



Need for the Thornton 2091S Substation Upgrade

ATCO Electric Ltd. (ATCO) has applied to the AESO for transmission system access to serve growing demand for electricity in the Grande Prairie area. ATCO's request can be met by the following solution:

PROPOSED SOLUTION

- Upgrade the existing Thornton 2091S substation, including adding one 144/25 kilovolt (kV) transformer and one 144 kV circuit breaker.
- Add or modify associated equipment as required for the above transmission developments.

NEXT STEPS

- In late 2026, the AESO may consider the need for this project for approval under section 501.3 of the ISO rules, *Abbreviated Needs Approval Process (ANAP Rule)*, or apply to the Alberta Utilities Commission (AUC) for approval of the need.
- The AESO will notify stakeholders via the AESO's website at www.aeso.ca/grid/transmission-projects prior to the project being considered under the ANAP Rule or when filing a needs identification document (NID) application with the AUC.

The following organizations have key roles and responsibilities in providing access to the transmission system:

THE AESO

- Must plan the transmission system and enable access to it for generators and other qualified customers.
- Can approve eligible projects through the ANAP Rule and for non-eligible projects, the AESO will prepare and submit a NID to the AUC for approval.

ATCO

- Is the transmission facility owner in the Grande Prairie area.
- Is responsible for detailed siting and routing, constructing, operating, and maintaining the transmission facilities.
- Is regulated by the AUC and must apply to the AUC for approval of its transmission facilities applications.

WHO IS THE AESO?

The Alberta Electric System Operator (AESO) plans and operates Alberta's electricity grid and wholesale electricity market safely, reliably and in the public interest of all Albertans. We are a not-for-profit organization with no financial interest or investment of any kind in the power industry.

We appreciate your views, both on the need for transmission system development and proposed transmission plans. If you have any questions or comments, please contact us directly.

CONTACT US

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