SENT VIA EMAIL

August 26, 2024

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 RESC Oyen Wind Power Project in the Oyen area**

The Alberta Electric System Operator (AESO) would like to advise you that Renewable Energy Systems Canda Inc. (RESC) has applied for transmission system access to connect its proposed Oyen Wind Power Project (proposed Facility) to the Alberta interconnected electric system (AIES) in the AESO's Central Planning Region.

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

Connection Assessment Findings

An engineering connection assessment was carried out by the AESO in order to assess the transmission system performance following the connection of the proposed Facility.[1] 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 were observed pre-Project on the 138 kV/144 kV transmission lines, 715L, 715AL, 749AL, 7L760, and 7L132 and most of these are exacerbated with the addition of the proposed Facility. A new Category A thermal criteria violation was observed following the connection of the proposed Facility on the 138 kV transmission line 472L. Additionally, Category A thermal criteria violations on the 240 kV lines 912L and 9L20 were exacerbated following the addition of the proposed Facility, however the approved Central East Transfer-Out (CETO)[2] Transmission Development will alleviate these violations once it is in service.

In addition, thermal criteria violations were identified when a single transmission facility is out of service (Category B) following the connection of the proposed Facility. To mitigate these Category B system performance issues, existing RASs 200 and 203, modified RASs 134 and 201, the new 9L24/760L RAS will be used. RASs 134 and 201 will be modified by adding the proposed Facility to the RAS logic, which will curtail the proposed Facility upon activation. The total megawatts tied to RAS 134 and RAS 201 exceed the Maximum Severe Single Contingency (MSSC) limit. Therefore, pre-contingency curtailment of projects

[1] The studies were performed assuming the Rate STS, *Supply Transmission Service*, contract capacity of 250 MW and a Rate DTS, *Demand Transmission Service*, contract capacity of 1 MW.

[2] More information about the approved CETO Project is available on the AESO website. Construction is commencing for Stage 1, with an anticipated in-service date of Q2 2026.

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assigned to these RASs may be required under the Category A condition, to prevent generation loss above the MSSC limit during Category B conditions.

The AESO will also make use of real-time operational measures to mitigate the above 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.

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

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.

For Further Information

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

To support the AESO's consideration of the Oyen Wind Power Project under the Abbreviated Needs Approval Process, the engineering connection assessment 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 website and in 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 RESC Oyen Wind Power Project Connection in the Oyen area*

Need for the Oyen Wind Power Project Connection in the Oyen area

Renewable Energy Systems Canada Inc. (RESC) has applied to the AESO for transmission system access to connect its proposed Oyen Wind Power Project (Facility) in the Oyen area. RESC's request can be met by the following solution:

PROPOSED SOLUTION

- Add one 240 kV transmission line to connect the Facility to the existing Lanfine 959S substation in a radial configuration.
- Modify the Lanfine 959S substation, including adding one 240 kV circuit breaker.
- Add or modify associated equipment as required for the above transmission developments.

NEXT STEPS

- In mid 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.

ATCO

- Is the transmission facility owner in the Oyen 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

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