



Enbridge Inc.

Whitetail Peaking Station Power Plant

December 24, 2014

The Alberta Utilities Commission
Decision 2014-376: Enbridge Inc.
Whitetail Peaking Station Power Plant
Application No. 1610321
Proceeding No. 3080

December 24, 2014

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The Alberta Utilities Commission
Fifth Avenue Place, Fourth Floor, 425 First Street S.W.
Calgary, Alberta
T2P 3L8

Telephone: 403-592-8845
Fax: 403-592-4406

Website: www.auc.ab.ca

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1 Introduction

1. In this decision, the Commission must decide whether it is in the public interest to approve the construction and operation of a natural gas-fired power plant. Enbridge Inc. (Enbridge) filed an application with the Alberta Utilities Commission (AUC or the Commission), pursuant to sections 11, 14 and 15 of the *Hydro and Electric Energy Act*, for approval to construct and operate a 186-megawatt (MW) natural gas-fired simple-cycle generating plant in the Peace River area, to be known as the Whitetail Peaking Station (the power plant) and a substation to be designated as Whitetail 976S (collectively, the project). The application was registered on February 18, 2014, as Application No. 1610321 and Proceeding No. 3080. The project would be located in the Northern Sunrise County of Alberta, and approximately 25 kilometres northeast of the town of Peace River.

2. The Commission issued a notice of application for Proceeding No. 3080 on May 9, 2014, which provided information to anyone who wished to express their objections to, concerns about, or support for the application. Submissions to the Commission were to be made by June 4, 2014. The notice was sent directly to landowners, occupants, agencies and other interested parties within 4,000 metres of the project as identified by Enbridge and was also published on the AUC website. Because of a publishing error, the notice of application did not appear in any local newspaper. A revised notice of application was consequently issued on May 22, 2014, for newspaper publication and was published in the Peace River Record Gazette on May 28, 2014. The revised notice of application extended the deadline for submissions until June 11, 2014.

3. On June 13, 2014, Enbridge filed an amendment to the application. The amendment proposed to change the location of the stormwater pond within the site and the nature of the proposed pond was changed from evaporative to test-and-release. The changes to the stormwater pond resulted in a relocation of the power plant approximately 75 metres to the east. The overall power plant site, in SE 29-85-19-W5M, was not changed in the amendment. An updated noise impact assessment (NIA) and drainage plan were filed in support of the amended site configuration.

4. The Commission issued a notice of application amendment for Proceeding No. 3080 on June 30, 2014, which provided information to anyone who wished to express their objections to, concerns about, or support for the amended application. Submissions to the Commission were to be made by July 23, 2014. The notice was sent directly to landowners, occupants, agencies and other interested parties within 4,000 metres of the project as identified by Enbridge. The notice of application amendment was published on the AUC website and in the Peace River Record Gazette on July 9, 2014.

5. The Commission received three statements of intent to participate in response to the notice of application and one submission in response to the notice of application amendment.

6. Doug and Merna Dallyn (collectively, the Dallyns) and their company Nyllad Enterprises Ltd. (Nyllad) on May 24, 2014, and May 23, 2014, respectively submitted statements of intent to participate. In its statement of intent to participate, Nyllad expressed concern with the proximity of the project to its land.¹ Nyllad explained that its business is located within the same valley as the project and that it was concerned with the lack of noise testing completed for cold weather conditions. Nyllad stated that it would prefer if the project were located approximately one mile north (the interveners' proposed site) to reduce impacts. In response to the notice of application amendment, the Dallyns explained that Nyllad holds a building permit for a yard site located in the SE 20-85-19-W5M.² The Dallyns expressed similar concerns with respect to the proximity of the proposed power plant to their land and residence. These concerns related to, among other things, noise from the project and the impact of noise to their enjoyment of their lands and on grazing animals.

7. By a letter dated June 2, 2014, Robin Marshall wrote to the Commission indicating that he was concerned with the proximity of the project to his residence. Mr. Marshall also indicated that he was concerned that noise from the project would decrease his property value.

8. On July 15, 2014, Alberta Transportation responded to the notice of application amendment indicating no concern.

9. On August 1, 2014, the Commission issued a ruling on standing,³ which granted standing to the Dallyns, Nyllad and Mr. Marshall in this proceeding.

10. The Commission issued a notice of hearing on August 11, 2014, which advised that a hearing would be held at the Belle Petroleum Conference and Business Centre in Peace River, Alberta, commencing on October 28, 2014. The notice was distributed by:

- mail to directly to registered parties;
- mail to landowners, occupants, agencies and other interested parties within 4,000 metres of the project as identified by Enbridge;
- publication in the Peace River Record Gazette newspaper on August 20, 2014; and
- publication on the AUC website.

11. The notice of hearing indicated that an information session would be offered by the AUC between Monday, August 18, 2014, and Friday, August 22, 2014, or Monday, August 25, 2014, via teleconference by request. No party requested the information session.

2 Hearing

12. The hearing commenced on October 28, 2014, at the Belle Petroleum Conference and Business Centre in Peace River, Alberta before Commission Member Anne Michaud. The

¹ Exhibit No. 46.01.

² Exhibit No. 55.01 Email from Doug and Merna Dallyn to the Commission on 2014-07-03.

³ Exhibit No. 60.01, AUC Letter – Ruling on Standing, August 1, 2014.

hearing lasted one day. The Commission considers that the record for the proceeding closed on October 28, 2014.

13. A list of all registered parties in Proceeding No. 3080 is provided in [Appendix A](#) to this decision report.

14. Mr. Lorne G. Mann, of Mann & Robinson Barristers and Solicitors, represented the Dallyn Area Landowners (the DAL group), a landowner group that consisted of the Dallyns, Nyllad, and Mr. and Ms. Marshall.⁴

15. A list of persons who appeared at the hearing for Proceeding No. 3080 is provided in [Appendix B](#).

3 Role and authority of the Commission

16. The Commission regulates the construction and operation of power plants in Alberta. The power plant proposed by Enbridge is a “power plant” as that term is defined in subsection 1(K) of the *Hydro and Electric Energy Act*. Section 11 of the *Hydro and Electric Energy Act* states that no person may construct or operate a power plant without prior approval from the Commission. In addition, sections 14 and 15 of the *Hydro and Electric Energy Act*, direct that approval from the Commission is necessary prior to constructing or operating a substation or a transmission line.

17. Accordingly, Enbridge has applied to construct the project pursuant to sections 11, 14 and 15 of the *Hydro and Electric Energy Act*.

18. When considering an application for a power plant, the Commission is guided by sections 2 and 3 of the *Hydro and Electric Energy Act* and Section 17 of the *Alberta Utilities Commission Act*.

19. Section 2 lists the purposes of the *Hydro and Electric Energy Act*. Those purposes include:

- to provide for the economic, orderly and efficient development and operation, in the public interest, of the generation of electric energy in Alberta;
- to secure the observance of safe and efficient practices in the public interest in the generation of electric energy in Alberta; and
- to assist the government in controlling pollution and ensuring environment conservation in the generation of electric energy in Alberta.

20. Section 3 of the *Hydro and Electric Energy Act* requires the Commission to have regard for the purposes of the *Electric Utilities Act* when assessing whether a proposed power plant is in the public interest. The purposes of that act include the development of an efficient electric industry structure and the development of an electric generation sector guided by competitive market forces.

⁴ Penny Marshall was identified as being part of the DAL group at the hearing; Transcript, Volume 1, page 8.

21. Section 3 of the *Hydro and Electric Energy Act* further directs that the Commission shall not have regard to whether the proposed power plant “is an economic source of electric energy in Alberta or to whether there is a need for the electric energy to be produced by such a facility in meeting the requirements for electric energy in Alberta or outside of Alberta.”
22. Section 17 of the *Alberta Utilities Commission Act* states that the Commission shall:
- ...in addition to any other matters it may or must consider in conducting the hearing or other proceeding, give consideration to whether construction or operation of the proposed... power plant... is in the public interest, having regard to the social and economic effects of the ...plant... and the effects of the ...plant... on the environment.
23. In Decision [2001-111](#),⁵ the Commission’s predecessor, the Alberta Energy and Utilities Board, described in the following passage how it considers the public interest in relation to an application for a power plant:
- The determination of whether a project is in the public interest requires the Board to assess and balance the negative and beneficial impacts of the specific project before it. Benefits to the public as well as negative impacts on the public must be acknowledged in this analysis. The existence of regulatory standards and guidelines and a proponent’s adherence to these standards are important elements in deciding whether potential adverse impacts are acceptable. Where such thresholds do not exist, the Board must be satisfied that reasonable mitigative measures are in place to address the impacts. In many cases, the Board may also approve an application subject to specific conditions that are designed to enhance the effectiveness of mitigative plans. The conditions become an essential part of the approval, and breach of them may result in suspension or rescission of the approval.
24. The Commission considers that this approach to assessing whether a proposed project is in the public interest is consistent with the purpose and intent of the statutory scheme. Further, the Commission considers that this approach provides an effective framework for the assessment of projects that require multiple approvals or authorizations.
25. In reaching the determinations set out in this decision, the Commission has considered all materials comprising the record of this proceeding, including the evidence and submissions provided by each party. References in this decision to specific parts of the record are intended to assist the reader in understanding the Commission’s reasoning relating to a particular matter and should not be taken as an indication that the Commission did not consider all relevant portions of the record as it relates to that matter.

4 Discussion

4.1 Project description

26. Enbridge proposed the construction and operation of a power plant that would consist of four General Electric LM6000 PF natural gas turbines operating in simple-cycle for a total installed capacity of 186 MW.

⁵ Decision 2001-111: EPCOR Generation Inc. and EPCOR Power Development Corporation – 490-MW Coal-Fired Power Plant, Application No. 2001173, December 21, 2001.

27. The project would also include a 480-volt, 500-kilowatt emergency generator for essential services such as egress lighting, electric heating and heat tracing, and a control system.
28. Enbridge also requested approval to construct and operate the Whitetail 976S substation to be located within the project site boundary. The Whitetail 976S substation would be comprised of four 13.8/144-kilovolt step-up transformers and five 144-kilovolt circuit breakers.
29. Enbridge indicated that it was aware that it cannot operate the power plant until the interconnection and associated connection facilities are approved by the Commission, and that this would entail applications to the Commission from ATCO Electric Ltd. and the Alberta Electric System Operator.
30. Should it receive the Commission's approval, Enbridge anticipated that construction of the project would commence in early 2015, would take approximately 14 months, and be fully operational by mid-2016.
31. The noise aspects of the application are discussed in Section 4.2 of this decision, consultation aspects in Section 4.3, siting aspects in Section 4.4 and environmental aspects in Section 4.5.

4.2 Noise

4.2.1 Views of Enbridge

32. Enbridge submitted a noise impact assessment, completed by Stantec Consulting Ltd. (Stantec), dated October 31, 2013.⁶ As a part of the amendment to the application, Enbridge submitted a revised noise impact assessment dated May 30, 2014, which was also completed by Stantec.⁷ The revised NIA indicated that since the original NIA was submitted, the project design was revised to change the general equipment arrangement. Specifically, the two 1,000-kilowatt compressor units had been replaced with three 500-kilowatt units (two units operating, one unit on standby).
33. The revised NIA modelled the power plant as if it were continuously running at full capacity, and included 10 minutes of increased noise to account for start-up or shutdown once in each of the daytime and the nighttime periods as defined in AUC Rule 012: *Noise Control* (AUC Rule 012).⁸ The revised NIA assessed compliance with the permissible sound level (PSL) at three residential receptor locations (dwellings) within 2.5 kilometres of the project boundary. The revised NIA indicated that the cumulative sound levels are predicted to be in compliance with the PSL requirements of AUC Rule 012 at all receptor locations assessed.
34. On October 24, 2014, as part of its rebuttal evidence, Enbridge filed additional noise information⁹ completed by Stantec in response to concerns from interveners. The additional noise information established new PSL values for the existing Dallyn residence (R3), assessed the wintertime noise impact, assessed the potential for low frequency noise at Mr. Marshall's residence (R2), and included a cumulative sound level assessment for both summertime and

⁶ Exhibit No. 7, Appendix 5 Noise Impact Assessment.

⁷ Exhibit No. 53.05, Noise Impact Assessment.

⁸ Exhibit No. 77.09, Enbridge reply evidence – Whitetail Appendix 7 – WPS Additional Information – Noise, PDF page 5.

⁹ Exhibit No. 77.09, Enbridge reply evidence – Whitetail Appendix 7 – WPS Additional Information – Noise.

wintertime conditions at all receptor locations in the study area, including the proposed Dallyn residence (R4).

35. At the hearing, Mr. de Haan, the owner of dBA Noise Consultants Ltd. who was retained by Stantec to prepare the NIAs, stated on behalf of Enbridge that the location of the proposed Dallyn residence (R4), could not be exactly determined, but was situated south of the project boundary at a distance of approximately 1.3 kilometres.¹⁰

36. The additional noise information compared the PSL values of AUC Rule 012, which were determined to be 40 dBA¹¹ L_{eq}¹² nighttime and 50 dBA L_{eq} daytime for receptors R1 (the closest current residence), R2, and R4, to the predicted cumulative sound level with the addition of the project.

37. For the existing Dallyn residence (R3), Enbridge submitted that there would be elevated PSL values of 45 dBA L_{eq} nighttime and 55 dBA L_{eq} daytime as a result of this receptor's proximity to a heavily travelled road, Highway 986.¹³ Enbridge included traffic volume data to support its submission that Highway 986 is a heavily travelled road.

38. Enbridge indicated that there were no other energy-related facilities located within three kilometres of the project that would contribute to the cumulative sound level.

39. In the additional noise information, the terrain north of the power plant was described as generally flat with differences in terrain height of approximately 10 metres and that there was no hill within over a mile. Some noise sources, including the exhaust stacks associated with the power plant, exceeded the terrain height differences. Mr. de Haan explained that moving the power plant one mile north to the interveners' proposed site so that a hill may block some of the noise would not reduce the cumulative sound level at any of the receptors.

40. The additional noise information included a cumulative sound level assessment at the four receptors under wintertime conditions. The additional noise information indicated that, under wintertime conditions, receptor R4 was predicted to have a cumulative sound level of 40.3 dBA L_{eq} nighttime, and therefore was not predicted to be in compliance with the PSL. However, the additional noise information also suggested that this could be mitigated by reducing the sound power level from expansion joints and that if such a measure were implemented, compliance with the PSL values under wintertime conditions at all receptor locations assessed would be ensured.

41. At the hearing, Mr. de Haan indicated that Enbridge recognized that AUC Rule 012 determines compliance with the PSL requirements under summertime conditions.¹⁴ However, Mr. O'Connell, Director Major Projects Enbridge Midstream and Enbridge Pipelines Inc., made a commitment, on behalf of Enbridge, to install the reduced sound power level expansion joints

¹⁰ Transcript, Volume 1, pages 27 and 28.

¹¹ A-Weighted decibel.

¹² energy equivalent sound level.

¹³ AUC Rule 012 defines a heavily travelled road as a highway or other road where 90 or more vehicles travel during the nighttime period consistently for any one month period in a year.

¹⁴ Transcript, Volume 1, page 127.

although the power plant is predicted to meet the PSL under summertime conditions¹⁵ and to implement further noise control measures if noise at receptors R1 and R4 exceeds the PSL.¹⁶

42. Enbridge committed to validate the cumulative sound level predictions after commissioning the power plant. Mr. de Haan stated that a noise control plan had not been discussed in detail with Enbridge, but recommended one that would involve noise measurements of the facility equipment at the power plant to verify vendor-guarantee noise level emissions and calibration of the noise model using the updated measurements.¹⁷ Mr. O'Connell committed to completing a noise study including near-field measurements and a calibration of the noise model, and receptor-based sound level measurements to confirm compliance with the PSL if the calibrated model indicates non-compliance at any of the receptor locations.¹⁸

43. The revised NIA and the additional noise information evaluated the potential for a low frequency noise contribution from the project and included dBC¹⁹ minus dBA calculations required by AUC Rule 012. The low frequency noise assessment found that the dBC minus dBA values are higher than 20 decibels (dB) at all four residential receptor locations assessed; consequently, the first part of the two-part low frequency noise test was met. Enbridge explained that an assessment of tonality for the 1/3 octave band between 20 Hertz (Hz) and 250 Hz was not included because the detailed information required for a tonality assessment was not available.

4.2.2 Views of the DAL group

44. The DAL group raised concerns with respect to noise from the power plant. The DAL group's evidence stated that the power plant would have an adverse impact on Ms. Dallyn's hearing issues, would negatively impact their quality of life, the value of their property and their enjoyment of their planned retirement home.²⁰ Mr. Dallyn testified at the hearing that Ms. Dallyn, who has had ear surgeries, is most bothered by low frequency noise and vibration.²¹

45. The DAL group's evidence took issue with the noise impact assessment only modelling the sound level impact of the project during summertime conditions and not wintertime conditions where sound level impact would be perceived to be greater.

46. The DAL group's evidence suggested that locating the power plant on the interveners' proposed site would provide geographical barriers, such as hills and a forest, in addition to the increased distance, which would lessen the noise impacts on residences. In response to Enbridge's submission that there was no hill which would act as a sound barrier in the area, Mr. Dallyn described the hill as being the highest hill in the community.²²

¹⁵ Transcript, Volume 1, pages 127 and 128.

¹⁶ Transcript, Volume 1, page 131.

¹⁷ Transcript, Volume 1, pages 132 to 134.

¹⁸ Transcript, Volume 1, page 134.

¹⁹ C-weighted decibel.

²⁰ Exhibits 62.01, Dallyn Area Landowners Group submission - Marshall, and 62.02, Dallyn Area Landowners Group submission - Dallyn.

²¹ Transcript, Volume 1, pages 198 to 201.

²² Transcript, Volume 1, page 171.

4.3 Consultation

4.3.1 Views of Enbridge

47. BowMont Capital and Advisory Ltd. originally commenced the background and supporting work for the application, including the commencement of the public consultation program. Enbridge acquired the rights to continue the development of the project and on November 5, 2013, informed stakeholders that it had taken over the project from BowMont Capital and Advisory Ltd.
48. The application identified all occupants, residents and landowners within 4,000 metres of the power plant site. The closest residence is located approximately 1.4 kilometres from the project.
49. Enbridge conducted a participant involvement program for the project, which included notifying all landowners, residents and occupants within a four-kilometre radius of the project, as well as other interested parties including government agencies, municipalities and industry. Enbridge held an open house on May 2, 2013, and a coffee talk on December 5, 2013. Enbridge consulted with landowners and occupants within 2,000 metres in person or over the telephone.
50. Enbridge stated that it notified and consulted the Woodland Cree First Nation and Duncan's First Nation as part of its aboriginal consultation activities. Enbridge added that it identified which aboriginal communities could potentially be impacted by the project by reviewing land use information and collaborating with Alberta Environment and Sustainable Resource Development (ESRD). Enbridge stated that no project-specific concerns were identified by any aboriginal group.
51. Among other notification and consultation records, Enbridge submitted the storyboards from its coffee talk, which included a project-specific overview of what was proposed, project schedules, renderings, air quality assessments, and noise information.²³ The open house information was similar but generally more detailed.²⁴
52. On June 12, 2014, Enbridge notified stakeholders of its amendment to the project site relating to the location of the drainage pond and equipment locations.
53. During consultation, Enbridge indicated that stakeholders suggested two alternate sites for the project, one being the interveners' proposed site and the other from Northern Sunrise County, both of which would have placed the project on the Three Creeks Provincial Grazing Reserve. Enbridge contacted the Operations Division of ESRD regarding siting the project on the grazing reserve and was informed that the project should be, to the extent possible, sited outside the reserve. Enbridge did not notify or consult landowners in the area about the stakeholder-proposed project locations.
54. On July 11, 2014, Enbridge filed a letter from NAV Canada that indicated it had no objection to the project. Enbridge stated that an Aeronautical Obstruction Clearance was not required by Transport Canada for the project.

²³ Exhibit No. 21, Final ENBWhitetail storyboards.

²⁴ Exhibit No. 18, BowMont presentation.

55. Enbridge stated that it relocated a gas pipeline planned to supply fuel for the project off land owned by Nyllad²⁵ in response to concerns raised in consultation,

56. Enbridge offered the DAL group a mediation session with an independent mediator after the Commission's notice of hearing was issued, however the members of the DAL group declined to participate in the mediation.

4.3.2 Views of the DAL group

57. The DAL group stated in its evidence that there was minimal meaningful consultation and insufficient information on the project's proposed location. Further, it indicated that there was no consultation on the DAL group's preferred siting.

58. At the hearing, the DAL group argued that Enbridge's consultation was inadequate because it did not include the Lubicon Lake Nation in its consultation of First Nations.²⁶

59. In its evidence the DAL group also stated that the information provided by Enbridge on the power plant's impacts, discharges and construction was insufficient.

60. Mr. Dallyn testified that he decided that he would not participate in the mediation offered by Enbridge because it was offered approximately one month before the hearing so he thought there was not sufficient time.²⁷ Mr. Dallyn further testified he felt that Enbridge was only offering the mediation to check off a box rather than listen to him.²⁸

4.4 Siting

4.4.1 Views of Enbridge

61. The power plant would be located on a 8.1-hectare parcel of Crown land in the southeast quarter of Section 29, Township 85, Range 19, west of the Fifth Meridian. The site is bounded by a 144-kilovolt transmission line and a haul road to the west, and the northern portion of the site has an existing seismic cut line passing through it.

62. Enbridge stated the visual impact of the power plant site is expected to be minimal because of its remote location, the presence of surrounding trees and the distance to the nearest residence. Enbridge submitted that it did not plan any mitigation measures relating to visual impact.

63. Enbridge investigated site alternatives prior to the selection of the proposed site, including a site further to the south. The southern site would have had significantly more environmental disturbance because of the extra nine kilometres of gas pipeline required.

64. Enbridge also investigated site alternatives proposed during consultation, including the interveners' proposed site, and determined that the project site, as proposed in its application, remained its preferred location.

²⁵ Exhibit No. 77.01, Enbridge reply evidence.

²⁶ Transcript, Volume 1, pages 232 and 233.

²⁷ Transcript, Volume 1, page 171.

²⁸ Transcript, Volume 1, page 171.

65. Enbridge stated that it took into consideration moving the project north onto the Three Creeks Grazing Reserve, as requested by the DAL group. However, the proposed intervener site would result in greater environmental disturbance because a longer gas pipeline, more crossings of Carmon Creek, and more tree clearing associated with the longer gas pipeline would be required.
66. Enbridge did not apply to the Commission for any alternative site options.
67. In response to concerns from the DAL group, Enbridge conducted additional research into the project's effects on the air shed and water shed. Enbridge concluded that the project site as well as the alternate sites, including the interveners' proposed site, are all located in the same water shed and air shed.
68. At the hearing, Enbridge argued that property value issues are complex technical issues requiring specialized knowledge, and that the DAL group did not establish how the project may adversely affect property values.²⁹
69. The alternate site proposed by the DAL group would place the project on the Three Creeks Provincial Grazing Reserve. Enbridge stated that ESRD provided feedback on siting within the grazing reserve. Specifically, ESRD stated that siting on the reserve would have "impact on cattle, loss of grazing revenue, management of gates, dust control, vegetation control and impact on recreational users of the reserve. Furthermore, the forestry office would not be prepared to authorize locating in the grazing pasture area."³⁰ Enbridge submitted email correspondence from ESRD,³¹ which provided ESRD's views on locating a power plant within the grazing reserve.
70. At the hearing, Mr. O'Connell, on behalf of Enbridge, stated that there are no plans to expand the power plant and that there is no room at the site to expand.³²

4.4.2 Views of the DAL group

71. The DAL group submitted in its evidence that it wanted the power plant to be sited on the interveners' proposed site located within SE 32-85-19-W5M. The DAL group stated that its proposed siting would lessen the adverse impacts relating to a planned cattle operation, health effects related to noise and negative effects on property value. Further, the DAL group stated that the power plant, as proposed, would affect the planned Dallyn home to be located on Nyllad lands.
72. The DAL group asserted that moving the power plant north to the interveners' proposed site would place the project in a different air shed and water shed, which would also lessen the impacts.
73. The DAL group submitted as part of its evidence an August 6, 2013 letter from Northern Sunrise County where the council suggested moving the power plant "North over to

²⁹ Transcript, Volume 1, page 229.

³⁰ Application, Outstanding concerns and how they have been addressed, page 10.

³¹ Exhibit No. 77.05, 2014-09-12 AESRD Email.

³² Transcript, Volume 1, page 152.

the edge of the community pasture on NE 32-85-19-W5M or SE 32-85-19-W5M or into the Community pasture so as not to have to remove any more trees from the trap line area.”³³

74. At the hearing, Mr. Mann questioned Enbridge on its expansion plans,³⁴ and Mr. Dallyn testified that he believed Enbridge had plans to expand the power plant in the future.³⁵

4.5 Environment

4.5.1 Views of Enbridge

75. The project would be located in Northern Sunrise County in the Lower Peace Region of Alberta, which does not currently have a provincial land-use framework in force. Enbridge stated the project would align with environmental initiatives outlined in the Northern Sunrise County Municipal Development Plan, including the application of ESRD’s Integrated Resource Management policies.

76. Enbridge stated that the project would be located within the Boreal Forest Natural Region and the Dry Mixed wood Natural Subregion. The site has treed muskeg to the south and a borrow pit to the north.

77. Enbridge stated that the power plant would be equipped with a dry low emissions system to reduce nitrogen oxides (NO_x) and carbon monoxide (CO) emissions and that it would operate and maintain the power plant to ensure it reduces the NO_x emission to below 15 parts per million by volume corrected to 15 per cent oxygen over a load range of 75 per cent to 100 per cent over the life of the project. Enbridge added that air emissions were predicted to be below the Alberta Emission Source Standards and are below the Alberta Ambient Air Quality Objectives. Enbridge provided an air quality assessment,³⁶ and an updated air quality assessment following the amendment,³⁷ which included the cumulative effects on air quality from other local sources within five kilometres of the power plant and demonstrated compliance with the Alberta Ambient Air Quality Objectives.

78. Alberta Culture granted *Historical Resources Act* clearance for the project in October 2012 to Stantec. In January 2014, Enbridge applied to change the approval to be in Enbridge’s name and subsequently filed a copy of the *Historical Resources Act* clearance for the project, which was dated May 8, 2014.

79. Enbridge submitted an *Environmental Protection and Enhancement Act* Industrial Approval application to ESRD on February 18, 2014.

80. Enbridge anticipated no adverse effect to wetlands, fish, or fish habitat because these habitats do not occur within the project footprint. Enbridge indicated that it anticipated localized effects to vegetation and wildlife associated with clearing and topsoil salvage, and submitted that these effects would be reversible when the project is decommissioned.

81. Enbridge stated it would develop a project-specific environmental protection plan (EPP) to address and minimize environmental effects by outlining best management practices and

³³ Exhibit No. 66.02, Northern Sunrise County letter 2013-08-06.

³⁴ Transcript, Volume 1, page 73, and pages 106 and 107.

³⁵ Transcript, Volume 1, pages 162 and 163.

³⁶ Exhibit No. 31, Appendix 6 Air Quality Assessment.

³⁷ Exhibit No. 53.06, Air Quality Study.

mitigation measures to be implemented throughout construction. Enbridge indicated the EPP would include, but would not be limited to, “mitigation measures to address the following environmental components: wildlife management/encounters, vegetation management, soils management, hydrostatic testing, spill prevention and response, and waste management. In addition, it will include contingency plans for encountering contaminated soils or archaeological artefacts. Environmental inspection will take place throughout the construction phase of the project to monitor the effectiveness of mitigation during construction. Operational monitoring will include continuous emissions monitoring for NO_x, flow rate and temperature on a continuous basis from the four gas turbine stacks.”³⁸

82. Enbridge made a commitment to ensure that that the project-specific EPP require that all vehicles arriving at the project site be clean and free of debris to minimize the spread of weed species and that all disturbed areas and soil stockpiles be managed for weeds to minimize the establishment of new infestations.³⁹

83. Enbridge consulted with an ESRD land management specialist in the Peace River office. Enbridge committed to review the results of any wildlife surveys with ESRD’s Fish and Wildlife Operations Division, and to incorporate, into the project, applicable mitigation measures recommended by the Fish and Wildlife Operations Division.

84. Enbridge stated that it would comply with the restricted activity periods for migratory and non-migratory birds that apply to the project area and that it would also consult with the Fish and Wildlife Operations Division in advance of vegetation clearing or ground disturbance planned during the restricted activity periods. Pre-disturbance nest surveys would be conducted in the project area prior to work occurring in the restricted activity periods.

85. Further, Enbridge would comply with ESRD’s recommended setback distances for sensitive species and committed to complying with all direction received from ESRD with regard to setbacks and any recommended mitigation measures.⁴⁰

86. Enbridge used the Alberta Conservation Information Management System to determine that no historical records of rare plants or rare ecological communities were identified within or adjacent to the project footprint.

87. In response to questions on the lack of discussions of targeted field studies with a local or regional biologist of the Wildlife Management Unit of the ESRD Operations Division Resource Management Branch, Mr. O’Connell stated that all other required field studies have been completed or are ongoing and will be filed with ESRD when completed. Mr. O’Connell stated that Enbridge would comply with all ESRD requirements.⁴¹

88. With respect to water usage for the project, Enbridge stated that service water for general use and demineralized water for gas turbine wash would be trucked in and stored, that project wastewater would not be discharged into the surrounding environment, and that all plant effluents with the potential to contact oil would be routed to a drainage tank and would be periodically pumped out for off-site disposal by a licensed hauler.

³⁸ Exhibit No. 42.02, Enbridge Responses to AUC IR Round 1.

³⁹ Exhibit No. 44.02, Enbridge Responses to AUC IR Round 2.

⁴⁰ Transcript, Volume 1, page 149.

⁴¹ Transcript, Volume 1, pages 149 and 150.

89. Enbridge stated the project site would be graded, ditched and bermed where necessary, to ensure that all surface runoff from the developed area of the plant site would be collected and routed to the stormwater retention pond, and that non-impacted surface runoff external to the developed plant area would not enter the stormwater retention pond. Enbridge designed the stormwater pond to be a test-and-release pond designed to handle a 1:100 year, 24-hour rainfall event in addition to normal rainfall and has been designed to accommodate a pump-out operation.

4.5.2 Views of the DAL group

90. The DAL group expressed concern with potential impacts of the power plant on the air shed and water shed.

91. The DAL group's submission stated that no information was provided on the power plant's discharges or its impacts on the environment.

92. The DAL group stated that the project area was a traditional animal and wildlife corridor with ongoing traplines.⁴²

5 Commission findings

93. In making its decision on the application submitted by Enbridge, the Commission must consider whether the approval of the application is in the public interest having regard to the social and economic effects of the development and the effects of the development on the environment, in accordance with Section 17 of the *Alberta Utilities Commission Act*. It must also consider whether the application meets all the requirements of the AUC Rule 007: *Applications for Power Plants, Substations, Transmission Lines, and Industrial System Designations* (AUC Rule 007).

94. The Commission finds, for the reasons that follow, that the original and revised noise impact assessments and the additional noise information were completed in accordance with AUC Rule 012.

95. The DAL group submitted that the noise modelling was inaccurate because a hill in the project area was not taken into account. In this regard, the Commission considers that the question before it is whether the noise model accurately reflects the general terrain conditions in the area. Based on the evidence submitted, the Commission finds that there was insufficient evidence to suggest that Enbridge's modelling of the terrain in the NIA was not indicative of the area, and consequently, that the terrain information used in the NIA is acceptable.

96. The DAL group submitted that in wintertime conditions the power plant would have a larger noise impact than in summertime conditions. AUC Rule 012 states that the PSL is based on summertime conditions. The Commission accepts the PSL determinations as submitted by Enbridge, including the adjustment to the PSL values at receptor R3 due to its proximity to a heavily travelled road. The Commission finds that the predicted cumulative sound levels met the PSL requirements of AUC Rule 012 at all residential receptor locations assessed.

⁴² Transcript, Volume 1, page 162, and Transcript, Volume 1, page 232.

97. As a result of the wintertime cumulative sound level assessment, Enbridge committed to install sound-reduced expansion joints to lessen the sound contribution of the project. The Commission finds that Enbridge's cumulative sound level assessment is predicted to meet the PSL of AUC Rule 012 at all residential receptor locations assessed under summertime conditions. Although meeting the PSL values outlined in AUC Rule 012 under wintertime conditions is not required by this rule, the Commission acknowledges Enbridge's commitment to install sound-reduced expansion joints.

98. The Commission considers that compliance with the PSL requirements of AUC Rule 012 can only be determined through receptor-based sound level measurements, also referred to as a comprehensive sound level survey. The Commission acknowledges Enbridge's commitment to perform a post-construction noise study that would include conducting near-field sound measurements of the project, calibrating the noise model using these measurements, and completing receptor-based sound level measurements to confirm compliance if the results of the calibrated noise model indicate non-compliance with the PSL.

99. AUC Rule 012 outlines the dBC minus dBA calculation as the first step to identify the potential for a low frequency noise condition. In accordance with that rule, a low frequency noise condition may exist if the dBC minus dBA value is equal to or greater than 20 dB and there is a clear tonal component between the frequencies of 20 Hz and 250 Hz.

100. The Commission finds that Enbridge followed the requirements of AUC Rule 012 in conducting its low frequency noise analysis. The Commission considers that the dBC minus dBA values presented as evidence are predictions and that a low frequency noise condition can only be determined through measurements of an operating power plant. Due to the complexity of determining low frequency noise, this is a specialized investigation that would only be required by AUC Rule 012 when low frequency noise is identified by area residents and there is a subsequent noise complaint investigation. The presence of a low frequency noise condition from the project's operation can therefore be more accurately determined by performing a post-construction comprehensive sound level study at the most impacted residence, R1.

101. As such, the Commission finds that, should it approve the project, it would require the following condition:

- Enbridge shall complete a post-construction comprehensive sound level survey, including an evaluation of low frequency noise, at the most impacted dwelling, R1, under representative conditions and in accordance with AUC Rule 012. Enbridge shall complete and file the survey with the Commission within one year of connecting the power plant to the Alberta Interconnected Electric System.

102. With respect to consultation, the Commission observes that a participant involvement program includes both a public notification and a personal consultation component. The Commission, in Decision [2014-040](#),⁴³ considered that:

A participant involvement program is a fundamental component of any facility application; the responsibility of the applicant to meet its consultation requirements under AUC Rule 007 must be satisfied before the Commission can consider the various

⁴³ Decision 2014-040: 1646658 Alberta Ltd. – Bull Creek Wind Project, Application No. 1608556, Proceeding No. 1995, February 20, 2014 (Errata released March 10, 2014).

components of a facility application. In other words, an applicant must discharge its mandatory public notification and personal consultation obligations in order for the Commission to be satisfied that the consultation process provided a reasonable opportunity for the Commission to have before it sufficient information to properly carry out its public interest mandate.

103. The Commission finds that the participant involvement program designed by Enbridge met the requirements of AUC Rule 007 in the following ways:

- mail out of project information packages to all stakeholders;
- personal consultation to stakeholders within the project area;
- open houses; and
- ongoing efforts made to address landowner concerns as they arose.

104. The Commission considers Enbridge's approach to identifying which First Nations to consult to be reasonable in the circumstances. The Commission notes in this regard that it did not receive an objection from any First Nation with respect to the project.

105. Based on the record of the proceeding, the Commission finds that Enbridge conducted a consultation program that was sufficient at all stages of the application process, including public notifications, an open house and a coffee talk, and in offering mediation to interveners with outstanding concerns.

106. The record also shows that Enbridge attempted to provide potentially-affected stakeholders with sufficient information to understand the project and its potential implications, and adequate opportunity to express concerns about the power plant. The Commission acknowledges that even an effective consultation program may not resolve all landowner concerns. There may be situations where individual stakeholders feel that the consultation effort, as it pertained to their specific interests, was insufficient. The perception of an applicant and interveners about the quality and effectiveness of the public consultation can differ widely. This merely reflects the fact that the parties do not agree.

107. The Commission heard evidence from Enbridge and received submissions from the DAL group relating to the siting of the project. In this regard, the DAL group submitted that its proposed site would be superior to the project site with respect to community impacts and noise.

108. Because Enbridge applied to the Commission with a single site for consideration, its application will stand or fall on the merits of the proposed site.⁴⁴ The Commission heard evidence from Enbridge that the site selection took into consideration the potential impacts on residents and stakeholders. While the summary of the alternative sites based on the consultation that took place and the feedback received provided Enbridge's rationale for its choice of the proposed site, the Commission will nonetheless consider whether the proposed site is suitable for the project.

109. Enbridge must only demonstrate that the project site is suitable for the project; not whether the proposed site is the best site for the project. The Commission also considers that, in this instance, the evidence brought forward with respect to the investigation into alternate sites

⁴⁴ This view is consistent with the Commission's view in Decision [2010-493](#) and the Alberta Energy and Utilities Board's view in Decision [2001-101](#).

proposed by interested parties provided the Commission with valuable information on Enbridge's communications with stakeholders and its willingness to engage in dialogue.

110. The Commission finds that the alternate site proposed by the DAL group did not demonstrate that the project site was not suitable. In addition, while Northern Sunrise County did propose another site alternative in 2013, it did not file an objection to the application or participate in the hearing.

111. Having considered the totality of the evidence, the Commission finds that the location of the proposed site is suitable for the construction and operation of the project. In summary, the Commission finds that the power plant would have a limited impact on local residences and stakeholders, would be in very close proximity to the natural gas pipeline fuel source, and would not impact grazing reserves.

112. With respect to the concerns raised by the DAL group about a possible expansion, the Commission understands, based on Enbridge's testimony, that Enbridge does not plan on expanding the power plant and that, in fact, there is no room for expansion. As noted above, because electricity generation is deregulated in Alberta, the Commission has no authority on Enbridge's ability to apply to expand the project. However, if any material changes are proposed to be made to the power plant, such as a change in capacity or number of turbines, an application to the Commission would be required and a participant involvement program would have to be conducted as part of that application.

113. In the Commission's view, there was insufficient evidence to demonstrate that the project would create direct adverse effects on property values, health, or the Dallyns' planned cattle operation.

114. Enbridge made numerous commitments pertaining to the project's impact on the environment, including the development of a project-specific environmental protection plan to minimize environmental effects associated with construction and operation of the project. Therefore, for the reasons that follow, the Commission finds that the application is in the public interest from an environmental perspective.

115. In making this decision, the Commission considered that Alberta Culture granted *Historical Resources Act* clearance for the power plant and that Enbridge has also applied to ESRD for approval to construct and operate the power plant under the *Alberta Environmental Protection and Enhancement Act*.

116. In assessing whether the project would create adverse effects on the air shed and the water shed, the Commission observes that the DAL group did not provide specific evidence or submit any expert evidence to support its view that the project may create negative environmental effects; the concerns raised by the DAL group were general and in the nature of personal opinion.

117. With respect to the project's air emissions, the Commission accepts Enbridge's assurances that air emissions will be below the Alberta Emission Source Standards and that the project will comply with the Alberta Ambient Air Quality Objectives.

118. Enbridge's approach for water usage and drainage, which includes the commitment to not discharge any wastewater into the surrounding environment and that the power plant's effluents

with the potential to contact oil will be periodically pumped out for off-site disposal by a licensed hauler, are acceptable to the Commission.

119. The project is located within a potential wildlife habitat for sensitive species, including species with minimum ESRD-recommended setbacks and restricted activity periods. In addition, the two site reconnaissance field surveys are now more than two years old. Consequently, the Commission considers that approval of the project would be subject to the following condition:

- Within 30 days of the decision, Enbridge must begin consultation with the Wildlife Management Unit of ESRD and, prior to construction, must obtain project approval from the Wildlife Management Unit of ESRD for any deviations from the survey standards or guidelines, and implement any wildlife surveys and mitigation measures recommended by ESRD.

120. The Commission finds that Enbridge has complied with the application requirements as set out in AUC Rule 007.

121. Based on the foregoing, the Commission finds that the approval of the power plant and associated substation as proposed by Enbridge, is in the public interest, in accordance with Section 17 of the *Alberta Utilities Commission Act*.

6 Decision

122. Pursuant to Section 11 of the *Hydro and Electric Energy Act*, the Commission approves the application and grants Enbridge the approval to construct and operate the power plant as set out in Appendix 1 – Power Plant Approval No. U2014-549 – December 24, 2014 (Appendix 1 will be distributed separately).

123. Pursuant to sections 14, 15 and 19 of the *Hydro and Electric Energy Act*, the Commission approves the application and grants Enbridge the approval set out in Appendix 2 – Substation Permit and Licence No. U2014-550 – December 24, 2014 (Appendix 2 will be distributed separately).

Dated on December 24, 2014.

The Alberta Utilities Commission

(original signed by)

Anne Michaud
Commission Member

Appendix A – Proceeding participants

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Name of organization (abbreviation) counsel or representative
Enbridge Inc. Laura K. Estep
Alberta Transportation and Utilities Marlene Lavoie
Nyllad Enterprises Ltd. Lorne G. Mann
Doug and Merna Dallyn Lorne G. Mann
Penny and Robin Marshall Lorne G. Mann

Appendix B – Oral hearing – registered appearances

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Name of organization (abbreviation) counsel or representative	Witnesses
Enbridge Inc. Laura K. Estep Elsa Kaus	Liam O'Connell Ian Sanchez Joanne Bradbury Ken Hiller Henk de Hann
The Dallyn Area Landowners group (the DAL group) Lorne G. Mann	Doug Dallyn

<p>The Alberta Utilities Commission</p> <p>Commission Panel Anne Michaud, Panel Chair</p> <p>Commission Staff Shanelle Sinclair (Commission counsel) Trevor Wilde</p>

Appendix C – Abbreviations

Abbreviation	Name in full
##-##-##-W5M	Section ##, Township ##, Range ##, west of the Fifth Meridian
AUC	Alberta Utilities Commission
AUC Rule 007	<i>AUC Rule 007: Applications for Power Plants, Substations, Transmission Lines, and Industrial System Designations</i>
AUC Rule 012	<i>AUC Rule 012: Noise Control</i>
CO	carbon monoxide
Commission	Alberta Utilities Commission
DAL group	Dallyn Area Landowners group
Dallyns	Doug and Merna Dallyn
dB	decibel
dBA	A-weighted decibel
dBc	C-weighted decibel
Enbridge	Enbridge Inc.
EPP	environmental protection plan
ESRD	Alberta Environment and Sustainable Resource Development
Hz	Hertz
interveners' proposed site	alternative power plant site proposed by the DAL group located within SE 32-85-19-W5M, one mile north of Enbridge's applied for site
L_{eq}	energy equivalent sound level
MW	megawatt
NIA	noise impact assessment
NO _x	nitrogen oxides
Nyllad	Nyllad Enterprises Ltd.
PSL	permissible sound level
R1	most impacted residence

R2	Marshall residence
R3	Dallyn residence
R4	proposed Dallyn residence
Stantec	Stantec Consulting Ltd.