



AUC

Alberta Utilities Commission

Alberta Electric System Operator Needs Identification Document

**ATCO Electric Ltd.
Temporary Capacity Increase in Brintnell 876S Substation
Wabasca Area**

December 23, 2011

The Alberta Utilities Commission

Decision 2011-521: Alberta Electric System Operator
Needs Identification Document
Application No. 1606733

ATCO Electric Ltd.
Temporary Capacity Increase in Brintnell 876S Substation
Wabasca/Brintnell Area
Application No. 1606746

Proceeding ID No. 208

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Wabasca/Brintnell Area

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No. 1606746
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1 Introduction

1. The Alberta Electric System Operator (AESO) filed a needs identification document (NID), registered as Application No. 1606733 (NID application) with the Alberta Utilities Commission (AUC or the Commission) on November 4, 2010, pursuant to Section 34 of the *Electric Utilities Act*. In the NID application, the AESO requested approval to increase load capacity on a temporary basis at the Brintnell 876S substation located in the Wabasca/Brintnell area.
2. To meet the need identified in the NID application and pursuant to Section 35 of the *Electric Utilities Act*, on February 23, 2010, the AESO directed ATCO Electric Ltd. (ATCO) to submit a facility application to the AUC for the required alterations to temporarily increase load capacity at the Brintnell 876S substation based on the AESO's functional specification, as issued on September 22, 2008.
3. Pursuant to sections 14 and 15 of the *Hydro and Electric Energy Act*, ATCO filed its facility application with the Commission as Application No. 1606746 (facility application) on November 12, 2010.
4. ATCO proposed the following development in the Brintnell 876S substation to meet the need identified in the NID application:
 - temporarily re-energize a 28/37.3/46.7-megavolt ampere (MVA), 240/25-kilovolt (kV) transformer (Transformer 901T)
 - add one 240-kV circuit breaker
 - re-energize a 42-MVA, 25-kV voltage regulator
 - expand the fenced area by 20 metres to the west
5. ATCO is the holder of Permit and Licence No. [U2009-217](#)¹ for Brintnell 876S substation, which is located in LSDs 10 and 11, Section 36, Township 82, Range 23, west of the Fourth Meridian, within ATCO's nine-hectare crown lease in the Municipal District of Opportunity, approximately 47 kilometres northeast of the hamlet of Wabasca.

¹ Substation Permit and Licence No. U2009-217, Application No. 1595051, May 26, 2009.

2 Application process

6. Pursuant to Section 15.4 of the *Hydro and Electric Energy Act*, the AESO and ATCO requested that the Commission jointly consider the NID and the facility applications. The Commission issued information requests to both ATCO and the AESO on March 4, 2011 and received responses on March 29, 2011, and April 7, 2011, respectively.

7. The Commission issued a notice of applications for the NID application and the facility application on November 9, 2011, with a submission deadline of November 23, 2011. Because the scope of the activity for the facility application is minor and the proposed alterations would occur within the existing site of Brintnell 876S substation, the notice was sent directly to the registered parties to Proceeding ID No. 208 only. No concerns or objections were received in response to the notice.

3 Discussion

8. On September 16, 2008, ATCO filed Application No. 1595051 with the AUC, requesting approval of a two-stage, multi-part project for Brintnell 876S substation. Application No. 1595051 consisted of the following:

Stage 1, part 1

- Relocate a 30/40/50-MVA, 240/25-kV transformer from Paintearth Creek 863S substation to Brintnell 876S substation and redesignate it as Transformer 902T.
- Add two 25-kV circuit breakers at Brintnell 876S substation.

Stage 1, part 2

- Disconnect the 28/37.3/46.7-MVA, 240/25-kV transformer (Transformer 901T) at Brintnell 876S substation and connect Transformer 902T in its place.

Stage 2

- Relocate Transformer 901T to Paintearth Creek 863S substation as a system spare.
- Relocate the 42-MVA, 25-kV voltage regulator at Brintnell 876S substation to Paintearth Creek 863S substation.

9. The Commission approved Stage 1, part 1 of Application No. 1595051 on March 11, 2009, and the corresponding Permits and Licences No. [U2009-94](#)² and No. [U2009-95](#)³ were issued to ATCO to alter and operate the Brintnell 876S substation and the Paintearth Creek 863S substation, respectively.

10. The Commission approved Stage 1, part 2 of Application No. 1595051 on May 26, 2009, and Permit and Licence No. U2009-217 was issued to ATCO to alter and operate the Brintnell 876S substation.

² Substation Permit and Licence No. U2009-94, Application No. 1595051, March 11, 2009.

³ Substation Permit and Licence No. U2009-95, Application No. 1595051, March 11, 2009.

11. On August 20, 2009, EnCana Corporation (EnCana) filed a motion before the Commission pursuant to sections 4, 9(1), 9(2) and 28 of AUC Rule 001: *Rules of Practice*, regarding Stage 2 of Application No. 1595051. In its motion, Encana requested that the Commission suspend Proceeding ID No. 208 until the AESO filed a new or amended need application addressing alternatives that were necessary in order to provide the elements of a maintainable power system with acceptable restoration time in the Brintnell area, and ATCO filed a new or amended facilities application to meet the approved need. The Commission granted EnCana's motion on November 6, 2009.
12. Subsequent to the Commission granting EnCana's motion, the AESO filed the NID application regarding the capacity increase at Brintnell 876S substation in order to meet the projected short-term load growth in and around the Brintnell oilfields. Additionally, ATCO filed the facility application, to replace Stage 2 of Application No. 1595051.
13. In the facility application, ATCO stated that Transformer 901T would be temporarily re-energized, and would remain in service until the proposed Deadman Creek substation was constructed and in service; expected by the fourth quarter of 2013. Once Deadman Creek substation is in service, Transformer 901T and a new 240-kV circuit breaker would remain at Brintnell substation to serve as a system spare to respond to outages in the Wabasca/Brintnell area and other ATCO substations.
14. ATCO stated that the proposed fenced area expansion at Brintnell 876S substation would be entirely within its existing leased crown lands.
15. The AESO coordinated with ATCO to carry out a participant involvement program to provide stakeholders with an opportunity to raise concerns regarding the need for the project and to provide details relating to the facility application. On June 30, 2010, ATCO mailed an information package to eight industrial or business occupants or interest holders, two trappers within at least 800 metres of Brintnell 876S substation, Alberta Sustainable Resource Development, Municipal District of Opportunity, the AESO and TELUS Corporation. The information package included the AESO's need overview document. ATCO personally consulted with the aforementioned stakeholders between July and August 2010.
16. As a result of the AESO's participant involvement program, one stakeholder raised a concern with the project need regarding the ramifications if Deadman Creek substation did not go into service, realizing that the need identified in the NID application is temporary. The AESO reassured the stakeholder that the load would continue to be served in the area. The stakeholder otherwise supported the need and had no further concerns. The AESO did not receive any other objections or concerns regarding the need for the project as a result of its participant involvement program.
17. ATCO did not receive any objections or concerns regarding the facility application as a result of its participant involvement program.
18. ATCO stated that all work for the project would comply with the *Safety Codes Act*. In addition, ATCO committed to ensuring that the project would comply with Alberta Environment's *C&R/IL/95-2, Environmental Protection Guidelines for Electric Transmission Lines*.

19. ATCO prepared and filed a noise impact assessment dated October 12, 2010. ATCO submitted that anticipated noise levels for Brintnell 876S substation would be within the permissible sound levels as specified in AUC Rule 012: *Noise Control* (AUC Rule 012).
20. ATCO submitted that the estimated cost to alter Brintnell 876S substation is \$5,358,500 (+20/-10%), and that it will be allocated as customer cost.

4 Findings

21. The Commission determined that the NID application, with the additional information provided through the information request process, contains the information required by the *Electric Utilities Act*, the *Transmission Regulation* and AUC Rule 007: *Applications for Power Plants, Substations, Transmission Lines, and Industrial System Designations* (AUC Rule 007).
22. Because no interested party has demonstrated that the AESO's assessment of the need for electricity in the Wabasca/Brintnell area is technically deficient or that approval of the NID application is not in the public interest, the Commission finds that the AESO's NID complies with subsection 38(e) of the *Transmission Regulation* and, therefore, approves the AESO's NID application.
23. The Commission finds that the facility application complies with the requirements prescribed under sections 14 and 15 of the *Hydro and Electric Energy Act* and AUC Rule 007. The Commission further finds that the facility application is consistent with the transmission system development as determined by the AESO in the NID.
24. The Commission is satisfied that the technical, environmental and noise impact assessments submitted by ATCO fulfill the requirements of AUC Rule 007 and AUC Rule 012.
25. The Commission recognizes that a participant involvement program was conducted by ATCO and the AESO with respect to the NID application and the facility application, and that there are no outstanding objections or concerns. The Commission finds that the participant involvement program meets the requirements of AUC Rule 007.
26. The Commission recognizes that there are no outstanding concerns in response to the notice of applications.
27. Because there are no outstanding objections to the facility application and the technical, siting, environmental and noise aspects of the project have been met, the Commission finds the project to be in the public interest pursuant to Section 17 of the *Alberta Utilities Commission Act*.
28. The Commission recognizes that the facility application replaces Stage 2 of Application No. 1595051 and therefore closes Stage 2 of Application No. 1595051.

5 Decision

29. The Commission approves the AESO's NID application as filed, pursuant to Section 34 of the *Electric Utilities Act* and Section 38 of the *Transmission Regulation*, and grants the approval set out in Appendix 1 – Need Identification Document – Approval No. U2011-478 – December 23, 2011 (Appendix 1 will be distributed separately).

30. The Commission approves ATCO's facility application pursuant to Section 19 of the *Hydro and Electric Energy Act*, and pursuant to Sections 14 and 15 of the *Hydro and Electric Energy Act*, grants Substation Permit and Licence No. U2011-479– December 23, 2011, to ATCO to alter and operate Brintnell 876S substation as set out in Appendix 2 (Appendix 2 will be distributed separately).

Dated on December 23, 2011.

The Alberta Utilities Commission

(original signed by)

Anne Michaud
Chair

(original signed by)

Bill Lyttle
Commission Member

(original signed by)

Neil Jamieson
Commission Member