

September 18, 2020

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

Dear **Notified Market Participant Primary Contact:**

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

The Alberta Electric System Operator (AESO) would like to advise you that Paintearth Wind Project Ltd. and Pattern Development Lanfine Wind ULC have each applied for transmission system access to connect their approved Paintearth Wind Project and Lanfine North Wind Power Project (approved Facilities) to the Alberta interconnected electric system (AIES) in the AESO's Central Planning Region.

Copies of the applicable AESO Need Overview documents are attached for your information. The AESO Need Overview documents describe the AESO's proposed transmission development to connect each of the approved Facilities to the AIES and the AESO's next steps, which includes submitting needs identification document (NID) applications 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 either of the above noted approved Facilities.<sup>1</sup>

### **Connection Assessment Findings**

Engineering connection assessments were carried out by the AESO to assess the transmission system performance following the connection of the approved Facilities. The connection assessments identified the potential for thermal criteria violations following the connection of the Paintearth Wind Project, under credible worse case forecast conditions, with all transmission facilities in service (Category A). In addition, thermal criteria violations were also identified when a single transmission facility is out of service (Category B) following the connection of either of the approved Facilities.

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 until the approved Provost to Edgerton and Nilrem to Vermilion Transmission System Reinforcement project is in place. In addition, to address potential thermal criteria violations under Category B conditions, the AESO may implement new remedial action schemes (RASs) or other mitigations, as required.

The AESO may also make use of real-time operational procedures to mitigate these potential thermal criteria violations, in accordance with [Section 302.1 of the ISO rules, Real Time Transmission Constraint](#)

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<sup>1</sup> The studies were performed assuming the following Rate STS, *Supply Transmission Service*, contract capacities: the Paintearth Wind Project Connection, Rate STS of 150 MW; and the Lanfine North Wind Power Project Connection, Rate STS of 145 MW.

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 Name]** (**[Effective Generation Facility Asset ID]**), which are effective in mitigating the potential transmission constraints.

If the AESO determines that congestion will arise under Category A conditions, the AESO will make an application to the AUC 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 amended Paintearth Wind Project Connection NID application and the AESO’s Pattern Lanfine North Wind Power Project Connection NID application. Following submission of the NID applications to the AUC, the NID applications 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](mailto:stakeholder.relations@aeso.ca)

Attachments:

AESO Need Overview Update: *Need for the Paintearth Wind Project Connection in the Halkirk area*

AESO Need Overview Update: *Need for the Pattern Lanfine North Wind Power Project Connection in the Oyen and Holden areas*

# Need for the Paintearth Wind Project Connection in the Halkirk area

*Paintearth Wind Project LP (Paintearth), by its general partner Paintearth Wind Project Ltd., has applied to the Alberta Electric System Operator (AESO) for transmission system access to connect its approved Paintearth Wind Project (Facility) in the Halkirk area.*

*Distribution of the original AESO Need Overview began in May 2017 and the AESO filed a needs identification document (NID) application in December 2017. As a result of a change in schedule, the AESO determined that an amendment to the filed NID application will be required. The AESO intends to submit the amended NID as described below.*

*Paintearth's request can be met by the following solution:*

## PROPOSED SOLUTION

- Add the proposed Pioneer 805S substation, including two 240 kilovolt (kV) circuit breakers.
- Add two 240 kV transmission lines to connect the proposed Pioneer 805S substation to the existing 240 kV transmission line 9L93 in an in-and-out configuration.
- Add one 240 kV transmission line to connect the Facility to the proposed Pioneer 805S substation.
- Add or modify associated equipment as required for the above transmission developments.

## REVISED NEXT STEPS

- The AESO has determined that the NID application submitted in December 2017 needs to be amended. The AESO now intends to submit the amended NID application to the Alberta Utilities Commission (AUC) for approval of the need in late 2020.
- The AESO's needs identification document (NID) application will be available on the AESO's website at [www.aeso.ca/grid/projects](http://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 Halkirk 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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# Need for the Lanfine North Wind Power Project Connection in the Oyen and Holden areas

*Pattern Development Lanfine Wind ULC (Pattern Development) has applied to the AESO for transmission system access to connect its approved Lanfine North Wind Power Project (Facility) in the Oyen area. Distribution of the original AESO Need Overview began in May 2018. The AESO has since revised its proposed schedule and identified the need for development in the Holden area, as described below. Pattern Development'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 Lanfine 959S substation.
- Modify the existing Lanfine 959S substation, including adding one 144 kV circuit breaker.
- Add or modify associated equipment as required for the above transmission developments.

## REVISED NEXT STEPS

- The AESO intends to apply to the Alberta Utilities Commission (AUC) for approval of the need in mid-2020.
- The AESO's needs identification document (NID) application will be available on the AESO's website at [www.aeso.ca/stakeholder-engagement/transmission-projects](http://www.aeso.ca/stakeholder-engagement/transmission-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 & ALTALINK

- Are the transmission facility owners (TFO) in their respective service areas:
  - ATCO is the TFO in the Oyen area.
  - AltaLink is the TFO in the Holden area.
- Are responsible for detailed siting and routing, constructing, operating and maintaining the transmission facilities within their respective service areas.
- Will coordinate the proposed transmission development described above.
- Are regulated by the AUC and must apply to the AUC for approval of their transmission facilities applications.

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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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