September 26, 2018

[Market Participant]

Attention: **[Market Participant]**

Dear **[Market Participant]**

Re: **Planned Generating Facility Connections in the AESO's Central Planning Region**

The Alberta Electric System Operator (AESO) would like to advise you that the proponents of two planned generating facilities have each applied for transmission system access to connect their respective planned generating facilities to the Alberta interconnected electric system (AIES) in the AESO's Central Planning Region.

Planning for the connection of these facilities is undertaken by the AESO as part of the AESO's Connection Process. The planned facilities are as follows:

- the Wheatland Wind Project; and
- the Paintearth Wind Project.

In late 2018, the AESO plans to file a Needs Identification Document (NID) application for the connection of the Wheatland Wind Project. The AESO has produced a Need Overview document of the Wheatland Wind Project connection that describes the AESO's proposed transmission development to connect this planned facility to the AIES. A copy of the Need Overview document is attached for your information.

The Paintearth Wind Connection Project NID application was filed by the AESO with the Alberta Utilities Commission (AUC) on December 15, 2017 and is currently being considered by the AUC in Proceeding 23206.

The purpose of this letter is to advise you that the AESO has identified that, under some potential system conditions, the operation of the **[Market Participant Facility]** may be affected following the connection of one or more of the above-noted planned generating facilities.[1]

Connection Assessment Findings

Engineering connection assessments were carried out by the AESO in order to assess the transmission system performance following the connection of the planned facilities. The connection assessments identified the potential for system performance issues, under some future system conditions, following the connection of one or more of the planned facilities.

[1] The studies were performed assuming the following Rate STS, *Supply Transmission Service*, contract capacities: the Wheatland Wind Project, Rate STS of 120 MW; and the Paintearth Wind Project, Rate STS of 150 MW.

Alberta Electric System Operator, Calgary Place, 2500, 330 – 5th Avenue SW Calgary, AB T2P 0L4
Phone: 403-539-2450 Fax: 403-539-2949 www.aeso.ca @theaeso

Transmission Constraint Management

To mitigate these potential system performance issues existing and planned remedial action schemes (RASs) may be modified. In addition, new RASs may be required.

The AESO may also make use of real-time operational measures to mitigate these potential system performance issues, including in accordance with Section 302.1 of the ISO rules, *Real Time Transmission Constraint Management* (TCM Rule). 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 assessments have identified source assets, including the **[Market Participant Facility]**, that are effective in mitigating the potential transmission constraints.

AESO Long-term Planning

At this time, the actual impacts of these projects depend on the actual energization timing of the planned generation facilities. The AESO will ensure plans are in place when impacts of these facilities become certain. As mentioned in the AESO's *Transmission Capability Assessment for Renewables Integration*,[2] the AESO expects to be able to connect approximately 130 MW in the Central East area. This capability report states that this could be achieved through use of RAS, which is consistent with the findings of the engineering connection assessments.

The Need for a Section 15(2) Application

If the AESO anticipates that congestion under system normal (Category A) conditions will arise on the transmission system, then the AESO is required to file and obtain approval from the AUC 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, and will address the frequency, magnitude and duration of any anticipated congestion at that time.

For Further Information

The engineering connection assessment will be included in the AESO's Wheatland Wind Project Connection NID application. Following submission to the AUC of the NID application, 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

Yours truly,

"Electronically signed by"

Maz Mazadi, PhD, P.Eng., SMIEEE
Manager, Project and System Access Studies

Attachments:
AESO Need Overview: *Need for the Wheatland Wind Project Connection in the Dorothy area*

[2] Available at: https://www.aeso.ca/assets/Uploads/Transmission-Capability-Assessment-for-Renewables-Integration-Final.pdf

Need for the Wheatland Wind Project Connection in the Dorothy area

FAST FACT

Alberta's electric transmission system comprises the towers, wires and related equipment that are a part of moving electricity from where it is generated to where it is used.

Wheatland Wind Project Ltd. (Wheatland) has applied to the Alberta Electric System Operator (AESO) for transmission system access to connect its proposed Wheatland Wind Project (Facility) in the Dorothy area. Wheatland's request can be met by the following solution:

PROPOSED SOLUTION

- Add a substation (Parker 2072S) with three 144 kilovolt (kV) circuit breakers.
- Add two 144 kV transmission lines to connect the proposed Parker 2072S substation to the existing 144 kV transmission line 7L85.
- Add a 144 kV transmission line to connect the Facility to the proposed Parker 2072S substation.
- Add or modify associated equipment as required for the above transmission developments.

NEXT STEPS

- In late 2017, the AESO intends to submit a needs identification document (NID) to the Alberta Utilities Commission (AUC) for approval.
- Once submitted, the NID will be posted on the AESO's website at **www.aeso.ca/grid/projects/**

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 ELECTRIC LTD.:

- Is the transmission facility owner in the Dorothy area
- Is responsible for detailed siting and routing, constructing, operating and maintaining the associated transmission facilities
- Is regulated by the AUC and must apply to the AUC for approval of its transmission facilities applications

CONTACT US

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.

Alberta Electric System Operator
Jennifer Vollmer
AESO Stakeholder Relations

stakeholder.relations@aeso.ca
1-888-866-2959

2500, 330-5th Avenue SW
Calgary, AB T2P 0L4
Phone: 403-539-2450
Fax: 403-539-2949

www.aeso.ca | **@theaeso**

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.