



**Alberta Electric System Operator  
Needs Identification Document Application**

**ATCO Electric Ltd.  
Facility Applications**

**Whitetail Interconnection Project**

**July 17, 2015**

**Alberta Utilities Commission**

Decision 3598-D01-2015: Whitetail Interconnection Project

Alberta Electric System Operator  
Needs Identification Document Application  
Application 1611093-1

ATCO Electric Ltd.  
Facility Applications  
Applications 3598-A001 to 3598-A005

Proceeding 3598

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**1 Introduction and background**

1. Pursuant to Alberta Utilities Commission Approval [U2014-549](#),<sup>1</sup> Enbridge Inc. (Enbridge) has approval to construct and operate the 186-megawatt (MW) Whitetail Peaking Station gas-fired power plant (the Whitetail Peaking power plant) located approximately 25 kilometres northeast of the town of Peace River. Enbridge also has approval to construct and operate the Whitetail 976S substation pursuant to AUC Permit and Licence [U2014-550](#).<sup>2</sup>

2. The Alberta Electric System Operator (AESO) filed a needs identification document application (the NID application) with the Commission, pursuant to Section 34 of the *Electric Utilities Act*, for approval of the need to respond to a request for system access service by connecting the Whitetail Peaking power plant to the Alberta Interconnected Electric System. The NID application was registered on December 17, 2014 in the AUC's electronic filing system as Application 1611093-1.

3. ATCO Electric Ltd. (ATCO Electric) filed facility applications with the Commission for approval to meet the need identified by the AESO. The facility applications included constructing and operating approximately 255 metres of new single-circuit 144-kilovolt (kV) transmission line, to be designated as 7LA106, relocating a portion of the existing 144-kV transmission line 7L106 and constructing one new telecommunications tower (the project). The applications were filed pursuant to sections 14, 15, 18 and 21 of the *Hydro and Electric Energy Act* and were registered on January 14, 2015 in the AUC's electronic filing system as applications 3598-A001 to 3598-A005.

4. In accordance with Section 15.4 of the *Hydro and Electric Energy Act*, the AESO and ATCO Electric requested that the Commission combine and consider the NID application and the facility applications jointly. On January 19, 2015, the Commission advised the AESO and ATCO Electric that the applications had been combined and were being considered jointly in Proceeding 3598.

5. In the NID application, the AESO requested the Commission to combine the NID application and facility applications in Proceeding 3598 with two other proceedings in the Peace River area to increase administrative efficiency. After considering submissions with

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<sup>1</sup> Power Plant Approval U2014-549, Proceeding 3080, Application 1610321, December 24, 2014.

<sup>2</sup> Substation Permit and Licence U2014-550, Proceeding 3080, Application 1610321, December 24, 2014.

respect to the AESO's request to combine the proceedings, on March 19, 2015, the Commission decided, for the reasons given in its ruling, to continue to conduct each proceeding separately.<sup>3</sup>

6. On April 2, 2015, the Commission issued a notice of applications for Proceeding 3598, which notified anyone who wished to express concerns about, or support of, one or more of the applications to file such submissions with the Commission by April 24, 2015. The notice was sent directly to landowners, occupants, agencies, First Nations and other interested parties identified by ATCO Electric as being located within 800 metres of the project. The notice was published on the AUC website and notification was automatically emailed to eFiling users that had chosen to be notified of notices of application issued by the Commission. The notice was also published in the Peace River Record Gazette on April 15, 2015.

7. No submissions were received with respect to the notice of applications.

8. On May 1, 2015, the Commission issued information requests to the AESO and to ATCO Electric. Both responded to the information requests on May 8, 2015. In its response, the AESO indicated that preliminary results of a regional planning study that was currently underway would be provided when available. On May 29, 2015, the AESO filed a supplemental response with the study results.

## **2 Discussion**

### **2.1 Needs Identification Document application**

9. Enbridge requested transmission system access service for the Whitetail Peaking power plant. In response, the AESO determined that the need could be met by constructing and operating a new 144-kV transmission line between the Whitetail 976S substation and the existing 144-kV transmission line 7L106.

10. The AESO stated that it had also considered two additional alternatives for connecting the Whitetail Peaking power plant. The first alternative was a radial 144-kV transmission line connection to Wesley Creek 834S substation via approximately 13.5 kilometres of new 144-kV transmission line, which would require the addition of one new 144-kV circuit breaker at the Wesley Creek 834S substation. The second alternative was an in-and-out connection to transmission line 7L106. This would connect the Whitetail Peaking power plant to the existing transmission line 7L106 between the Wesley Creek 834S substation and Meikle 905S substation, and require one new 144-kV switching substation and two new 144-kV transmission lines. These two alternatives were rejected due to the higher costs and greater potential land impacts than projected for the project.

11. The AESO conducted a connection study to assess transmission system performance prior to and after the proposed connection. The AESO performed its connection assessment for the project in conjunction with the connection assessment for the interconnection of the approved Carmon Creek power plant, also located in the Peace River area. The connection assessments concluded that the connection of the proposed facilities, in conjunction with the Carmon Creek power plant, may result in new thermal constraints on the 144-kV transmission line 7L27 under N-0 conditions (i.e., system normal conditions).

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<sup>3</sup> Exhibit 3598-X0045, AUC letter to parties - combining proceedings 3543, 3598 and 3591.

12. The AESO stated that the planned development of transmission elements in the Northwest Region, specifically a transmission line from Wesley Creek 834S substation to a planned Little Smoky South substation, would resolve these potential overload issues. The AESO expected, based on its preliminary studies for the region, that developments in the Northwest Region will be in-service in 2019 or 2020. The AESO confirmed that until the planned developments for the Northwest Region are in service, remedial action schemes and ISO Rules, Section 302.1, *Transmission Constraint Management* will be used to maintain safe and reliable operation of the Alberta Interconnected Electric System.

13. During the period from June 2014 to December 2014, the AESO worked with ATCO Electric to carry out a participant involvement program to notify stakeholders about the NID application and facility applications. The AESO participant involvement program notified all occupants, residents and landowners identified by ATCO Electric as being located within 800 metres of the proposed development, as well as other interested parties including First Nations. The AESO stated that no concern was raised by any party about the need for the project.

14. The AESO determined that there are no system-related costs associated with the proposed transmission expansion.

## 2.2 Facility applications

15. The AESO directed ATCO Electric to file facility applications with the AUC for the facilities proposed to meet the need identified and to assist the AESO in conducting a participant involvement program for its NID application.

16. Accordingly, ATCO Electric proposed to:

- decommission and salvage approximately 200 metres of the existing 144-kV transmission line 7L106
- construct approximately 265 metres of new single-circuit 144-kV transmission line approximately 30 metres east of the proposed salvaged 7L106 facilities
- construct approximately 255 metres of new single-circuit 144-kV transmission line designated as 7LA106
- construct a 34-metre tall telecommunications tower and associated control building at the approved Whitetail 976S substation
- connect transmission line 7LA106 to the approved Whitetail 976S substation

17. ATCO Electric stated that it had conducted individual consultation with all landholders, occupants, agencies, industries, First Nations and other interested parties located within 800 metres of the proposed project. ATCO Electric stated that there were no objections to the proposed project.

18. ATCO Electric proposed one route for the proposed transmission line 7LA106, which it stated would provide the most direct route between the existing transmission line 7L106 and the

approved Whitetail 976S substation without conflicting with the current plans at the substation site.

19. The project would be located within the Boreal Forest Natural Region and Dry Mixedwood sub-region of Alberta which contains a mix of upland forests and wetlands. The land use in the area is a mix of oil and gas usages, with forestry developments occurring outside the project area.

20. ATCO Electric stated that the proposed route for transmission line 7LA106 does not overlap any environmentally sensitive areas and that no significant environmental impacts are anticipated in association with the proposed route.

21. ATCO Electric stated that it would construct and maintain the project in accordance with Alberta Environment and Parks' (AEP) Fact Sheet R&R/11-03, *Environmental Protection Guidelines for Transmission Lines* and the terms and conditions of rights-of-way agreements and easements.

22. ATCO Electric said that the project does not require a conservation and reclamation approval or an environmental impact assessment report under the *Environmental Protection and Enhancement Act*.

23. Although the proposed project is not expected to go over or be within water bodies, should any work be required to take place in watercourses, beds or banks, ATCO Electric would comply with the *Water Act* and apply for any necessary approvals before construction.

24. ATCO Electric stated that it would comply with the *Wildlife Act* and the project would include pre-construction environmental surveys of plants, animals and soils. In response to an information request, ATCO Electric stated that there was no indication of sensitive, endangered, or threatened species within the project study area. It added that should environmental surveys indicate that wildlife species at risk are present within the project area, the local wildlife biologist at the Wildlife Management Unit of AEP would be consulted to ensure that ATCO Electric would minimize and mitigate potential impacts.

25. ATCO Electric confirmed that the project would be built and operated in accordance with the authorizations granted pursuant to Section 39 of the *Electric Utilities Act*, the *Alberta Safety Codes Act*, and applicable regulations and industry standards.

26. 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.

27. ATCO Electric stated that it would meet or exceed setbacks for active wells and their associated developments as prescribed in Section 10 – Overhead Systems in the *Alberta Electrical Utility Code* and respecting abandoned wells as prescribed in the Alberta Energy Regulator's Directive 079: *Surface Development in proximity to Abandoned Wells*.

28. ATCO Electric stated that in conjunction with pipeline operators, it would continue to meet regulated standards including those in both the *Safety Codes Act* and the *Pipeline Act* so that both transmission and pipeline facilities will be operated safely.

29. ATCO Electric did not submit a noise impact assessment because there would be no noise-producing equipment added. ATCO Electric stated that any significant noise or traffic attributable to the project is generally limited to the construction period when larger trucks and equipment are required for moving and construction.
30. The facility applications indicated that *Historical Resources Act* clearance was issued by Alberta Culture on July 4, 2014. A historical resources impact assessment was not required for the project.
31. ATCO Electric estimated that the project cost (within +20 per cent/-10 per cent accuracy) would be \$5,929,652. No costs were designated as system costs.

### 3 Findings

32. The Commission finds that the NID application filed by the AESO contains all the information required by the *Electric Utilities Act*, the *Transmission Regulation* and Rule 007: *Applications for Power Plants, Substations, Transmission lines, Industrial System Designations and Hydro Developments*.
33. No interested party demonstrated that the AESO's assessment of the means proposed to meet the need identified by the AESO is technically deficient or that approval of the needs identification document is not in the public interest. Therefore, as prescribed by subsection 38(e) of the *Transmission Regulation*, the Commission considers the AESO's assessment of the need to be correct and approves the AESO's needs identification document.
34. The Commission is satisfied that the facility applications comply with the information requirements prescribed in Rule 007 and that the facilities proposed will be sufficient to meet the need identified in the AESO's needs identification document.
35. The Commission is satisfied that a participant involvement program was completed, that there were no objections or concerns received in response to the notice of applications, and that there are no outstanding objections or concerns with the NID application and facility application. The Commission finds that the respective consultation efforts made by the AESO and ATCO Electric fulfill the requirements of Rule 007.
36. Prior to construction, ATCO Electric will conduct environmental and wildlife surveys and consult specifically with AEP-wildlife staff and follow their recommendations should any prescribed wildlife be encountered.
37. The AESO filed the NID application to meet its legislated mandate to provide non-discriminatory system access service on the transmission system. The AESO has provided sufficient assurance that the proposed facilities will not negatively affect the safety and reliability of the Alberta Interconnected Electric System. Potential N-0 transmission constraints and congestion attendant upon future operation of these proposed facilities are not otherwise a proper basis for denying a meritorious application for system access service. The Commission is satisfied that potential transmission congestion implications will be adequately managed by the AESO by applying ISO Rules, Section 302.1 *Transmission Constraint Management*, which is in the course of being changed to comply with applicable legislation, and by applying any applicable remedial action schemes in place. Whether or not an exception is approved pursuant

to Section 15(2) of the *Transmission Regulation* for the Peace River area in AUC Proceeding 3591 is not relevant to this decision.

38. Based upon all of the evidence provided in this proceeding and its above findings, the Commission also finds the project to be in the public interest in accordance with Section 17 of the *Alberta Utilities Commission Act*.

#### **4 Decision**

39. Pursuant to Section 34 of the *Electric Utilities Act*, the Commission approves the Needs Identification Document in Application 1611093-1 and grants the AESO the approval set out in Appendix 1 – Needs Identification Document 3543-D02-2015 – July 17, 2015.

40. Pursuant to sections 14, 15 and 19 of the *Hydro and Electric Energy Act*, the Commission approves Application 3598-A001 and grants ATCO Electric the approval set out in Appendix 2 – Transmission Line Permit and Licence 3598-D03-2015 – July 17, 2015, to alter and operate transmission line 7L106.

41. Pursuant to sections 14, 15 and 19 of the *Hydro and Electric Energy Act*, the Commission approves Application 3598-A002 and grants ATCO Electric the approval set out in Appendix 3 – Transmission Line Permit and Licence 3598-D04-2015 – July 17, 2015, to construct and operate transmission line 7LA106.

42. Pursuant to Section 18 of the *Hydro and Electric Energy Act*, the Commission approves Application 3598-A003 and grants ATCO Electric the approval set out in Appendix 4 – Connection Order 3598-D05-2015 – July 17, 2015, to connect transmission line 7LA106 to transmission line 7L106 and to Whitetail 976S substation.

43. Pursuant to sections 14, 15 and 19 of the *Hydro and Electric Energy Act*, the Commission approves Application 3598-A004 and grants ATCO Electric the approval set out in Appendix 5 – Telecommunications Facilities Permit and Licence 3598-D06-2015 – July 17, 2015, to construct and operate the Whitetail Telecommunications Tower Site.

44. Pursuant to sections 14, 15 and 21 of the *Hydro and Electric Energy Act*, the Commission approves Application 3598-A005 and grants ATCO Electric the approval set out in Appendix 6 – Decommission and Salvage Approval 3598-D07-2015 – July 17, 2015, to decommission and salvage a portion of transmission line 7L106 as requested.

45. The appendices will be distributed separately.

Dated on July 17, 2015.

**Alberta Utilities Commission**

*(original signed by)*

Willie Grieve, QC  
Chair

*(original signed by)*

Anne Michaud  
Commission Member

*(original signed by)*

Bohdan (Don) Romaniuk  
Acting Commission Member