

## About the Project

TransAlta Corporation (TransAlta) is excited to introduce the Riplinger Wind Power Project (the Project), a 304 - megawatt (MW) wind development located approximately 30 km southeast of Pincher Creek in Cardston County (Figure 1).

The Project will consist of up to 46 wind turbine generators, each with a capacity to generate up to 6.6 MW of power. The final turbine technology will be confirmed as the Project advances through the development process.

TransAlta has been conducting preliminary site investigations here since 2020 and are currently advancing the Project through permitting and regulatory processes with the goal of seeking all necessary permits and approvals to construct, own, interconnect and operate the wind project and wind project substation.









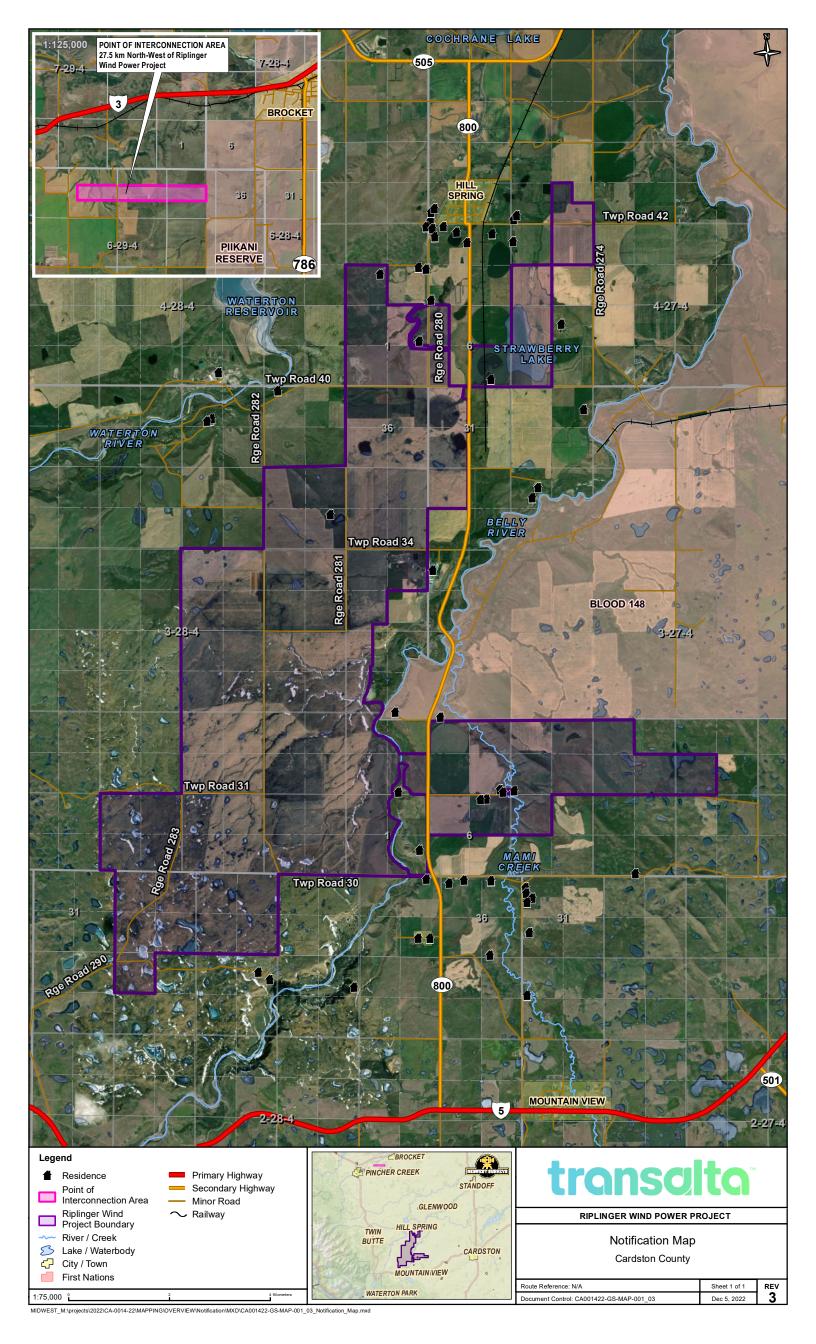


## Who is TransAlta?

TransAlta is a power generation company and marketer of wholesale electricity. Beginning as a small, local power company in 1909, TransAlta has transformed over the last century to become an experienced and respected power generator and wholesale marketer of wind, solar, hydroelectric, natural gas, and coal electricity.

Today, we are one of Canada's leading clean energy companies with over 110 years of generation experience. With a fleet of 27 wind facilities with an installed generating of 1,763 MW of clean, renewable power, TransAlta has extensive experience in planning, developing, constructing, and operating wind facilities across Canada and the U.S.

Recently, TransAlta completed construction of the 207 MW Windrise Wind project located in the Municipal District of Willow Creek, Alberta and is currently constructing the 130 MW Garden Plain Wind Project in Paintearth County and Special Area No. 2, Alberta.



# **Project Components**

The Project is located 30 km southeast of Pincher Creek on approximately 14,000 acres of privately-owned land in Cardston County.

**Turbine Technology:** The Project will host up to 46 wind turbines. Turbine technology has not been confirmed however, each turbine is anticipated to have the capacity to produce up to 6.6 MW of electricity for an expected total nameplate capacity of 304 MW.

**Underground Collector System and Substation:** Each turbine will be connected through a buried underground 34.5kV collector system which will feed into the Project substation. The Project substation will be located near the center of the Project site.

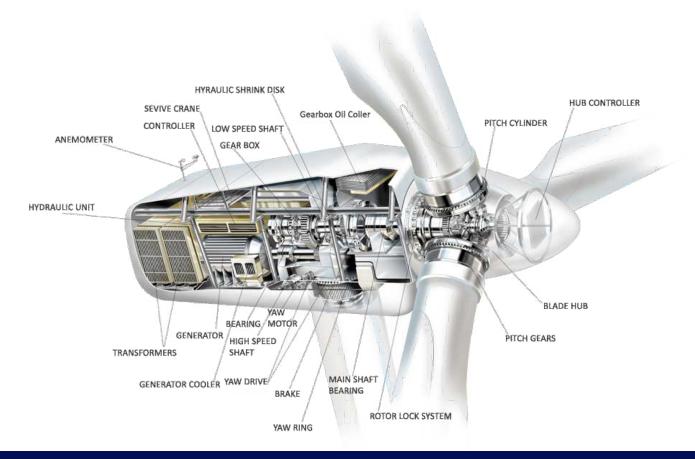
**Transmission Interconnection:** The Project will require the construction of roughly 45km of transmission line which will connect the Project to the Alberta Interconnected Electric System. The transmission line will enable power generated by the Project to reach Alberta's electricity grid.

A separate and distinct regulatory, permitting and stakeholder engagement process will take place for the transmission interconnection project. To assist with this, TransAlta has contracted a highly experienced third-party consultant to undertake work related to environmental evaluation, route selection and public and Indigenous engagement.

Information packages regarding the Project transmission interconnection will be sent out to those stakeholders over the coming months.

**Meteorological Tower:** TransAlta will install up to two permanent meteorological towers on-site used for the collection of weather data.

Roads and Access Points: TransAlta will endeavor to use existing roads and access points for accessing turbine locations during construction and operations of the Project. TransAlta will seek approval to use local County roads and may upgrade those under County standards to facilitate the delivery of turbine components to site.



# Wind Project Benefits: Supporting Local Communities

Wind projects provide social and economic benefits to the local communities where they are hosted. The Riplinger Wind Power Project will:

- Create new employment opportunities, during construction, for local tradespeople, contractors, and skilled laborers
- Create long-term employment, including permanent positions, for site technicians and maintenance personnel over the operating life of the wind project
- Increase purchases of goods and services which will directly impact local businesses
- Generate an additional source of tax revenue for Cardston County
- Provide supplemental income from annual lease payments to project landowners during the life of the wind project

# Environmental Considerations

The Project has the potential to impact wildlife and wildlife habitat. As such, a full suite of environmental studies were completed, by a third-party consultant, in the Project area between 2021 and 2022. These studies were conducted in accordance with the Wildlife Directive for Wind Energy Projects in Alberta (Wildlife Directive) released by Alberta Environment and Parks in 2018 following the Sensitive Species Inventory Guidelines and other prescribed survey protocols (e.g., migratory bird surveys).

Fieldwork in the following environmental surveys were completed:

- Wildlife: Migratory birds, breeding birds, acoustic bats, sensitive raptors, sharptailed grouse, and burrowing owl
- Vegetation: Habitat mapping
- Wetlands: Mapping and classification
- Historical Resources: Archaeological and cultural features

Findings from these environmental studies have been incorporated into our final Project design and layout.

The turbines and most of the Project infrastructure will be sited on disturbed lands (e.g., cultivated), which is aligned with Alberta Environment & Parks (AEP) regulations. Most of the Project infrastructure has been sited outside of any environmental features (e.g., sharp-tailed grouse leks or raptor nests) that were identified during field surveys. There are several wetlands in the Project area however, permanent Project infrastructure has been sited outside of Class III and higher wetlands and their associated setback (100 m). If impacts to wetlands or wildlife features are expected, the appropriate approvals (i.e., Water Act) will be applied for and mitigation measures will be confirmed with AEP.

In addition, a summary of the wildlife data collected will be submitted to AEP in Q1 2023 and their feedback, in the form of a Renewable Energy Referral Report, will be incorporated into our Environmental Evaluation and Environmental Protection Plan, both required for an AUC facility application submission.

# Visual Impacts

As part of Project design, visual simulations using specialized software will be created at various locations in and around the Project site. These simulations will provide a representative depiction of the wind turbines on the landscape and will be displayed at our stakeholder engagement session.

TransAlta refers to Transport Canada's Canadian Aviation Regulations (CARs) Standard 621 for the lighting and marking of wind turbines and wind projects. The wind turbines will be painted an off-white color which is studied to be the least reflective in the broadest range of lighting conditions.

TransAlta will submit a proposed lighting plan to Transport Canada prior to the start of construction, which will integrate best industry design practices to minimize visual impact on the landscape.

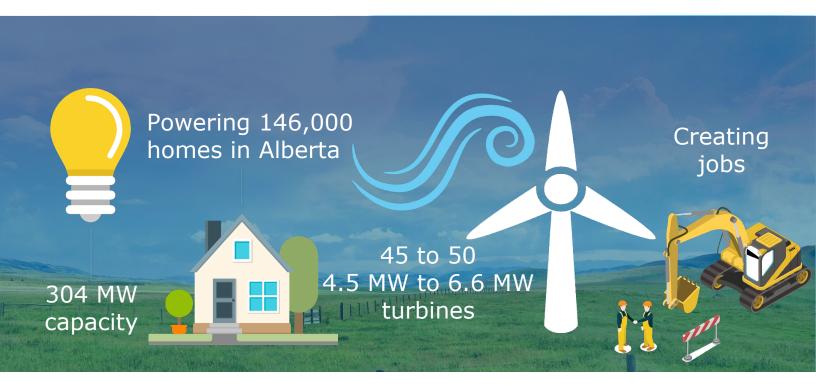
# Radiocommunications and Radar

Wind turbine generators, like other large structures, may have the potential to disrupt the transmission of electromagnetic signals with the potential to interfere with radiocommunication systems.

As part of Project design, TransAlta will commission an inventory and preliminary impact assessment of radiocommunication, and radar systems present in the vicinity of the Project in communication with related stakeholders and in accordance with guidelines developed for industry by the Radio Advisory Board of Canada and the Canadian Broadcasting Corporation.

There are a multitude of variables to consider when assessing systems and impacts including land topography, turbine composition, turbine siting, source signal strength, equipment type, etc.

Companies identified as having facilities within the range of our Project will be consulted as part of this impact assessment.



#### Sound

Wind turbines produce sound that can originate from either air flow or mechanical sources:

- Air Flow: As air passes over and between the wind blades, and when the wind blades pass by the tower
- Mechanical: Created by equipment components such as the gearbox and generator, located in the wind turbine nacelle

Sound from all wind projects must meet stringent requirements regulated by the Alberta Utilities Commission (AUC). These sound requirements are outlined in AUC Rule 012: Noise Control, which states that sound levels from a wind project, measured cumulatively with noise from other facilities and sources must not exceed the permissible sound level of 40 decibels (dBA) at night outside residences.

For comparison, 40dBA is what you would expect to measure in a quiet office or living room.

As part of Project design, a Noise Impact Assessment (NIA) is underway to demonstrate that the Project, including turbines and substation components, and cumulative impacts of other noise sources in the area comply with AUC Rule 012: Noise Control. Sound level maps will be displayed at our stakeholder engagement session.

The findings will be reported in our NIA and submitted as part of our AUC facility application for the Project. The Project will comply with all AUC Permissible Sound Level guidelines.

#### Health

In 2012 Health Canada announced its intention to undertake a large study in collaboration with Statistics Canada to provide federal advice and in acknowledgement of the community health concerns expressed in relation to wind turbines. The results of the study were published in 2014. The study concluded that the scientific evidence available to date does not demonstrate a direct causal link between wind turbine noise and adverse health effects.

If you would like more information about health effects and wind turbines or would like additional reference material on this subject, please contact us.

#### Shadow Flicker

Shadow flicker is the effect of the sun shining through the blades of a wind turbine as they rotate, casting a moving shadow. It will be perceived as a "flicker" due to the rotating blades repeatedly casting the shadow.

A shadow flicker study is forthcoming and is conducted for the Project as part of the AUC application. The results of the study will be available to stakeholders and if applicable, there will be a map identifying receptors and the expected duration of shadow flicker for each receptor. The Project has been designed to ensure shadow flicker duration will fall within acceptable industry standard limits.

## Decommissioning

The useful life for current technology wind turbines is approximately 30 to 35 years. Once a facility has reached the end of its useful life, TransAlta will assess options to repower the Project or decommission. For decommissioning, renewable energy projects are required to comply with the Conservation and Reclamation Directive for Renewable Energy Projects (C&R Directive). C&R plans are created for each project which will aim to return the land to equivalent land capability.

C&R Plans address activities related to the restoration of any land impacted by the project. TransAlta works closely with project host landowners to ensure decommissioning is carried out to the satisfaction of our host landowners and complies the C&R Directive.





# Permitting & Approval Requirements

Wind projects require multiple permits and approvals from all three levels of government, agencies, regulatory bodies, and other stakeholders, throughout the project lifecycle. The permits and approvals required for the Project include:

#### **Federal**

- Transport Canada
  - Aeronautical Obstruction Clearance
- NavCanada
  - Land Use and Air Navigation Services Assessment

#### **Provincial**

- Alberta Environment and Parks
  - Wildlife Referral Report
- Alberta Culture and Status of Women
  - Historical Resources Act Clearance
- Alberta Utilities Commission
  - Permit and License to construct, own and operate the wind project and substation
  - Connection Order to connect the facility collector system to the collector substation
- Alberta Transportation
  - Roadside Development Permit

#### Municipal

- Cardston County
  - Development Permit
  - Road Use Agreement
  - Utility Placement Permit
  - Right-of-Way Consent (if necessary)

#### **Other**

- Utility Facility Owners
  - Crossing Agreement or Right-of-Way Easements
- RCMP/TV/Satellite/ Telecommunications
  - Radio comms / radar interference

# Project Timeline



### **Next Steps**

TransAlta will continue to engage and consult with Indigenous and local communities, landowners, and other stakeholders throughout development of the project.

If you have questions, concerns, or general feedback, **we would appreciate receiving this information by February 10, 2023**, as part of our first round of consultation. TransAlta will be actively consulting with stakeholders as needed up to AUC submission and if the project is approved, through construction and operations.

As part of our consultation and engagement plan, we are planning a stakeholder engagement session that will be held in at the Hillspring Community Center on February 16 & 17, 2023.

More project details will be shared as the project advances.

#### Contact Us

For more information about TransAlta or the Riplinger Wind Power Project, please contact us:

(877) 547-3365 Extension 1 canadian\_projects@transalta.com transalta.com

Please reference the Riplinger Wind Power Project in the subject line of your email









# Participating in the AUC's independent review process to consider facility applications

The AUC regulatory review process to consider facility applications for utility projects

The AUC uses an established process to review social, economic and environmental impacts of facility projects to decide if approval of a project is in the public interest.

The AUC considers applications requesting approval of the need for transmission development and facilities applications seeking approval to construct, operate, alter and decommission electric and natural gas facilities. Applications, as specified in AUC Rule 007, are required for:

- The need for transmission upgrades.
- The route and location of transmission facilities.
- The siting of power plants.
- The construction of a battery storage system.
- · The designation of an industrial system.
- The need for and siting of natural gas utility pipelines.

Sometimes the Alberta Electric System Operator's needs identification document application is considered together with a facility application in a single proceeding; sometimes separate proceedings are held to consider each application.

# Application review process



Step 1: Public consultation prior to applying to the AUC

Step 2: Application filed to the AUC

Step 3: Public notice

Step 4: Public submissions to the AUC

Step 5: Consultation and negotiation

Step 6: The public hearing process

Step 7: The decision

Step 8: Opportunity to appeal

Step 9: Construction, operation and compliance

## **Application review process**

# Step 1: Public consultation prior to applying to the AUC

An applicant seeking approval of a proposed utility development project is required to engage in a participant involvement program prior to filing an application with the AUC. The public involvement program involves consultation with persons whose rights may be directly and adversely affected by the proposed project so that concerns may be raised, addressed and, if possible, resolved.

The application guidelines and requirements for facility applications can be found in AUC Rule 007: Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines.

Potentially affected parties are strongly encouraged to participate in the public consultation, also called a participant involvement program. Early, active and ongoing discussions with an applicant may lead to greater influence on project planning and what is submitted to the AUC for approval.

#### **Step 2: Application filed to the AUC**

When the applicant has concluded its consultation with potentially affected parties and the participant involvement requirements have been completed, the applicant files its application through the AUC online public filing system, called the eFiling System.

AUC staff members review each application submitted to verify that all of the application requirements in Rule 007 have been met before an application is deemed complete. If all of the required information is not provided, the application may be closed or missing information will be requested of the applicant. Rule 007 specifies, among other requirements, that applicants must submit the results of a public involvement program in its application that includes information about how applicants consulted and notified stakeholders and Indigenous groups and identifies any unresolved objections and concerns about the project.

#### **Step 3: Public notice**

When the AUC receives an application it is assigned a proceeding number and the AUC generally mails a notice of application directly to those who live, operate a business or occupy land in the project area who may be directly and adversely affected if the AUC approves the application. The notice initiates the opportunity for formal intervention in the proceeding to consider an application or applications. The notice of application will also set out important dates and information about where to find the application and other items being considered. The five-digit eFiling System proceeding number in the notice is the most efficient way to find information about a proposed project through the AUC website.

# **Step 4: Public submissions to the AUC**



Prior to the submission deadline provided in the notice, formal submissions of outstanding concerns and unresolved objections about a project may be submitted to the AUC. To submit a concern, participants will need to register to participate in the proceeding, which involves providing a brief written statement called a statement of intent to participate. Submissions are filed electronically through the eFiling System. The information filed becomes part of the public record and is an important part of the process to ensure that outstanding concerns are heard, understood and considered.

The AUC uses the information gathered through statement of intent to participate submissions to decide whether to hold a hearing on the application(s). The AUC must hold a hearing if a concerned person can demonstrate that they have rights that may be directly or adversely affected by the AUC's decision on the application. Such a person is said to have standing before the AUC. If the AUC decides to hold a hearing, the AUC will provide further opportunities for participants with standing to ask the applicant questions on the public record and present their position on the application either in writing or in person. Hearings may

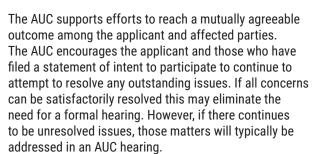
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be held in writing, in person or virtually through web-conference software.

#### **AUC eFiling System**

The eFiling System is the online tool that the AUC uses to manage applications and submissions in its proceedingbased review. The eFiling System gives access to all public documents associated with an application. The system is also used to submit your concerns and provide input to the AUC and can be used to monitor related proceeding filings. Those who do not have access to the internet can send submissions, evidence and other material by mail and the AUC will upload the submission on their behalf.

#### **Step 5: Consultation and** negotiation (if applicable)



#### **Step 6: The public hearing process**

The AUC will issue a notice of hearing if a person with standing continues to have legitimate unresolved concerns with the application. The notice of hearing will provide a hearing date and location, or specify if the hearing will be held in writing or virtually. When the AUC holds a public hearing, registered parties are given the opportunity to express their views directly to a panel of Commission members. Any member of the public can listen to an in-person or virtual oral hearing. An oral public hearing operates similar to a court proceeding.

Participants in a hearing can either represent themselves or be represented by a lawyer. In addition, participants may hire experts to assist in preparing and presenting evidence to support their position.

#### Cost assistance

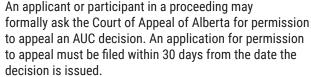
A person determined by the AUC to have standing or a local intervener can apply for reimbursement of reasonable costs. Those who hire a lawyer or technical experts must be aware that while reimbursement for the costs of legal and technical assistance is available under AUC Rule 009: Rules on Local Intervener Costs, recovery of costs is subject to the AUC's assessment of the value of the contribution provided by the lawyer and technical experts in assisting the AUC to understand the specifics of the case. It is also subject to the AUC's published scale of costs.

People with similar interests and positions are expected and encouraged to work together to ensure that expenditures for legal or technical assistance are minimized and costs are not duplicated.

#### **Step 7: The decision**

The AUC's goal is to issue its written decision no more than 90 days after the close of record. The AUC can approve, or deny an application and can also make its approval conditional upon terms or conditions. AUC decisions are publicly available through the AUC website at www.auc.ab.ca.

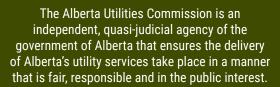
#### **Step 8: Opportunity to appeal**



An applicant or participant in a proceeding can also ask the AUC to review its decision. An application to review a decision must be filed within 60 days from the date the decision is issued and satisfy the limited grounds described in AUC Rule 016: Review of Commission Decisions.

#### **Step 9: Construction, operation and** compliance

An applicant that receives approval to build and operate a facility from the AUC is expected to follow through on any commitments it has made to parties and must adhere to any conditions that were set out in that approval. If concerns about compliance with approval conditions and post-construction operations cannot be resolved with the applicant, they can be brought to the AUC's attention for consideration. The AUC has significant compliance and enforcement powers for all approved applications. Additional information is available on the AUC website.



We are committed to ensuring that Albertans whose rights may be directly and adversely affected by a utility development project are informed of the application and have the opportunity to have their concerns heard, understood and considered.



#### Contact us

Phone: 310-4AUC 1-833-511-4282 (outside Alberta) info@auc.ab.ca www.auc.ab.ca

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