

# Needs identification document checklist application

**Date:** May 14, 2025

**Applicant reference:** P2513 – Scotford 409S Substation Upgrade

## Identification

**Company name:** Alberta Electric System Operator (AESO)

**Name, position and contact information of applicant contact:**

Brenda Hill  
 Regulatory Administrator  
 403-539-2850  
 Brenda.Hill@aeso.ca

## Project details

**This application is for:**

Generation connection ☐      Non-distribution facility owner load ☒

**Project written description, including the need, nature and extent of the project and the Alberta Electric System Operator's (AESO) preferred option:**

Shell Canada Limited (Shell) has requested system access service to improve the reliability of electricity service to the Scotford Industrial Complex in the Fort Saskatchewan area (AESO Planning Area 33, Fort Saskatchewan, which is part of the AESO Northeast Planning Region). This Facility has an approved Industrial System Designation (Industrial System Designation Order 29243-D02-2024).

Shell's request does not include changes to the existing Rate STS, *Supply Transmission Service*, contract capacity, or the existing Rate DTS, *Demand Transmission Service*, contract capacity at Scotford 409S substation.

The Proposed Transmission Development consists of the following elements:

1. Upgrade the existing Scotford 409S substation, including adding one 138/25 kilovolt (kV) transformer and two 138 kV circuit breakers.
2. Modify, alter, add or remove equipment, including switchgear, and any operational, protection, control and telecommunication devices required to undertake the work as planned and ensure proper integration with the transmission system.

**Applicable ratings/capability of any proposed major elements:**

The 138/25 kV transformer will have a minimum capacity of 83 MVA.

**Proposed in-service date:** November 25, 2027

**Cost estimate for the preferred option for the project is attached.**

Yes ☒      No ☐

## Technical considerations

<p><b>Single line diagram(s) of the proposed development and study area is attached.</b></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p><b>The AESO has conducted appropriate studies and considers that the project will not result in adverse impacts to the Alberta Interconnected Electric System.</b></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p><b>List any new or exacerbated Category B system impacts that occur as a result of the project and provide a description of how they will be addressed (e.g. description of remedial action schemes that will be used):</b></p> <p>The AESO examined the Proposed Transmission Development and confirms it does not impact the Alberta Interconnected Electric System (AIES). The Proposed Transmission Development will not result in new or exacerbated Category B system impacts.</p>
<p><b>Briefly describe any alternatives to the AESO's preferred option that the AESO considered and why they were ruled out:</b></p> <p>The AESO did not consider other alternatives to respond to the request for system access service.</p>
<p><b>Participant involvement requirements</b></p>
<p><b>Notification requirements have been met and there are no unresolved objections.</b></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p><b>Environmental requirements</b></p>
<p><b>The AESO does not anticipate significant environmental effects as a result of the project.</b></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p><b>Other considerations</b></p>
<p><b>If you answered no to any of the questions above, please explain:</b></p> <p>n/a</p>
<p><b>The project raises issues not addressed by the preceding questions.</b></p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
<p><b>If yes, please explain:</b></p> <p>n/a</p>