

August 12, 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 Connection Big Rock Solar Battery Project Connection

The Alberta Electric System Operator (AESO) would like to advise you that Enerfin Energy Company of Canada Inc. (Enerfin) has applied for transmission system access to connect its proposed Big Rock Solar 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.¹ The connection assessment identified the potential for thermal criteria violations and the potential for voltage criteria violations on the 500 kV BC Intertie transmission path 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 691L and 733L, and the 240 kV transmission lines 924L and 927L were exacerbated following the connection of the Facility. New Category A thermal criteria violations were observed on the 138 kV transmission line 765L following the connection of the Facility. 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.

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](#) (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.

In addition, thermal and voltage 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, real-time operational measures and existing remedial action schemes (RASs) 136, 175 and modified planned RASs 223, 224 and 194 will be used. Once RASs 223 and 224 are modified to add the Facility to the RAS logic, the total megawatts assigned to these RASs will 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.

¹ The studies were performed assuming the Rate STS, *Supply Transmission Service*, contract capacity of 90 MW and a Rate DTS, *Demand Transmission Service*, contract capacity of 40 MW.

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

The AESO is developing system plans that will address some of the identified thermal criteria violations as part of the Southwest Area Transmission Development plan.² The need and timing of generation-driven transmission plans will be assessed according to the forthcoming Optimal Transmission Planning framework.³

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 Big Rock Solar Battery 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 Big Rock Solar Battery Project Connection*

² More information about this plan is 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 Big Rock Solar Battery Project Connection

Enerfin Energy Company of Canada Inc. (Enerfin) has applied to the AESO for transmission system access to connect its proposed Big Rock Solar Battery Project (Facility) in the High River area. Enerfin's request can be met by the following solution:

PROPOSED SOLUTION

- Add one 138 kilovolt (kV) transmission line, to connect the Facility to the existing 138 kV transmission line 812L using a T-tap configuration.
- Modify the existing High River 65S substation, including adding one 138 kV circuit breaker.
- Add or modify associated equipment as required for the above transmission developments.

NEXT STEPS

- In late 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 when 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 High River 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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