

October 14, 2022

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 Big Sky Solar Project Connection in the Empress area**

The Alberta Electric System Operator (AESO) would like to advise you that Renewable Energy Systems Canada Inc. (RESC) has applied for transmission system access to connect its Big Sky Solar Project (planned 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 planned Facility.¹ The connection assessment identified the potential for thermal criteria violations when a single transmission facility is out of service (Category B) following the connection of the planned Facility. To mitigate these potential Category B system performance issues, existing, modified, and new remedial action schemes may be used. The total megawatts tied to the RAS 134 and RAS 201 exceeds the Maximum Severe Single Contingency (MSSC) limit; therefore, pre-contingency curtailment of projects assigned to the RASs 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.

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

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 planned Facility to the AIES.

To support the AESO's consideration of the Big Sky Solar Project Connection under the Abbreviated Needs Approval Process, the engineering connection assessment will be posted on the AESO website at:

¹ The studies were performed assuming the Rate STS, *Supply Transmission Service*, contract capacity of 140 MW.

<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 Big Sky Solar Project Connection in the Empress area*

Need for the Big Sky Solar Project Connection in the Empress Area

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

PROPOSED SOLUTION

- Add one 144 kilovolt (kV) transmission line to connect the Facility to the existing 144 kV transmission line 7L760 in a T-tap configuration.
- Add or modify associated equipment as required for the above transmission developments.

NEXT STEPS

- The AESO intends to apply to the Alberta Utilities Commission (AUC) for approval of the need in late 2022.
- The AESO's needs identification document (NID) application will be available on the AESO's website at www.aeso.ca/grid/projects at the time of its application to 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.
- Is regulated by the AUC and must apply to the AUC for approval of its NID.

ATCO

- Is the transmission facility owner in the Empress 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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