SENT VIA EMAIL

April 28, 2023

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 Bull Trail Wind Connection in the Irvine area**

The Alberta Electric System Operator (AESO) would like to advise you that Bull Trail Renewable Energy Centre Limited Partnership has applied for transmission system access to connect its Bull Trail Wind Power Project (approved 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 **[Effective Generation Facility Name]** ([**Effective Generation Facility Asset ID]**) may be curtailed following the connection of the planned 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 approved Facility.[1] The connection assessment identified the potential for voltage criteria violations on the Cassils-Bowmanton-Whitla (CBW) transmission path following the connection of the approved Facility, under credible worse case forecast conditions, with all transmission facilities in service (Category A).

In addition, thermal, transient stability and voltage criteria violations were also identified when a single transmission facility is out of service (Category B) following the connection of the approved Facility. To mitigate these potential system performance issues, a planned remedial action scheme (RAS), RAS 164 will be modified by adding the approved Facility to the RAS logic, which curtails the approved Facility upon activation. Planned RAS 180, RAS 175 and RAS 197 will continue to be applied for other observed Category B constraints without modifications to include the approved Facility. The total megawatts tied to RAS 164 exceeds the Maximum Severe Single Contingency (MSSC) limit. Therefore, pre-contingency curtailment of projects assigned to the RAS may be required under the Category A condition, to prevent generation curtailment above the MSSC limit during Category B conditions.

The AESO may also make use of real-time operational measures to mitigate these potential system performance issues, in accordance with Section 302.1 of the ISO rules, *Real Time Transmission Constraint Management* (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.

[1] The studies were performed assuming the Rate STS, *Supply Transmission Service*, contract capacity of 300 MW.

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

If the AESO determines that congestion will arise under Category A conditions, the AESO will make an application to the AUC 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 AUC for approval of such an exception.

The AESO has previously communicated with stakeholders regarding its plans to mitigate congestion under Category A conditions on the the CBW transmission path. Materials can be found on the AESO website at: https://www.aeso.ca/grid/transmission-projects/bowmanton-244s-substation-voltage-support-project-7083/

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 approved Facility to the AIES.

The engineering connection assessment will be included in the AESO's Bull Trail Wind Power 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 Bull Trail Wind Connection in the Irvine area*

Need for the Bull Trail Wind Power Project Connection in the Irvine area

Bull Trail Renewable Energy Centre Limited Partnership (Bull Trail) has applied to the AESO for transmission system access to connect its approved Bull Trail Wind Power Project (Facility) in the Irvine area. Bull Trail's request can be met by the following solution:

PROPOSED SOLUTION

- Add one substation, to be designated Gros Ventre Creek 1141S, including three 240 kilovolt (kV) circuit breakers.
- Connect the proposed Gros Ventre Creek 1141S substation to the existing 240 kV transmission line 983L in an in-and-out configuration.
- Add one 240 kV transmission line to connect the Facility to the Gros Ventre Creek 1141S substation.
- Add or modify associated equipment as required for the above transmission developments.

NEXT STEPS

- In early 2023, 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 Irvine 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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