



**Alberta Electric System Operator  
ATCO Electric Ltd.**

**9L66 Line Relocation Transmission Development  
Needs Identification Document and Facility Application**

**April 23, 2010**

**ALBERTA UTILITIES COMMISSION**

Decision 2010-182: Alberta Electric System Operator and ATCO Electric Ltd.

9L66 Line Relocation Transmission Development

Application Nos. 1605456 & 1605489

Proceeding ID. 303

April 23, 2010

Published by

Alberta Utilities Commission  
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# ALBERTA UTILITIES COMMISSION

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Calgary Alberta

**ALBERTA ELECTRIC SYSTEM OPERATOR  
ATCO ELECTRIC LTD.  
9L66 LINE RELOCATION  
TRANSMISSION DEVELOPMENT**

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## **1 INTRODUCTION**

1. On September 17, 2009, the Alberta Electric System Operator (AESO) filed Application No. 1605456 with the Alberta Utilities Commission (AUC or Commission or) seeking approval of the Needs Identification Document (NID) to decommission and salvage a 5-kilometre (km) segment of double-circuit 240-kV transmission line 9L66/9L92, and rebuild the segment of 9L66 on single-circuit structures, pursuant to section 34 of the *Electric Utilities Act*. Double-circuit transmission line 9L66/9L92 is close to the Albian Oil Sands project area, and is owned and operated by ATCO Electric Ltd. (ATCO).

2. Pursuant to section 35 of the *Electric Utilities Act*, the AESO directed ATCO to submit a facility application to the Commission for the facilities that are required to meet the needs identified in the NID. On September 23, 2009, the AESO requested that the Commission consider both the NID application and ATCO's pending facility application jointly, pursuant to section 15.4 of the *Hydro and Electric Energy Act*.

3. On September 25, 2009, ATCO filed Application No. 1605489 (Facility Application) with the Commission seeking approval to decommission and salvage the 5-km segment of double-circuit 240-kV transmission line 9L66/9L92 egressing from Muskeg River 847S substation, and rebuild the segment of 9L66 on single-circuit structures on new right-of-way south of its existing alignment.

4. On October 6, 2009, the Commission advised the AESO and ATCO that the NID and the Facility Application would be combined and considered jointly by the Commission.

5. On October 20, 2009, the Commission requested that ATCO file an updated version of the Facility Application to reflect the current status of the subject transmission elements which would include an update of all references of the transmission elements to their correct designations. On November 3, 2009, ATCO submitted an amended version of the Facility Application.

6. The Commission issued Notice of Application to all interested parties on February 2, 2010. No objections to the Applications were received by the Tuesday, February 23, 2010 deadline for intervenor submissions.

## 2 BACKGROUND

### 2.1 Overview – the Process for New Transmission Development in Alberta

7. Two approvals from the Commission are required to build new transmission facilities in Alberta: (1) an approval of the need for expansion or enhancement to the system pursuant to section 34 of the *Electric Utilities Act*; and (2) a permit to construct and operate a transmission line pursuant to sections 14 and 15 of the *Hydro and Electric Energy Act*.

8. Section 38 of the *Transmission Regulation* provides guidance to the Commission in the exercise of its jurisdiction in considering a NID application. Where no party objects to a NID, subsection 38(e) is of particular relevance. It states:

38 When considering whether to approve a needs identification document under section 34(3) of the Act, the Commission must:

- (e) consider the ISO's assessment of the need to be correct unless an interested person satisfies the Commission that
  - (i) the ISO's assessment of the need is technically deficient, or
  - (ii) to approve the needs identification document would not be in the public interest.

9. Section 34 of the *Electric Utilities Act* provides the Commission with three options for making a decision on a NID. The Commission may approve, deny or refer the NID back to the AESO with suggestions or directions for changes or additions.

10. Facility applications are prepared by a transmission facility owner (TFO) at the direction of the AESO. The TFO for these facilities is ATCO. Pursuant to section 17 (1) of the *Alberta Utilities Commission Act*, when considering an application for a transmission facility the Commission must consider whether the proposed transmission line is in the public interest having regard for the social and economic effects of the transmission line and the effect of the transmission line on the environment.

### 2.2 The NID Application

11. The AESO stated that Shell Canada Energy (Shell) has requested relocation of a 5.0-km segment of double-circuit 240-kV line 9L66/9L92 within its mine lease west of the existing Muskeg River 847S substation. Both 9L66 and 9L92 were constructed with 1 x 795 kcmil conductors on the double-circuit line segment mentioned above.

12. The AESO does not foresee the need for that particular segment of 9L92 in the future. However, the AESO stated that it is prudent to match the capacity of the relocated line with the new segment of 9L66 with conductor to have the same capacity as the rest of 9L66 line and the existing 240-kV network in the region.

13. The AESO presented two alternatives for the customer requested line relocation:
- Alternative 1: Relocate the Transmission Line as is with 1 x 795 kcmil conductor; and
  - Alternative 2: Build the relocated line with 2 x 795 kcmil conductors.

14. The AESO recommended Alternative 2 to ensure that the line is built with adequate capacity to be integrated with the area transmission development in order to avoid a potential bottleneck or stranding of capital in the future.

### **2.3 The Facility Application**

15. To meet the need specified by the AESO in the NID, ATCO proposed to:
- Decommission and salvage the 5-km segment of double-circuit 240-kV transmission line 9L66/9L92 egressing from Muskeg River 847S substation; and
  - Construct an 8.9-km replacement segment for 9L66 with single-circuit structures, and 2 x 795 kcmil conductors on new right-of-way south of its current alignment (Project).

16. The estimated total cost of the Project submitted by ATCO was \$9,956,000 (+20%/-10%) of which \$1,194,500 (+20%/-10%) represented the system portion cost and \$8,761,500 (+20%/-10%) represented the customer portion cost.

17. ATCO stated that the Project is located within the Region Municipality of Wood Buffalo, northeast of the hamlet of Fort MacKay, and that existing and new transmission facilities will be located on lands where the oil sands rights are held by Shell Canada.

18. ATCO stated that the selection of the proposed transmission line route was based on consultation with affected landholders, agencies, and other interested parties. ATCO stated that the proposed route was determined in conjunction with Shell as part of a planned utility corridor.

19. The AESO, in conjunction with ATCO, conducted a participation involvement program (PIP) for the Project before the applications were filed with the Commission. No objections were received regarding the need for the Project. ATCO also confirmed that no objections regarding the Project were received.

20. ATCO included a conservation and reclamation plan in the Facility Application which describes their measures to reduce the environmental effects of the Project. ATCO stated that they will construct and maintain the proposed transmission facilities adhering to Alberta Environment's C&R/IL/95-2, *Environmental Protection Guidelines for Electric Transmission Lines*, and in accordance with the terms and conditions of the right-of-way agreements and easements, including any requirements identified in environmental field reports for easements on Crown land.

### **3 DISCUSSION**

#### **3.1 The NID Application**

21. The Commission has reviewed the NID application and has determined that it meets the requirements of a Needs Identification Document. The Commission notes that a participant involvement program has been conducted and there are no outstanding public or industry objections or concerns.

22. As no interested party has demonstrated that the AESO's assessment of the need to relocate the Transmission Line is technically deficient or that approval of the NID is not in the public interest, the Commission must therefore consider the AESO's assessment of need to be correct, in accordance with subsection 38(e) of the *Transmission Regulation*.

#### **3.2 The Facility Application**

23. The Commission finds that the Facility Application is technically complete and complies with the requirements prescribed by sections 14, 15 and 21 of the *Hydro and Electric Energy Act* and by *AUC Rule 007*. The Commission also finds that the transmission development applied for by ATCO will fulfill the need identified in the NID.

24. The Commission notes that a participant involvement program has been conducted. ATCO notified all occupants, residents and landowners within 800 metres (m) of the affected and proposed transmission line right-of-way, and no objections were received. The Commission also notes that it issued a Notice of Application to directly affected landowners within 800 m of the affected and proposed transmission line right-of-way and notes that no objections were received.

25. The Commission is satisfied that the Project is in the public interest, having regard to its social and economic impacts. As well, based on AUC review of ATCO's plans, the Project should not incur any adverse environmental impacts with respect to soil conservation and reclamation, visual impact, historical resources, and surface water resources. Accordingly, the Commission notes that the proposed route follows existing right-of-ways and an existing utility corridor and is satisfied that the environmental impacts associated with the Project will be minimal.

### **4 DECISION**

26. As there are no objections or evidence from interested parties that AESO's assessment of the need for and selection of Alternative 2 is technically deficient or not in the public interest, the Commission approves the NID as filed, pursuant to section 34 of the *Electric Utilities Act*.

27. The Commission also approves ATCO's Facility Application, pursuant to sections 14, 15, and 21 of the *Hydro and Electric Energy Act*. The Commission grants ATCO a Permit and Licence for the alteration of transmission line 9L66 and also approves the decommissioning and salvage of transmission line 9L92 and a portion of 9L66.

28. Respective approvals set out in the Appendices are granted (the Appendices will be distributed separately).

Dated April 23, 2010.

**ALBERTA UTILITIES COMMISSION**

*(original signed by)*

Thomas McGee  
Chair

*(original signed by)*

N. Allen Maydonik, Q.C.  
Commissioner

*(original signed by)*

Tudor Beattie, Q.C.  
Commissioner