width. NMM argued that the continued existence of a transmission line would prevent the sidewalks from being widened and the larger foundations for the monopoles would exacerbate the issue.⁵⁶

6.1.3 Commission findings

77. As earlier stated, on an application such as this, the AUC's public interest assessment focuses on any incremental effects, (in this section, on traffic and pedestrian safety) resulting from the change in transmission structure, type, placement and height along the subject one-kilometre segment of Home Road compared to the current circumstances.

78. The Commission accepts NMM's anecdotal evidence that collisions occur frequently on Home Road. However, based on the evidence before it, the Commission can find no correlation between the presence or absence of transmission lines and structures along Home Road and the frequency of accidents occurring there. Further, the Commission accepts ENMAX's evidence that the proposed steel monopoles are stronger than the existing lattice structures and therefore less prone to collapse should a vehicle collide with them.

79. The Commission acknowledges the assertions of NMM members that the proposed monopoles are opaque and that they will therefore limit visibility to a greater degree than the existing lattice structures. However, ENMAX explained that the project provides an opportunity, which ENMAX has taken, to modify the placement of the structures to increase the distance from intersections and in turn reduce the likelihood of visual impairment for drivers.

80. Considering all of the above, on balance, the Commission is not persuaded that the project will have an overall negative incremental impact on traffic and pedestrian safety along Home Road such that mitigation is required.

81. Further, the Commission finds that ENMAX has adequately consulted with the City regarding traffic and pedestrian safety and accepts ENMAX's assertion that it is not aware of any future plans for Home Road or the adjacent sidewalks that would be impacted as a result of the project. The Commission also notes that many of the concerns expressed by NMM regarding traffic and pedestrian safety along Home Road, including the need for a traffic study, are planning issues over which neither ENMAX nor the Commission have jurisdiction.

6.2 Electric and magnetic fields

6.2.1 Views of ENMAX

82. ENMAX submitted that the project would produce extremely low frequency electric and magnetic fields (EMF) that constitute a small fraction of the well-established and widely accepted International Commission on Non-Ionizing Radiation Protection guidelines. ENMAX stated that the project would produce EMF levels at one to four per cent of the guideline levels.

⁵⁵ Transcript, Volume 2, page 278, lines 3-14.

⁵⁶ Transcript, Volume 2, page 279, lines 7-24.

83. ENMAX submitted that its views are consistent with the past approach of the Commission, which has given considerable weight to the conclusions of the World Health Organization and Health Canada. ENMAX submitted that both organizations state that there is no demonstrated adverse effect to human health associated with exposure to EMF from transmission lines at extremely low frequency.⁵⁷

84. ENMAX submitted that little or no weight should be given to publications on EMF filed by the interveners as no independent expert evidence was provided. ENMAX claimed this approach would be consistent with past Commission practices including the Red Deer Area Transmission Development decision.⁵⁸

85. ENMAX requested that the Commission apply the same analysis it did in the Heartland decision⁵⁹ and find that there is no evidence that the project will result in adverse health effects associated with EMF exposure and, therefore, no mitigation measures are required.

86. During the hearing, Brad Van Elslande, a senior engineer at ENMAX, described the project as lowering EMF levels when measured at nearby buildings, as compared to the existing lines:

For this project, it's key to note that the new proposed design lowers the EMF exposure by approximately 72 percent compared to the existing magnetic field level and 92 percent compared to the existing electric field level measured at maximum rating, the closest building.⁶⁰

87. Mr. Van Elslande also committed that ENMAX would conduct EMF measurements in response to a stakeholder request to confirm that actual EMF ratings are near expected levels.⁶¹

6.2.2 Views of NMM

88. Some members of NMM expressed concern about the health effects of EMF exposure while others indicated that regardless of the science and health effects, there was a negative perception of EMF that would result in negative impacts to property value. Members of NMM also filed documents dealing with EMF as evidence.⁶² During the hearing, Mr. Algra testified that “[r]egardless of the immediate science, there is a massive public perception of what EMF can do to individuals” and therefore a “perceived impact on property values from the future, especially when an industrial pole that’s 20 feet taller and much larger in diameter is placed in very close proximity to a residential home.”⁶³

⁵⁷ Transcript, Volume 2, page 257, lines 1-11.

⁵⁸ Decision 2014-219: AltaLink Management Ltd. – Red Deer Area Transmission Development, Proceeding 2669, Application 1609677, July 29, 2014.

⁵⁹ Decision 2011-436: AltaLink Management Ltd. and EPCOR Distribution & Transmission Inc. – Heartland Transmission Project, Application 1606609, Proceeding 457, November 1, 2011.

⁶⁰ Transcript, Volume 1, page 119, lines 10-15.

⁶¹ Transcript, Volume 1, page 120, lines 15-17.

⁶² Exhibit 23981-X0059, Selection Bias in Canadian Study, Exhibit 23981-X0060, EUROPAEM EMF Guideline 2016, Exhibit 23981-X0061, Scientific Limits to EMF Exposure, Exhibit 23981-X0077, Electric and Magnetic Fields Associated With the Use of Electric Power, Exhibit 23981-X0078, Main Anderson Substation Appendix C, Electric and Magnetic Fields from Overhead Powerlines and Exhibit 23981-X0080, Complete DEC 2007.

⁶³ Transcript, Volume 1, page 150, lines 11-19.

89. Members of NMM also raised concerns that if the transmission lines were to be energized to 138 kV in the future, that the EMF levels would increase. In the hearing, Mr. Shaarbafi commented that “[a]fter ten years, are we going to increase the capacity of the line, switching [to] high voltage? Now who is coming to talk about the EMF issue at this time? Everything is in place. This is the time to talk about those issues.”⁶⁴

6.2.3 Commission findings

90. The Commission has considered the concerns raised by some members of NMM respecting the potential for EMF exposure resulting from the proposed project in light of the circumstances before it; namely, that the project proposes to replace seven transmission structures with taller structures, but the pre-existing transmission lines will remain in place along much the same alignment. Accordingly, the Commission has focused on the incremental effect of the project as compared to the existing facilities.

91. The Commission accepts the uncontroverted evidence that the project will result in the closest, most impacted buildings realizing a significant reduction in EMF exposure, and therefore finds that the project’s incremental impact will be a material reduction in EMF levels. As a result, mitigation for EMF is not required.

92. The Commission acknowledges NMM’s concern that regardless of actual EMF levels, the perception of EMF exposure resulting in safety concerns, may, in turn, have an impact on property values. The Commission’s findings on property values are detailed in Section 7, below.

7 Property value

7.1 Views of ENMAX

93. ENMAX submitted that given the scope of the project and long-standing, pre-existing overhead lines in the area, the project is unlikely to have any sustained negative incremental impact on property values. ENMAX stated that impacts on property values in urban settings are subjective and site-specific and therefore difficult to quantify. In ENMAX’s view, potential impacts to property values will depend on a number of factors. Mr. Hawrelko provided the following response to counsel for NMM in relation to the visual impact of the new monopoles on property values during the oral hearing:

... there could be many things. Property values go up and down with the economy, with adjacent construction, roadwork. It's a plethora of potential impacts, sir.

It's just very challenging to say the impact here is due to the proximity to the line versus the incremental height of the line versus the roadways versus all the other factors. It's extremely difficult to say -- to segregate what is the impact of the increased height on property values versus all of the other impacts.⁶⁵

94. ENMAX further submitted that there is limited, if any, evidence in this proceeding to suggest that the change in structure type and height would result in a reduction of property

⁶⁴ Transcript, Volume 1, page 182, line 24 to page 183, line 3.

⁶⁵ Transcript, Volume 1, page 34, line 23 to page 35, line 8.

values. ENMAX argued that “[i]n fact, the replacement of lattice structures with more streamline monopole structures may further reduce visual impacts by streamlining the landscape and raising the wires to clear the street level view.”⁶⁶

95. In ENMAX’s view, the property valuation report filed by NMM and authored by Brian Gettel, provides a generic opinion on potential effects of overhead lines on urban and rural property values, and relies on information that is largely irrelevant to this proceeding. It should therefore be given no weight. ENMAX further submitted that Mr. Gettel was not present at the oral hearing to testify and that his conclusions could not be tested through cross-examination.

96. Similarly, in response to NMM’s argument that a decision from the Alberta Surface Rights Board⁶⁷ sets out general principles regarding the impact of transmission lines on property values, ENMAX submitted that the circumstances of that decision were “very different” as they involved greenfield development in a rural agricultural setting and taller structures located directly on the property of the landowner. Accordingly, the Alberta Surface Rights Board’s decision has no relevance to the question of potential property value impacts along Home Road and should not inform the Commission’s assessment of its application.⁶⁸

97. ENMAX argued that while it did not consider the date on which a home was purchased to be determinative, it noted that the Commission has considered this information to be relevant in a previous decision.⁶⁹ ENMAX stated that the evidence indicates that a number of NMM members purchased their homes after the existing line was in place.⁷⁰ ENMAX also submitted that it is the incremental impacts of the project that are relevant to the Commission’s decision⁷¹ and that the Commission has, in a previous decision,⁷² required evidence to support a finding that realigned structures would result in decreased value of properties already in close proximity to existing transmission lines.

7.2 Views of NMM

98. Members of NMM asserted that the project will adversely affect property values. Karim Sharbaafi stated that he purchased his property in 2015, and suggested that housing prices would drop at least 10 per cent due to the proposed project.⁷³ Mr. Algra expressed a similar view:

Our home looks out onto the Bow River and the Rocky Mountains. The addition of large industrial looking steel monopoles will reduce the property value of the home. This loss

⁶⁶ Transcript, Volume 2, page 248, lines 9-18.

⁶⁷ AltaLink Management Ltd. v. Royal West Property Corp., 2014 ABSRB 221.

⁶⁸ Transcript, Volume 2, page 253, line 12 to page 254, line 4.

⁶⁹ Decision 2011-340: Alberta Electric System Operator, AltaLink Management Ltd. and EPCOR Distribution & Transmission Inc. – New Transmission line 1043L and Alteration of Transmission Line 904L West of Edmonton/Jackfish Area, and Conductor Replacement and New Structure on Existing Transmission Lines 904LE/904LW in the Edmonton Area, Proceeding 754, Applications 1606285, 1606407, 1606409, 1606664 and 1606666, August 12, 2011.

⁷⁰ Transcript, Volume 2, page 243, lines 10-20.

⁷¹ Transcript, Volume 2, page 226, lines 20-25.

⁷² Transcript, Volume 2, page 251, lines 13-22; Decision 2011-487: ENMAX Power Corporation, Replace and Realign Transmission Line 138-26.81, December 20, 2011, paragraph 22.

⁷³ Exhibit 23981-X0063, System generated PDF, June 17, 2019.

of value will not be compensated by Enmax. An underground corridor would maintain the property values that we have experience[d].⁷⁴

99. Ms. Wannamaker stated that property values are determined by a number of factors, and according to the City website, market value is negatively impacted by the presence of power poles and is positively impacted by having river and mountain views.⁷⁵

100. In Mr. Johnston's view, the project will negatively affect real estate values, especially those properties that are directly below the transmission lines.

101. NMM argued that it was not only homeowners directly adjacent to the transmission lines that would be impacted by the project, but that they "will also have a negative impact to those other Montgomery homes that will now see these monopoles when they couldn't see the lattice towers before."⁷⁶

102. NMM relied on a decision by the Alberta Surface Rights Board⁷⁷ for the following propositions which in its view have general application to the affect of transmission lines on property values:⁷⁸

- Transmission lines have a negative visual impact.
- Transmission lines have an effect that decreases with distance.
- Transmission lines are perceived negatively in at least some markets.
- Visual buffers minimize the negative impact.
- The land will be less desirable with the transmission line in place.

7.3 Commission findings

103. Because ENMAX is applying to replace seven existing structures, the Commission's focus in this proceeding is to consider the incremental impact, if any, of the project on, amongst other things, property values.

104. While the Commission acknowledges the property valuation concerns raised by NMM, including the impact of perceived EMF levels on property value, the Commission continues to be of the view that concerns related to property value impacts require specialized expertise and evidence for the Commission to conclude that a given project will have an adverse effect on land and property values.⁷⁹ Such evidence must be specific to a particular project rather than general in nature.

⁷⁴ Exhibit 23981-X0069, System generated PDF, June 18, 2019.

⁷⁵ Exhibit 23981-X0091, Letter from Ms. Wannamaker, August 16, 2019.

⁷⁶ Transcript, Volume 2, page 282, lines 7-12.

⁷⁷ AltaLink Management Ltd. v. Royal West Property Corp., 2014 ABSRB 221.

⁷⁸ Transcript, Volume 2, page 265, lines 2-13.

⁷⁹ Decision 2011-436, AltaLink Management Ltd. and EPCOR Distribution & Transmission Inc., Heartland Transmission Project, Application 1606609, Proceeding 457, November 1, 2011, page 16.

105. While NMM raised a number of property value concerns, these largely relate to the presence of power lines in general as opposed to any incremental property value impact associated with the project. Moreover, no property value evidence specific to this project was submitted, nor was any expert available for cross-examination on the topic of the effect of the project on property values of residences in the subject area. The Commission therefore has no evidence to support a finding that the project will result in an incremental reduction in property values of residences in the area.

8 Visual impacts

8.1 Views of ENMAX

106. ENMAX acknowledged that the project could result in a different esthetic compared to the existing lines; however, it expressed the view that there is limited, if any, evidence to suggest that the change in structure type and height would result in a material adverse visual impact. ENMAX explained its position as follows:

EPC is of the view that esthetics are subjective and site specific and understands that the project could result in different visual impacts compared to the existing line. These impacts might be perceived positively or negatively, depending on a particular stakeholder's location and esthetic preferences.

It's important to frame concerns about visual impacts in the appropriate context; that being incremental impacts, as compared to a nearly 60-year-old overhead transmission line located in a densely populated urban area with other longstanding and changing viewscape obstructions.⁸⁰

107. With respect to the size of the footprint associated with the proposed monopoles compared to the existing steel lattice structures, Mr. Campbell indicated that the footprints are comparable and approximately the same size:

...They're very comparable. I don't have the dimensions of the existing structures, but from my memory, the footprint is square or rectangular in nature and it's approximately a metre by a metre.

The diameter of the monopoles that we are proposing are 1 metre in diameter and the concrete foundation is approximately 1 1/2 metres.

So regardless, you know, they're approximately the same size. I don't have the actual dimensions of the existing lattice towers, but from my memory, they are approximately the same size.⁸¹

8.2 Views of NMM

108. NMM expressed concerns with adverse visual impacts associated with the project. In its view, the project would not be an appropriate solution for the community. Janice Mackette of the Montgomery Community Association commented that the existing towers are "approximately

⁸⁰ Transcript, Volume 2, page 247, line 22 to page 248, line 8.

⁸¹ Transcript, Volume 1, page 139, lines 11-22.

the height of existing mature trees in the surrounding area” and “although they have a rough industrial esthetic, which in itself is at odds with the residential setting, their scale makes them appear to visually -- to be visually connected to the streetscape and, therefore, connected to the community -- to the residential setting.”⁸²

109. Ms. Wannamaker stated that the proposed monopoles are on the front and side lawns of properties and that there is no visual screen between the proposed poles and many homes. She went on to state that the poles will be visible from most of the community given their location on a hill. In Ms. Wannamaker’s view, one of the selling features of homes in the community is the views of the hills and mountains that they afford residents and guests.⁸³

110. During the oral hearing, David Baker expressed his concerns with visibility issues as a result of the significant diameter of the proposed monopoles at street level.⁸⁴

111. NMM also argued that the proposed steel monopole structures will impact views as they are not transparent, compared to the semi-transparent steel lattice structures currently in place which allow for individuals to see through them.⁸⁵

8.3 Commission findings

112. The Commission acknowledges that the project will change the viewscape along Home Road; however, how that change will be perceived is subjective and site specific. Some individuals may prefer the monopoles while others may not. The Commission accepts ENMAX’s evidence that the footprint of the steel monopole structures is similar to that of the existing structures. While the monopoles will be taller than the existing lattice towers and may therefore be visible from further away, it is also the case that the transmission and distribution lines themselves will be strung higher on the poles and may therefore cause less visual impact than the existing lines. Having taken these various factors into consideration, along with evidence of long-standing visual disturbance in the area, the Commission finds that it is not possible to determine whether the project will have a positive or negative incremental visual effect as compared to the current transmission line configuration.

9 Environmental and other considerations

113. ENMAX retained Tetra Tech Canada Inc. (Tetra Tech) to assess the existing land use conditions of the project area to identify environmental features that could be affected by the construction of the project. Tetra Tech identified mitigation measures to be implemented during construction.⁸⁶ Tetra Tech concluded that “Residual effects to the surrounding environment are not anticipated given that the Project is located in a previously disturbed area surrounded by residential and commercial development and that appropriate mitigation measures will be implemented and maintained”.⁸⁷ ENMAX stated that the mitigation measures recommended by Tetra Tech would be incorporated into its environmental management plan, to be prepared and

⁸² Transcript, Volume 1, page 197, lines 6-15.

⁸³ Exhibit 23981-X0068, AUC from Wannamaker June 17 2019, page 7.

⁸⁴ Transcript, Volume 1, page 194, lines 7-15.

⁸⁵ Transcript, Volume 1, page 27, line 8 to page 28, line 25.

⁸⁶ Exhibit 23981-X0005, Appendix E-1 - Tetra Tech Environmental Evaluation, PDF pages 5, 6 and 8.

⁸⁷ Exhibit 23981-X0005, Appendix E-1 - Tetra Tech Environmental Evaluation, PDF page 9.

implemented prior to construction.⁸⁸ ENMAX confirmed that it would submit its environmental management plan once finalized.

114. ENMAX submitted that construction of the project is expected to take six to eight weeks and would be undertaken on a block-by-block basis, with construction activities on each block expected to be completed within 10 days. ENMAX confirmed that construction is not anticipated to take place during the raptor breeding season identified in the Tetra Tech report as being between April 15 and August 30. ENMAX also stated that it would comply with Alberta Environment and Park's (AEP) *Environmental Protection Guidelines for Transmission Lines*.

115. ENMAX stated that under a traffic accommodation plan, all temporary traffic accommodation during construction would be co-ordinated with, and approved by, the City. The traffic accommodation plan would contemplate accommodation for emergency vehicles, public transit, residents, commuters and recreation users.

116. ENMAX submitted that it has adopted construction practices, which include dust mitigation and noise control, including the installation of mufflers on all equipment to minimize any adverse impacts from construction activities.

117. ENMAX stated that it would comply with all City guidelines for road use and safety during project construction.

118. ENMAX stated that it would execute construction activities between 7 a.m. and 5 p.m. unless work is required to be performed outside these hours due to traffic constraints. In all cases, ENMAX stated that it would comply with the requirements of Rule 012: *Noise Control*.

119. ENMAX stated that its practice is to notify stakeholders a minimum of two weeks prior to construction to outline the type of work planned, communicate the anticipated timeframe and discuss any disruptions that may occur.⁸⁹

9.1 Commission findings

120. Based on the Tetra Tech report and in the absence of evidence to the contrary, the Commission is satisfied that given the scope and location of the project, its environmental effects (including effects on sensitive species) will be minimal and can be mitigated to an acceptable degree through ENMAX's commitment to comply with AEP's *Environmental Protection Guidelines for Transmission Lines* and the mitigation methods identified in the environmental evaluation completed by Tetra Tech (including that construction not occur during the raptor breeding season between April 15 and August 30).

121. In approving the project the Commission therefore imposes the following condition on its approval:

- a. ENMAX shall submit an environmental management plan to the Commission prior to the start of construction and shall implement all mitigation measures identified in that plan.

⁸⁸ Exhibit 23981-X0001, ENMAX Application, PDF page 23.

⁸⁹ Exhibit 23981-X0083, 2019-07-12-EPC-Home Road Reply Evidence, PDF page 24, paragraph 83.

122. The Commission is also satisfied that the technical and environmental aspects of the project, as submitted by ENMAX, fulfill the requirements of Rule 007. Further, it finds that a noise impact assessment under Rule 012 was not required as no noise producing equipment is proposed.

123. The Commission finds that any impacts due to construction activities are of a transient nature expected to occur over a six to eight-week period and that these impacts can be minimized or mitigated to a reasonable degree. In the Commission's view, ENMAX's construction plan, which progresses on a block-by-block basis and limits construction hours where possible, to the hours between 7 a.m. and 5 p.m. minimizes these impacts on area residents to an acceptable degree as does ENMAX's commitment to: comply with all City guidelines for road use and safety during project construction; comply with the requirements of Rule 012; and notify stakeholders of construction activities two weeks in advance.

10 Decision

124. After considering the record of this proceeding, for the reasons articulated herein and subject to the condition outlined in this decision the Commission finds that, in accordance with Section 17 of the *Alberta Utilities Commission Act*, approval of the project is in the public interest, having regard to the social, economic, and other effects of the project, including its effect on the environment. The Commission further finds that ENMAX has satisfied the requirements of Rule 007.

125. Pursuant to sections 14, 15, 19 and 21 of the *Hydro and Electric Energy Act*, the Commission approves the application and grants ENMAX Power Corporation the approval set out in Appendix 1 – Transmission Line Permit and Licence 23981-D02-2019 and Appendix 2 – Transmission Line Permit and Licence 23981-D03-2019 (the appendixes will be distributed separately).

Dated on October 16, 2019.

Alberta Utilities Commission

(original signed by)

Carolyn Hutniak
Panel Chair

(original signed by)

Joanne Phillips
Commission Member

(original signed by)

Kristi Sebalj
Commission Member

Appendix A – Proceeding participants

Name of organization (abbreviation) Company name of counsel or representative
ENMAX Power Corporation (ENMAX) K. Slipp E. Bouey P. Khan
No Montgomery Monopoles (NMM) M. Niven, Q.C. Z. Hussain, student-at-law
H. Malek (unrepresented)
L. and B. McDonald (unrepresented)

Alberta Utilities Commission
Commission panel C. Hutniak, Panel Chair K. Sebalj, Commission Member J. Phillips, Commission Member
Commission staff R. Watson (Commission counsel) K. Macnab (Commission counsel) T. McCusker K. Surgenor

Appendix B – Oral hearing – registered appearances

Name of organization (abbreviation) Name of counsel or representative	Witnesses
ENMAX Power Corporation (ENMAX) K. Slipp E. Bouey P. Khan	K. Hawrelko M. Campbell B. Van Elslande B. Hensel
No Montgomery Monopoles (NMM) M. Niven, QC Z. Hussain, student-at-law	R. Johnston K. Shaarbafi D. Baker M. Wannamaker M. Algra J. Mackett