

December 09, 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 Eastervale Solar + Storage Project Connection

The Alberta Electric System Operator (AESO) would like to advise you that Eastervale Solar Inc. (Eastervale Solar) has applied for transmission system access to connect its proposed Eastervale Solar + Energy Storage 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, the **[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 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 138/144 kV transmission lines 715L, 715AL, 749AL, 472L, 7L760, and 7L132 and several of these violations are exacerbated with the addition of the proposed Facility. Additionally, following the connection of the proposed Facility, new Category A thermal criteria violations were observed on the 138 kV transmission line 704L, and the 240 kV transmission line 9L62. The second stage of the approved Central East Transfer-Out (CETO) Transmission Development,² will alleviate the thermal criteria violations observed on the 240 kV transmission line 9L62 once it is in service.

In addition, thermal criteria violations were also identified when a single transmission facility is out of service (Category B) following the connection of the proposed Facility. To mitigate these potential system performance issues, existing Remedial Action Schemes (RAS)s 134, 201, 203, planned RASs 213 and 238, and planned 9L24/760L RAS will be used. RAS 211 will be modified to include the Project to mitigate overload on 704L. The total megawatts tied to modified RAS 211, RAS 134, and RAS 201 exceed the Maximum Severe Single Contingency (MSSC) limit. Therefore, pre-contingency curtailment of projects assigned to these RASs 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 Section 302.1 of the ISO rules, Real Time Transmission Constraint Management

¹ The studies were performed assuming the Rate STS, *Supply Transmission Service*, contract capacity of 300 MW and Rate DTS, *Demand Transmission Service*, contract capacity of 200 MW.

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



(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 for approval of such an exception.

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 proposed Facility to the AIES.

The engineering connection assessment will be included in the AESO's Eastervale Solar + Storage 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 Eastervale Solar + Storage Project Connection

OCTOBER 2024



Need for the Eastervale Solar + Storage Project Connection

Eastervale Solar Inc. (Eastervale Solar) has applied to the AESO for transmission system access to connect its proposed Eastervale Solar + Energy Storage Project (Facility) in the Amisk area. Eastervale Solar'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 1047L using a T-tap configuration.
- Add or modify associated equipment as required for the above transmission developments.

NEXT STEPS

- In mid 2025 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 & ATCO

- Are the transmission facility owner in Amisk Area.
- Are responsible for operating and maintaining the new 240 kV transmission line and constructing, operating and maintaining the transmission facilities within their respective service territories.
- Are regulated by the AUC and must apply to the AUC for approval of their 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

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