

July 04, 2025

Notified Market Participant Corporate Legal Name

Address Line 1.
Address Line 2.
City, Province, Postal Code.

Dear Notified Market Participant Primary Contact:

Re: Need for the Willow Ridge Wind and Battery Project Connection

The Alberta Electric System Operator (AESO) would like to advise you that SPWC Development LP (SPWC) has applied for transmission system access to connect its approved Willow Ridge Wind and Battery Project (Facility) to the Alberta interconnected electric system (AIES) in the AESO South Planning Region.

The purpose of this letter is to advise you that the AESO has identified that, under credible worse case forecast conditions, the operation of **[Effective Generation Facility Name]** (**[Effective Generation Facility Asset ID]**) may be affected following the connection of the Facility.

Connection Assessment Findings

An engineering connection assessment was carried out by the AESO to assess the transmission system performance following the connection of the Facility. The connection assessment identified the potential for thermal criteria violations following the connection of the Facility, under credible worse case forecast conditions, with all transmission facilities in service (Category A).

Category A thermal criteria violations on the 138 kV transmission lines 613L, 170L, Russell 632S PST, 786L, 412L, and 765L, and 240 kV transmission lines 1005L, 1036L, 924L, 1109L, and 1080L were exacerbated following the connection of the Facility. New Category A thermal criteria violations were observed on the 138 kV transmission line 412L. Should the AESO determine that mitigation is required to address potential thermal criteria violations under Category A conditions, the AESO may develop operational procedures or other mitigation measures.

In addition, thermal criteria violations were also identified when a single transmission facility is out of service (Category B) following the connection of the Facility. To mitigate these potential system performance issues, existing remedial action schemes (RASs) 175, 178, 169, 40, 179, and 194; planned RASs 223, 224, and 225; modified RAS 170; and new RAS 183 will be used. Once RAS 170 is modified to add the Facility to the RAS logic, the total megawatts will exceed the Maximum Severe Single Contingency (MSSC) limit. Therefore, precontingency curtailment of projects assigned to this RAS may be required under the Category A condition, to prevent generation curtailment above the MSSC limit during Category B conditions.

The AESO will make use of real-time operational measures to mitigate these potential system performance issues, in accordance with <u>Section 302.1 of the ISO rules</u>, <u>Real Time Transmission Constraint Management</u> (TCM Rule), which is in effect today. When applied, the TCM Rule could result in the AESO issuing directives for curtailment to source assets that are effective in managing a constraint.

The connection assessment identified source assets, including the **[Effective Generation Facility Asset ID]**, which are effective in mitigating the potential transmission constraints.

1

Public

¹ The studies were performed assuming the Rate STS, *Supply Transmission Service*, contract capacity of 246 MW and a Rate DTS, *Demand Transmission Service*, contract capacity of 1.5 MW.



The AESO will continue to monitor the pace of generation development and will notify market participants if it determines that it is necessary to obtain approval for an "exception" under Section 15(2) of the *Transmission Regulation*. The AESO will notify market participants if and when the AESO determines it is necessary to apply to the Alberta Utilities Commission (AUC) for approval of such an exception. The AESO is developing system plans that will address some of the identified thermal criteria violations as part of the Southwest Area Transmission Development (SWATD) plan.² The need and timing of generation-driven transmission plans will be assessed according to the forthcoming Optimal Transmission Planning (OTP) framework.³

For Further Information

The AESO Need Overview document is attached for your information. The AESO Need Overview describes the AESO's proposed transmission development to connect the Facility to the AIES.

The engineering connection assessment will be included in the AESO's Willow Ridge Wind and Battery Project Connection needs identification document (NID) application. Following submission of the NID application to the Alberta Utilities Commission, the NID application will be posted on the AESO website at: https://www.aeso.ca/grid/transmission-projects/. Stakeholders will be notified when this occurs via the AESO stakeholder newsletter

If you have any questions or concerns, please contact the AESO at 1-888-866-2959 or stakeholder.relations@aeso.ca

Attachments: AESO Need Overview: Need for the Willow Ridge Wind and Battery Project Connection

-

² More information about this plan is discussed in the discussed in the South Planning Region Near-Term Transmission Plans section of the AESO 2025 Long-Term Transmission Plan; materials are available on the AESO website.

³ More information about Optimal Transmission Planning (OTP) is available on the AESO Engage website.



Need for the Willow Ridge Wind and Battery Project Connection in the Town of Fort MacLeod area

SPWC Development LP, (SPWC) has applied to the AESO for transmission system access to connect its proposed Willow Ridge Wind and Battery Project (Facility) in the Town of Fort MacLeod area. SPWC's request can be met by the following solution:

PROPOSED SOLUTION

- Add one 240 kilovolt (kV)transmission line to connect the Facility to the existing 240 kV transmission line 968L in a T-tap configuration.
- Add or modify associated equipment as required for the above transmission developments.

NEXT STEPS

- In late 2024, 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 prior to 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.

ALTALINK

- Is the transmission facility owner in the Town of Fort MacLeod 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

Alberta Electric System Operator

AESO Stakeholder Relations stakeholder.relations@aeso.ca 1-888-866-2959

2500, 330-5th Avenue SW Calgary, AB T2P 0L4 Phone: 403-539-2450

www.aeso.ca | X@theaeso