



**ATCO Electric Ltd.**

**Nevis to Stettler Transmission Project**

**December 20, 2011**



**The Alberta Utilities Commission**  
Decision 2011-503: ATCO Electric Ltd.  
Nevis to Stettler Transmission Project  
Application No. 1607425  
Proceeding ID No. 1302

December 20, 2011

Published by

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## **1 Introduction**

1. ATCO Electric Ltd. (ATCO), by Application No. 1607425 registered on June 21, 2011, applied to the Alberta Utilities Commission (AUC or the Commission), pursuant to sections 14, 15 and 19 of the *Hydro and Electric Energy Act* for a permit and licence to construct and operate a 144-kilovolt (kV) transmission line designated as 7L143 from Nevis 766S substation to Stettler 769S substation; to alter the existing Nevis 766S substation; to alter the existing Stettler 769S substation, and to interconnect the above facilities to the Alberta Interconnected Electric System, all in the Stettler area (the project).

2. ATCO is the owner and operator of the Nevis 766S substation pursuant to Permit and Licence No. AP 74-17<sup>1</sup> and subsequent amendments and is also the owner and operator of the Stettler 769S substation pursuant to Permit and Licence No. [U2005-251](#).<sup>2</sup>

3. The project is intended to meet the need identified in the Hanna Region Transmission System Development in the Stettler area, approved in AUC Approval No. [U2011-114](#).<sup>3</sup>

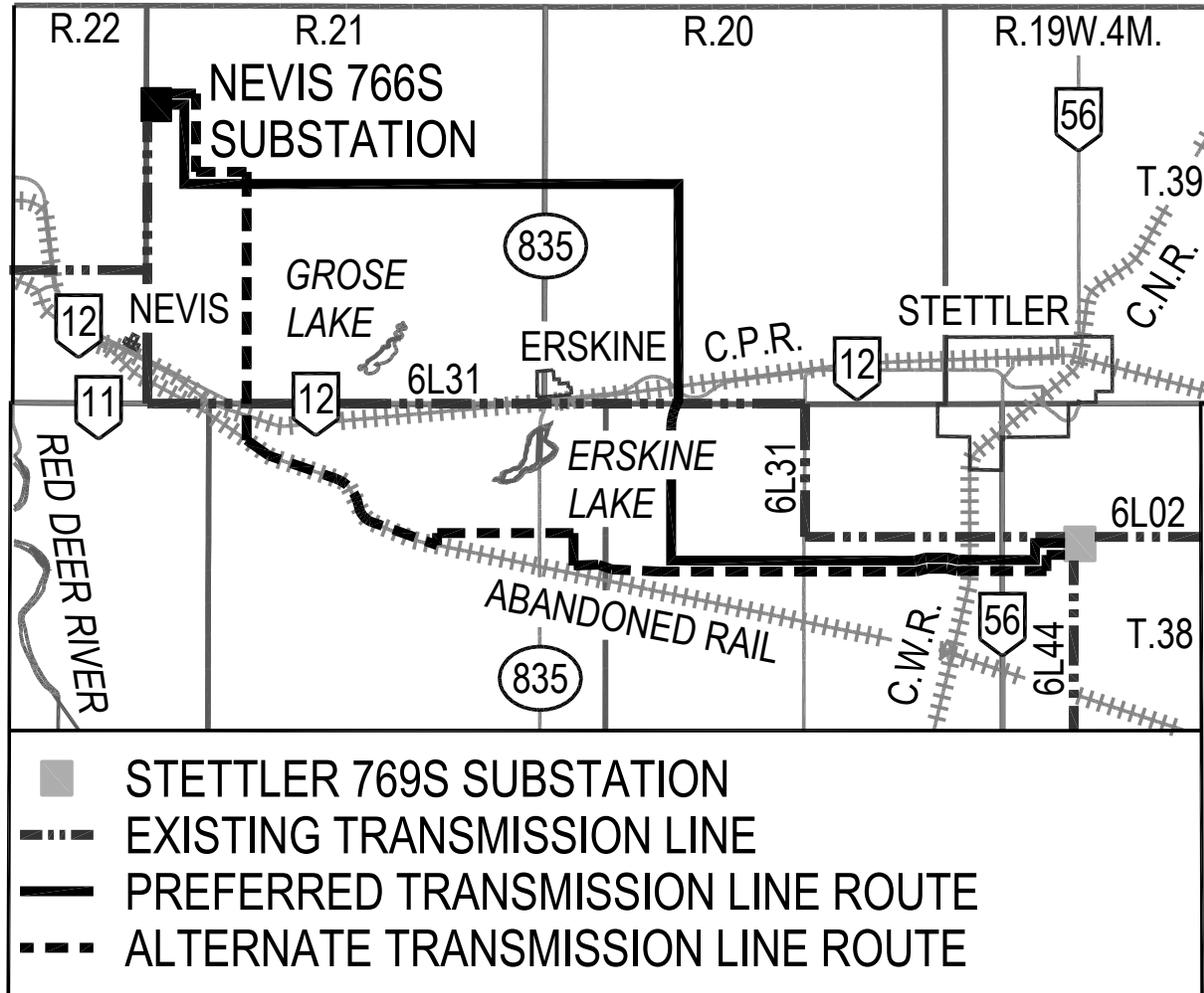
4. ATCO applied for approval of a preferred route for the transmission line (preferred route), or in the alternative for approval of an alternate route for the transmission line (alternate route). The preferred route is the more northern route, and has a proposed line length of approximately 35.1 kilometres with 15 major turns; the alternate route is the more southern route which parallels an abandoned railway line for a portion of its length and has a proposed line length of approximately 33.6 kilometres with 21 major turns. The preferred and alternate route share approximately 14.7 kilometres of common alignment. A map showing the preferred and alternate routes is provided on the page following.

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<sup>1</sup> Permit and Licence No. AP 74-17, January 16, 1975.

<sup>2</sup> Substation Permit and Licence No. U2005-251, Application No. 1393078, June 29, 2005.

<sup>3</sup> Needs Identification Document Approval No. U2011-114, Application No. 1606526, Proceeding ID No. 748, June 7, 2011.



5. The Commission issued a notice of application on September 2, 2011. The deadline for filing statements of intent to participate with the AUC was October 4, 2011.
6. One notice of application was returned to the AUC by Canada Post. ATCO provided updated contact information for the returned notice. On October 26, 2011, the Commission re-issued the notice of application to the one party with the updated contact information and extended the deadline for submission for that party to November 16, 2011.
7. The Commission received two intervener submissions from individuals in response to the notice of application but on October 24, 2011 and October 26, 2011, the two interveners withdrew their objections.
8. The AUC held an information session regarding public involvement in AUC processes in Stettler, Alberta on September 27, 2011, as announced in the notice of application.
9. ATCO conducted a participant involvement program for the project before filing the application. The participant involvement program included notification to and consultation with all landowners within 800 metres of the preferred route, the alternate route and the two substations. ATCO held two open houses on June 2 and June 7, 2010, in Stettler, Alberta to describe the project and answer questions about it.

10. The Commission issued information requests to ATCO on September 1, 2011, October 14, 2011 and November 10, 2011, to clarify details of the application. On December 2, 2011, ATCO amended Table 9 of the application to correct the amount of public and private land used by the preferred and alternate routes. The application was deemed complete on December 5, 2011.

## 2 Discussion

11. When considering an application to construct or operate a transmission facility, the Commission must consider whether the proposed project is in the public interest having regard to its social and economic effects and its effect on the environment, in accordance with Section 17 of the *Alberta Utilities Commission Act*. Regarding the interpretation of “public interest”, the Commission is mindful of Decision 2009-028<sup>4</sup> which states:

The Commission recognizes that there is no universal definition of what comprises the “public interest” and that its meaning cannot be derived from strictly objective measures. The Commission acknowledges that the ultimate determination of whether a particular project is in the “public interest” will largely be dictated by the circumstances of each transmission facility application.

In the Commission’s view, assessment of the public interest requires it to balance the benefits associated with upgrades to the transmission system with the associated impacts, having regard to the legislative framework for transmission development in Alberta. This exercise necessarily requires the Commission to weigh impacts that will be experienced on a provincial basis, such as improved system performance, reliability, and access with specific routing impacts upon those individuals or families that reside or own land along a proposed transmission route as well as other users of the land that may be affected. This approach is consistent with the EUB’s historical position that the public interest standard will generally be met by an activity that benefits the segment of the public to which the legislation is aimed, while at the same time minimizing, or mitigating to an acceptable degree, the potential adverse impacts on more discrete parts of the community.

12. For the preferred route, ATCO had identified that 22.5 hectares (ha) of trees would have to be removed, whereas for the alternate route, 21.7 ha of trees would have to be removed. The preferred route was indentified as containing 9.8 ha of wetland, and the alternate route would contain a similar amount with 10.2 ha. The preferred route right-of-way would include 9.8 ha of environmentally significant areas, whereas the alternate route would include 23.2 ha of environmentally significant areas.

13. The environmental impact evaluation provided by ATCO was largely derived from a desktop study. ATCO indicated that most, or all, of the right-of-way for both the preferred and alternate routes was not surveyed. ATCO also indicated there was limited field access at the time of route selection, and for that reason ATCO stated that “[f]ield surveys to classify vegetation and determine the presence of native pasture, listed plant species, listed plant communities and/or listed weed species will be completed within the right-of-way of the route selected for development prior to the start of construction.”

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<sup>4</sup> Decision 2009-028: AltaLink Management Ltd. Transmission Line from Pincher Creek to Lethbridge, Application No. 1521942, Proceeding ID No. 19, March 10, 2009.

14. Along the preferred and alternate routes, the nearest residence is approximately 90 metres away from the proposed line. There are 38 residences within 800 metres of the preferred route right-of-way, whereas there are 47 residences within 800 metres of the alternate route right-of-way.

15. ATCO estimated the project cost to be \$40.292 million in 2012 dollars for the preferred route and \$42.355 million for the alternate route. The estimates were provided at a +20%/-10% level of accuracy, as required by AUC Rule 007: *Rules Respecting Applications for Power Plants, Substations, Transmission Lines, and Industrial System Designations* (AUC Rule 007). The entire cost for either the preferred and alternate routes is allocated as system cost.

16. ATCO stated that the expected in-service date of the transmission line would be March 2013, based on acquiring permits and licences by March 2012.

17. At the Nevis 766S substation, located within LSD 12 in NW 30-39-21 W4M, ATCO proposed to add one 144-kV circuit breaker and two 144-kV manually-operated switches and to salvage one 72-kV circuit breaker and related support equipment and infrastructure associated with the existing 72-kV transmission line 6L31. ATCO proposed to expand the substation site by approximately 156 metres to the east and expand the fenced area of the substation to the northeast with the addition of an irregular shaped 55-metres by 38-metres fenced area.

18. ATCO identified the Nevis 766S substation as a deferred facility as defined in AUC Rule 012: *Noise Control* (AUC Rule 012). Section 2.2(1) of AUC Rule 012 states “A facility constructed and in operation before October 17, 1988 is considered to be a deferred facility, meaning that it does not have to demonstrate compliance in the absence of a noise complaint.”

19. ATCO completed a noise impact assessment for the Nevis 766S substation which included calculated permissible sound levels at four nearby residences. In response to a Commission information request, ATCO subsequently completed comprehensive sound level surveys at the four nearby residences as outlined in Section 2.2(3) of AUC Rule 012, which states, *inter alia*, that “the [permissible sound level] will be the measured sound level as determined from a prior or new comprehensive sound level (CSL) survey.” ATCO identified in the noise impact assessment and in the comprehensive sound level survey that the proposed addition of a circuit breaker is not expected to be a significant producer of noise at the substation.

20. At the Stettler 769S substation, located within LSD 13 in NW 20-38-19 W4M, ATCO proposed to add one 144/72/25-kV 40/53/66-megavolt-ampere (MVA) load tap changing transformer, one 144/25/12.5-kV 15/20/25-MVA load tap changing transformer, one 144-kV 15-megavolt ampere reactive capacitor bank, four 144-kV circuit breakers, one 72-kV circuit breaker, one 25-kV 17.3-MVA voltage regulator and one 16-metre tall telecommunications tower with associated communications equipment and to salvage a 72-kV circuit breaker and two 72/25-kV 6/8-MVA transformers. ATCO also proposed to expand the existing fenced area of the substation with the addition of a 51-metre by 64-metre fenced area to the east.

21. ATCO also completed a noise impact assessment for the Stettler 769S substation. In the noise impact assessment report, ATCO predicted that the cumulative noise would be in compliance with the applicable daytime and night-time permissible sound levels set out in AUC Rule 012.

22. In the application, ATCO stated that it attempted to limit potential visual impacts due to the proposed transmission lines by avoiding routing the lines in close proximity to residences, parks and protected areas. ATCO stated that no scenic viewpoints have been identified through agency or stakeholder consultation.

### **3 Findings**

23. The Commission has reviewed the application and finds that the application meets the requirements stipulated in AUC Rule 007.

24. The Commission accepts that ATCO's participant involvement program has been conducted and there are no outstanding public or industry objections or concerns associated with oncoming construction and future operation of the transmission line, or the oncoming alterations to the two existing substations. As such, the Commission finds that the participant involvement program meets the requirements of AUC Rule 007.

25. Regarding noise impacts, the Commission accepts ATCO's results of the Stettler 769S substation noise impact assessment in which it was predicted that the proposed substation alterations will meet the requirements of AUC Rule 012.

26. The Commission accepts the comprehensive noise survey for the Nevis 766S substation as a record for future reference. The Commission is satisfied that there have been no formal noise complaints filed regarding the Nevis 766S substation and that no further information is required to satisfy the requirements of AUC Rule 012 at this time. In the event that a noise complaint is filed with the Commission against the Nevis 766S substation, the suitability of the results of the comprehensive noise survey filed in the application for use in the calculation of the permissible sound levels will be determined at that time, particularly pertaining to the isolation analysis performed.

27. The Commission finds that from an environmental perspective, with the additional assessment and mitigation described in the application, both the preferred and alternate routes are adequate. Because the preferred route requires marginally more tree removal and traverses marginally more wetland but contains significantly less Environmentally Significant Areas, the Commission considers that neither the preferred route nor the alternate route is demonstrably better in these regards.

28. The Commission finds that the reduced land use impacts of fewer corner structures for the preferred route is tempered by the increased length of the line, but the fact that there are fewer nearby residences along the preferred route and its lower estimated cost weigh in favour of the preferred route.

29. The project is intended to meet the need as identified in the Hanna Region Transmission System Development, Approval No. U2011-114. The Commission finds that the application sufficiently addresses the conversion of the existing 72-kV Stettler substation to a 144-kV substation, the construction of a new 144-kV transmission line between Nevis 766S substation to Stettler 769S substation and the addition of a capacitor bank at Stettler 769S substation approved in Approval No. U2011-114.

30. In considering the public interest as required by Section 17 of the *Alberta Utilities Commission Act*, the Commission finds that the environmental factors do not favour either route, and that the economic and social factors discussed above all weigh in favor of the preferred route for the construction of the proposed transmission line.

31. Accordingly, the Commission finds the application to be in the public interest in accordance with Section 17 of the *Alberta Utilities Commission Act*.

32. Future environmental assessment is needed to implement mitigation measures proposed in ATCO's application to reduce environmental impacts to an acceptable level. Given the lack of access to land to conduct surveys prior to AUC approval, the Commission stresses the importance of future environmental assessment. The Commission grants the permits to construct the proposed transmission line along the preferred route subject to the condition that ATCO shall submit to the Commission results of the pre-construction evaluations and wildlife surveys after they have been completed and before construction begins.

#### **4 Decision**

33. Pursuant to sections 14 and 15 of the *Hydro and Electric Energy Act*, the Commission grants the application and grants ATCO Permit and Licence No. U2011-431 – December 20, 2011, in Appendix 1– to construct and operate the proposed transmission line along the preferred (north) route – subject to the condition that ATCO shall submit to the Commission the results of the proposed pre-construction evaluations and wildlife surveys after they have been completed but before construction begins. (Appendix 1 will be distributed separately).

34. Pursuant to sections 14, 15 and 19 of the *Hydro and Electric Energy Act*, the Commission further grants ATCO Permit and Licence No. U2011-432 – December 20, 2011, in Appendix 2 to alter and operate Stettler 769S substation (Appendix 2 will be distributed separately).

35. Pursuant to sections 14, 15 and 19 of the *Hydro and Electric Energy Act*, the Commission further grants ATCO Permit and Licence No. U2011-433 – December 20, 2011, Appendix 3 to alter and operate Nevis 766S substation (Appendix 3 will be distributed separately).

Dated on December 20, 2011.

#### **The Alberta Utilities Commission**

*(original signed by)*

Anne Michaud  
Commission Member