SENT VIA EMAIL

December 11, 2020

Notified Market Participant Corporate Legal Name
Address Line 1.
Address Line 2.
City, Province, Postal Code.

Dear **Notified Market Participant Primary Contact:**

Re: **Canyon Creek Pumped Hydro Energy Storage Project Connection**

The Alberta Electric System Operator (AESO) would like to advise you that Turning Point Generation (TPG) has applied for transmission system access to connect its approved Canyon Creek Pumped Hydro Energy Storage Project (approved Facility) to the Alberta interconnected electric system (AIES) in the AESO Central Planning Region.[1]

A copy of 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, and the AESO's next steps, which include submitting a needs identification document (NID) application to the Alberta Utilities Commission (AUC) for approval.

The purpose of this letter is to advise you that the AESO has identified that, under credible worse case forecast conditions, the operation of the **[Effective Generation Facility Name]** ([**Effective Generation Facility Asset ID]**) may be affected following the connection of the approved Facility.[2]

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. The connection assessment identified the potential for marginal thermal criteria violations, under credible worse case forecast conditions, with all transmission facilities in service (Category A) when the Facility is in discharging mode.

Transmission Constraint Management

Should the AESO determine that mitigation is required to address potential marginal thermal criteria violations under Category A conditions, the AESO may develop operational procedures or other mitigation measures.

To mitigate potential system performance issues, the AESO may also make use of real-time operational measures, 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] Energy storage units have unique characteristics that allow them to operate in either charging or discharging mode.

[2] The studies were performed assuming the Rate STS, *Supply Transmission Service*, contract capacity of 75 MW.

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

Closer to the in-service date, if the AESO determines that congestion will arise under Category A conditions, the AESO will make an application to the Alberta Utilities Commission 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.

For Further Information

The engineering connection assessment will be included in the AESO's Canyon Creek Pumped Hydro Energy Storage Project Connection NID application. Following submission of the NID application to the AUC, the NID application will be posted on the AESO website at: https://www.aeso.ca/grid/projects/

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 Canyon Creek Pumped Hydro Energy Storage Project Connection in the Hinton area*

Need for the Canyon Creek Pumped Hydro Energy Storage Project Connection in the Hinton area

Turning Point Generation (TPG) has applied to the Alberta Electric System Operator (AESO) for transmission system access to connect its proposed Canyon Creek Pumped Hydro Energy Storage Project (Facility) in the Hinton area. TPG'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 745AL 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 early 2021.
- 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.

ALTALINK

- Is the transmission facility owner in the Hinton 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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