



BULL TRAIL

wind project



PROJECT PROFILE

About the Project

Bull Trail Renewable Energy Centre Limited Partnership is proposing to develop, design, build and operate the 270 MW Bull Trail Wind Power Project.

The project will be located on approximately 21,951 acres of privately owned land located approximately 3 km south of the Hamlet of Irvine in Cypress County, Alberta. Location of the project is available on the map.

Each turbine will be connected to the Project substation by a medium voltage (34.5 kV) collector system. The collector system will be buried underground, wherever practical. The Project collector substation will be located in the middle of the project site (NE 21-10-2-W4M).

Power generated by the project turbines will be transmitted through the electrical collector system to the substation, which is located within the project area. The substation will ultimately be connected to the provincial grid via a transmission line interconnection which will be constructed by AltaLink Management Ltd. (“AltaLink”). AltaLink will conduct a participant involvement program and file a separate application with the AUC to obtain the requisite authorizations to construct and operate the transmission line interconnection facilities.

To date, the Project has received permit approvals from the Alberta Environment and Parks (AEP) in August 2021. The Project will be submitting Power Plant and Substation applications to Alberta Utilities Commission (AUC) in Q4 2021. Once all required permits are received, the Project is planned to start construction in late 2022 and achieve commercial operation in late 2023.

Project Overview

NAME/LOCATION

Bull Trail Wind Power Project
Cypress County, Alberta

DEVELOPER

EDF Renewables Development Inc.

OWNER

Bull Trail Renewable Energy Centre Limited Partnership

RENEWABLE FUEL

On-shore Wind

PROJECT SIZE

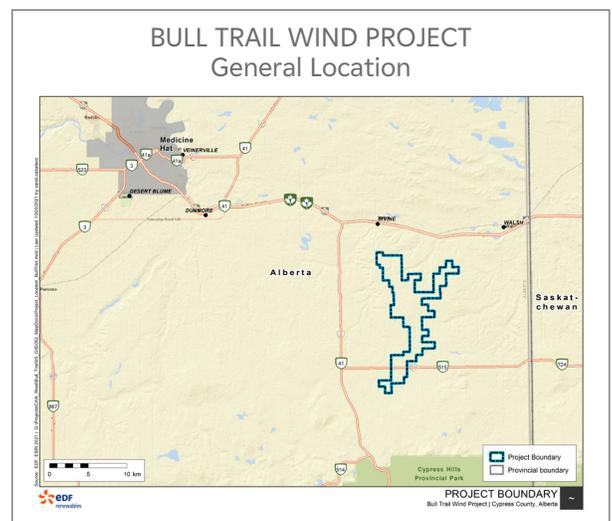
Up to 270 megawatts (MW)

CONNECTION POINT

The Project substation will be located in the middle of the project site (NE 21-10-2-W4M). The substation will ultimately be connected to the provincial grid via a transmission line interconnection which will be constructed by AltaLink Management Ltd. (“AltaLink”).

HOST MUNICIPALITY

Cypress County





Additional tax revenue

Throughout the life of the project



Stimulate local economy

During construction

- o The project is anticipated to generate up to 200 jobs at peak construction
- o Contract opportunities for local businesses
- o Increased opportunities for local businesses and hospitality sector



Long-term operation and maintenance job opportunities

- o Anticipating up to 10 local full-time staff to operate the facility
- o Local contractors required to help maintain equipment
- o Hire locally whenever possible



Mark Gallagher
Senior Development Manager



Susan Jin
Project Developer

53 Jarvis Street, Suite 300
Toronto, ON M5C 2H2
416.363.8380

www.edf-re.ca



COMPANY BACKGROUND

A Global Leader in Low-Carbon Energy



EDF Group, through its subsidiaries in North America delivers results to utilities, commercial & industrial, and corporate purchasers through the procurement of renewable energy.



EDF Renouvelables is the global renewable energy affiliate of the Group. Present in 22 countries, under the brand EDF Renewables, the company develops, builds and operates renewable power plants.



EDF Renewables North America is one of the largest renewable energy developers in North America with 20 GW of wind, solar, storage and electric vehicle charging projects developed throughout the U.S., Canada, and Mexico.



**Grid-Scale
Power**



**Distributed
Solutions**



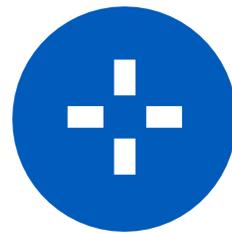
**Asset
Optimization**

A Global Leader in Low-Carbon Energy



Our Purpose

To build a net zero energy future with electricity and innovative solutions and services, to help save the planet and drive wellbeing and economic development



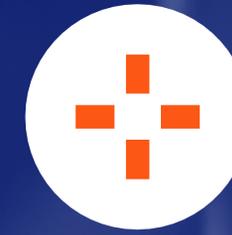
Our Mission

Delivering renewable solutions to lead the transition to a sustainable energy future.



Our Core Values

Safety | Good Sense
Accountability | Transparency
Teamwork | Respect | Passion



Our Commitment

We are committed to diversity and aim to ensure that each and every one of our employees has a full sense of belonging within our organizations. They are empowered to express their opinions and contribute to our success. All have the responsibility to create and sustain an inclusive environment.

Diversity, equity and inclusion are fundamental to our culture and core values. Our unwavering dedication to this pursuit makes us more innovative and creative, which helps us serve our clients and communities better.

Creating Value from Origination to Commercial Operation

EDFR is a **technology agnostic provider** of renewable generation, storage, and management solutions.



Origination

Comprehensive **analysis, identification and evaluation** of prospective sites and matching those sites with customer needs.



Development

Resource **assessment, permitting, site design, interconnection rights** and technology selections.



Transaction

Securitization of **energy offtake and financing**.



Construction

Implementation of all aspects of the **system, design, installation, and construction** to ensure a quality build.



Asset Optimization

Asset management, monitoring and maintenance to **ensure profitable and optimal performance** of facility.

35+ years

We were on the forefront of the burgeoning wind industry in California as a service provider beginning in 1985.

\$18+ billion

Since 2010, we have paid over \$18 billion to vendors, including lease payments made to landowners.

8,000

Our 20 GW project development has created 8,000 on-site jobs.

Based on an employment factor of 4 jobs per MW IRENA Annual Review

20 GW

We expanded into project development in 2000 and have developed 20 GW of grid-scale solar and wind projects across North America.

as of 12/31/20



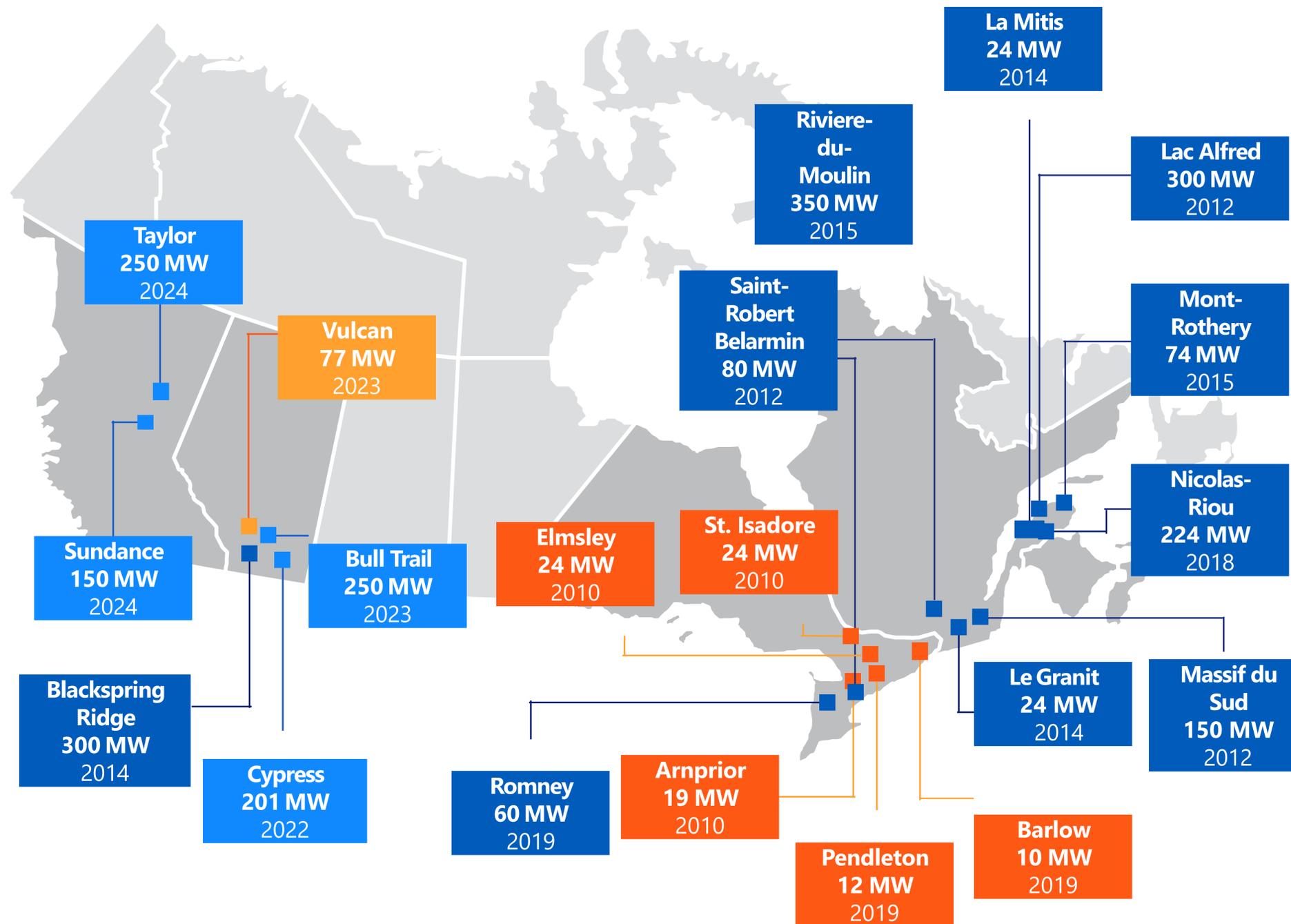
GRID-SCALE POWER

Bigger projects. Bigger impact.

EDF Renewables' Grid-Scale Power team ; provides **origination, development, transaction and construction** services for large-scale wind (offshore and onshore), solar power generation and storage projects across North America.

Our team of leaders can solve energy challenges facing businesses and communities no matter the size or complexity.

EDF Renewables in Canada



2,602+ MW
Put into Service, Under Construction or Contracted

- Wind - In Development
- Wind - Developed
- Solar - In Development
- Solar - Developed

2020 Safety Results North America



0.65 TRIR

Total Recordable Incident Rate = (# of recordable incidents) / (hrs * 200k)



0.57 DART

Days Away, Restricted or Transferred = (# of days away, restrictions, job transfers) / (hrs * 200k)



2,613,776 hours

Worked by employees

2017

0.60 TRIR
0.32 DART

2018

0.95 TRIR
0.76 DART

2019

0.77 TRIR
0.54 DART

(as of 12/31/20)



We more than doubled our ability to track and report on Industrial Wastes across our organization in 2020 after we implemented a robust waste management system.



We increased the amount of materials we recycled from 2019 to 2020 by 83,383 tons (or increased the amount recycled by 19 %)

WASTE MANAGEMENT REDEFINED

OUR MISSION

Delivering **renewable solutions** to lead the transition to a **sustainable energy future.**

OUR CORE VALUES

Safety

Good Sense

Accountability

Transparency

Teamwork

Respect

Passion

PROJECT BACKGROUND AND DESCRIPTION

Project Description

PROJECT OWNER BULL TRAIL RENEWABLE ENERGY CENTRE LIMITED PARTNERSHIP

PROJECT NAME BULL TRAIL WIND POWER PROJECT

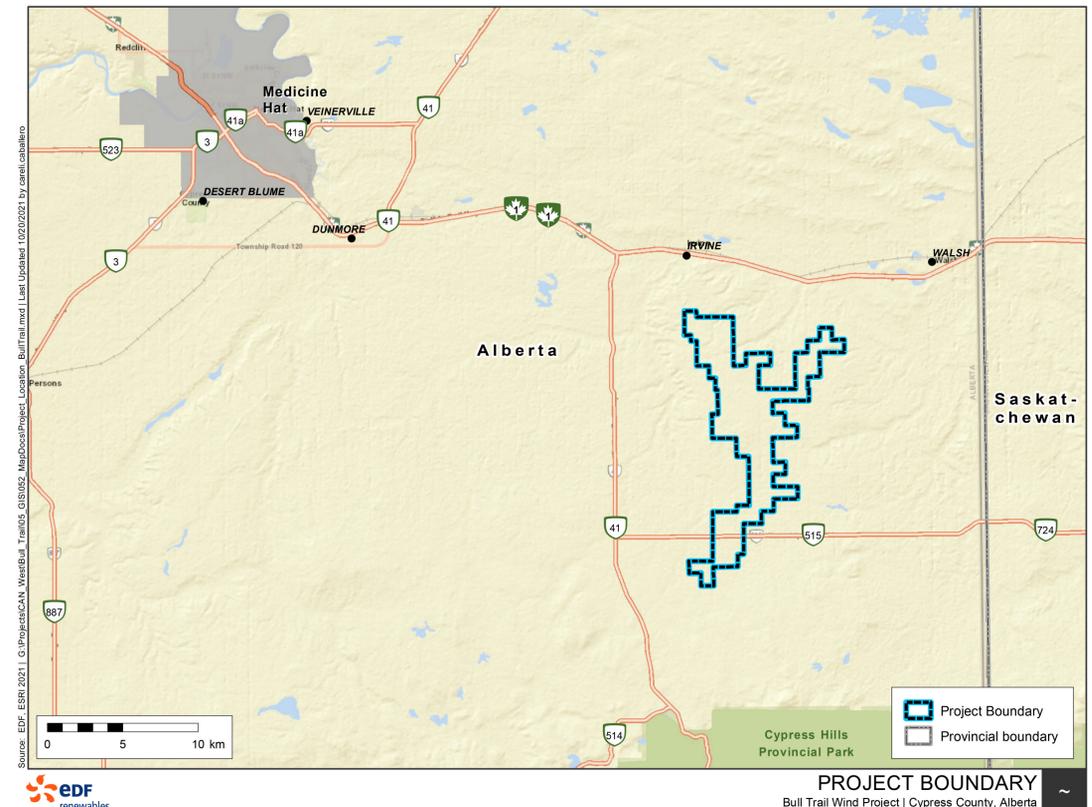
HOST MUNICIPALITY CYPRESS COUNTY

TOTAL CAPACITY Up to 270 MW

LOCATION Located on approximately 21,951 acres of privately owned land

ELECTRIC SYSTEM Each turbine will be connected to the Project substation by a medium voltage (34.5 kV) collector system. The collector system will be buried underground, wherever practical. The Project collector substation will be located in the middle of the Project site (NE 21-10-2-W4M).

INTERCONNECTION Power generated by the project turbines will be transmitted through the electrical collector system to the substation, which is located within the project area. The substation will ultimately be connected to the provincial grid via a transmission line interconnection which will be constructed by AltaLink Management Ltd. (“AltaLink”). AltaLink will conduct a participant involvement program and file a separate application with the AUC to obtain the requisite authorizations to construct and operate the transmission line interconnection facilities.



PERMITTING & CONSULTATION PROCESS

Engagement & Consultation Process

- We take community engagement and public consultation seriously. We have been engaging with the community since 2017 through land agents, in-person meetings, newsletters and open houses. To date, we have completed 1 open house and delivered multiple updates and newsletters to stakeholders.
- With COVID-19, we adapted our engagement practices to keep you and our team members safe. Although we are not able to meet in-person, we remain available for public consultation through online methods. We understand that there may be new neighbours in the project area throughout the entire project lifecycle. We will include and engage with our new neighbours to provide updates on the project and respond to any concerns they may have.
- You can always reach us at: 1-844-255-5471 and bulltrailwind@edf-re.com. We also suggest visiting our project website www.bulltrail.ca for more project details.



Project and Community Engagement Timeline

Commenced public consultation and environmental fieldwork

First public mail-out to stakeholders & open house

2018



AEP REPS submission

Q1 2021



AUC submission

Q4 2021



Anticipated Commercial Operation

Q3 2023



Q4 2019

Completion of environmental studies



Q3 2021

Received AEP Approval
Second public consultation with stakeholders
Second open house



Q3 2022

Anticipated AUC Approval
Anticipated start of construction

In Harmony with Agriculture

- We recognize that we need the support of local landowners and we work diligently to make sure we listen and co-operate.
- Well designed wind energy projects complement farming activity with minimal disruption.
- We work closely with our landowners to ensure project infrastructure fits with current and future land use.
- We value your feedback and if you have any comments or concerns, please let one of the team know.



Avian & Bat Impacts

Well-sited wind projects should have minimal impacts upon local bird and bat populations.

- Working closely with Alberta Environment and Parks, Cypress LP has undertaken all required bird and bat studies to quantify potential risks and implement mitigation measures to ensure sustainable development.
- Potential impact on birds and bats was considered in the Renewable Energy Project Submission for the Cypress Wind Power Project.
- A multi-year post-construction wildlife monitoring program will be undertaken to determine effects.

A report published in Avian Conservation & Ecology stated:

“Overall...the effects of collisions, nest mortality, and lost habitat on birds associated with Canadian wind farms appear to be relatively small compared to other sources of mortality.”

Source: Zimmerling, R. J., Pomeroy, A.C., d'Entremont, M. V., and Francis, C.M. (2013)

Environmental Studies Completed

Wind power project design includes consideration of impacts on wildlife and vegetation.

ENVIRONMENTAL STUDIES UPDATE

In January 2021, we submitted Renewable Energy Project Submission (REPS) to Alberta Environment and Parks (AEP) for review. This includes field environmental studies from 2018 – 2020 and the proposed Project layout. In August 2021, we received approval from the AEP.

If required, additional archaeological and paleontological resources work will be completed in 2022.



Technical Studies Completed

NOISE

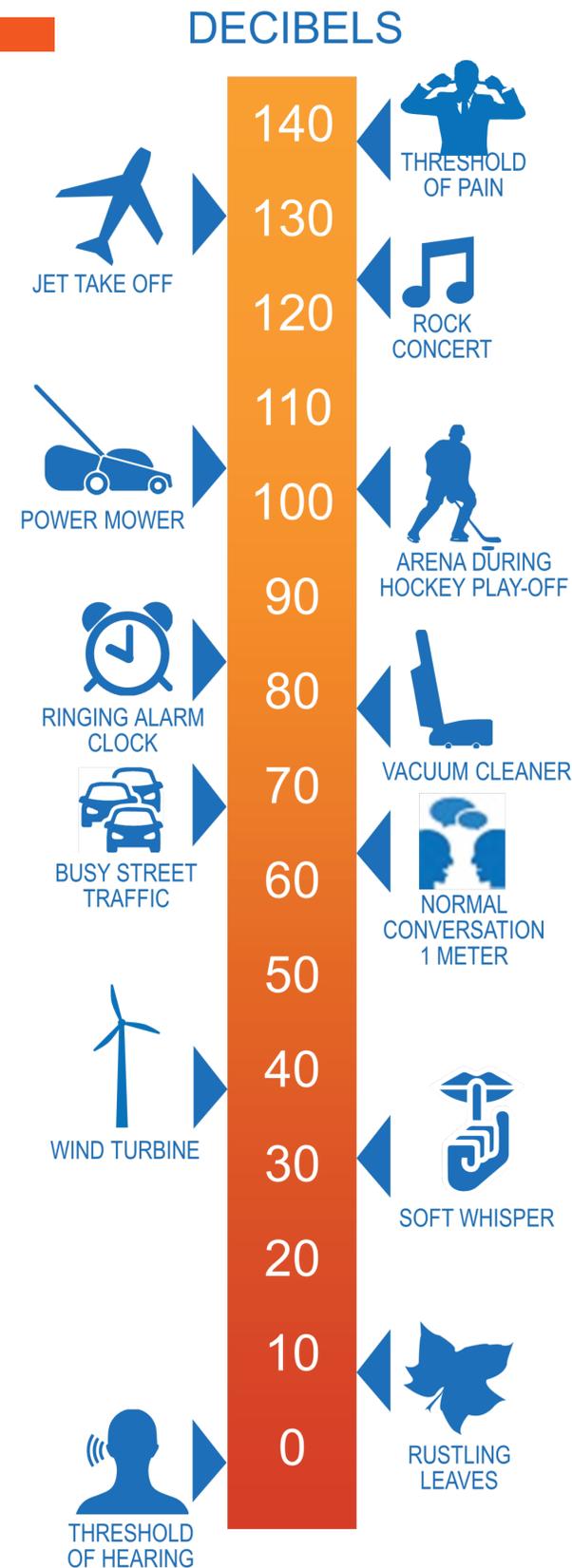
We have completed and updated the third-party noise impact assessment. The assessment follows AUC Rule 012: Noise Control, and includes cumulative sound emissions from nearby facilities, including oil and gas facilities. The noise results are outlined in the Project Map. The Project remains in compliance with AUC Rule 012 with the Project layout.

SHADOW FLICKER

We have conducted an updated shadow flicker analysis. The results of this study can be found on the Project Map, which identifies all dwellings and the expected duration of shadow flicker for each dwelling. This study considers the probability of cloud cover, but it does not consider the residence orientation or window location. The results of this study differ from the last study. Additional details are available upon request.



Noise Impact Assessment



- All wind energy projects must meet Alberta Utilities Commission (AUC) Rule 012: *Noise Control*.
- The Noise Impact Assessment has been completed for all residences within 1.5 kilometres of the project.
- The study includes the noise from the project and nearby operational and proposed energy related facilities.
- The results of the Noise Impact Assessment were used to determine the final turbine layout. The resulting noise contours are shown on the Project Map.
- This Project meets the requirements of AUC Rule 012: *Noise Control*.

Shadow Flicker Analysis

- Shadow flicker is caused when the turbine blades cast a shadow on nearby residences.
- We have completed a shadow flicker study and provided the results in the Project Map. The shadow flicker results are presented on a colour scale that correlates with the annual hours of the adjusted case shadow flicker.
- The adjusted case shadow flicker considers the probability of cloud cover, but it does not consider the residence orientation and window location.
- Residences within 2 km of the project were considered in the shadow flicker analysis.

Aviation Impacts

- The Alberta Utilities Commission's (AUC) approval required the completion of federal-level processes. This includes approval from **Transport Canada** and **NAV CANADA** to ensure the wind project is visible and does not present a hazard to aviation safety.
- According to the Transport Canada Standard, the Project requires lighting at the top and midpoint of perimeter-located wind turbines and the highest elevation turbines.
- We will continue to consult with all aviation facility owners near the project area to ensure safe operations of the wind farm and aviation facilities.

LOCAL COMMUNITY BENEFITS

Municipal, Local and Indigenous Community Benefits

We value the long-term benefits of working with the local stakeholders and Indigenous communities. Community benefits will include:

- **Employment** opportunities during the construction and operational phases of the project. The project is anticipated to generate more than 200 jobs at peak construction, and up to 10 permanent positions during operations.
- **Contract opportunities** for local businesses.
- **Local investments** into hospitality and construction services during the development, construction and operational phases of the project.
- **Tax revenues** throughout the life of the project.
- **Reduction in air pollution and greenhouse gases**



Local Economic Benefits

Direct benefits

The project will result in increased job opportunities for the local area. Some of these job opportunities may include:

- Surveying
- Civil engineering
- Mechanical work
- Electrical work
- Road construction
- Transportation equipment
- Earthwork activities
- Maintenance of vehicle fleet
- Maintenance of paths
- Snow removal
- Other related services



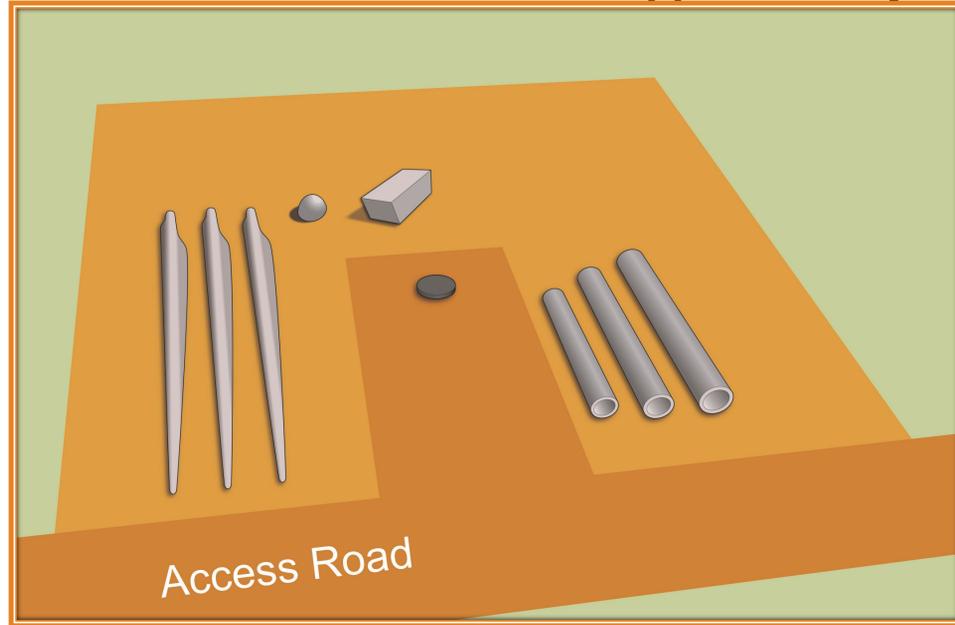
Indirect benefits

- Increased spending on goods and services during construction and operational phases.

CONSTRUCTION & OPERATION

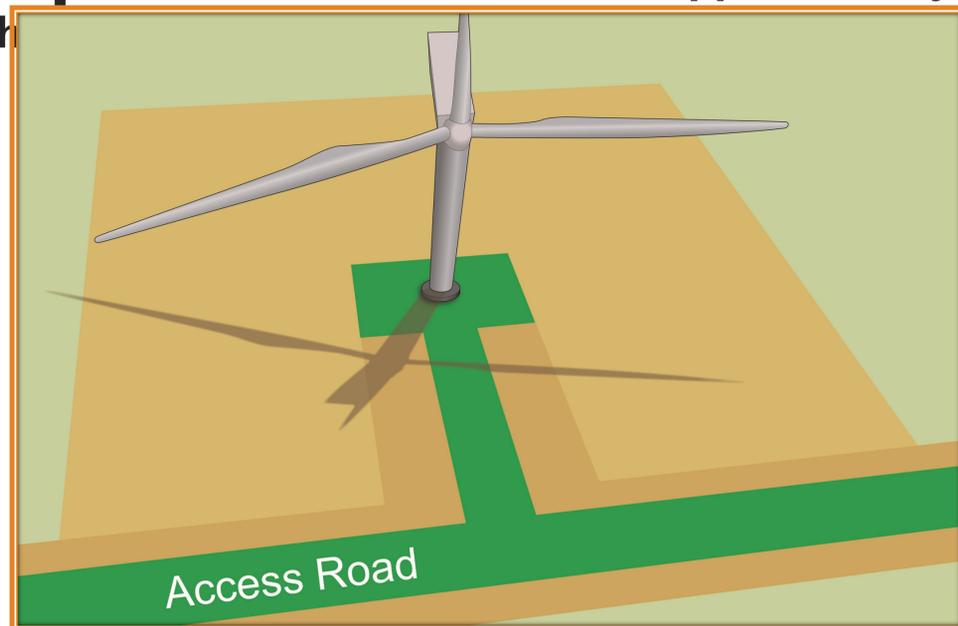
Access Road & Turbine Pad

Construction Phase – approximately 2.5 acres / turbine (1



A temporary turbine pad area of about 100 metres by 100 metres will be created at each turbine location, in order to deliver all the required turbine components to each turbine pad.

Operational Phase – approximately 0.11 acres / turbine (0.05



After construction, the access road width and the turbine pad will be reduced to limit impacts for agricultural use.



Turbine Foundation & Electrical System Construction

- The turbines will be installed on top of a buried, cast-in-place reinforced concrete foundation.



Foundation excavation. Diameter approx. 20 metres (m)



Reinforcing steel installation. Between 40-50 tons of rebar



Each foundation requires approx. 400-600 m³ of concrete

- The electrical system will consist of underground cables and a project substation. The cabling will be buried at a depth that will not interfere with normal agricultural practices.

Buried collection system



Substation connecting a project to a transmission line



Turbine Assembly



Transportation of turbine components

Approximately 12 trucks are required for the delivery of a complete turbine



Tower assembly
Up to 6 tower sections.



Nacelle installation
The nacelle weighs about 59 tonnes.



Blade assembly
The blades will be attached to the hub on the ground or lifted one at a time onto the hub.

Operation and Maintenance Building & Permanent Meteorological Towers



- An operation and maintenance (O&M) building will be built or rented to allow operators to maintain the turbines and keep spare parts.
- Wind speed, wind direction, temperature and humidity will be measured by the permanent meteorological towers. We have permitted seven locations but will install up to three permanent meteorological towers during project operations.



Decommissioning & Reclamation

- The project is expected to be operational for up to 30 years
- At the end of the project's life, we will evaluate whether the project should be decommissioned or repowered
- Decommissioning:
 - The project is de-energized. Turbines and all other above-ground infrastructure is removed and the land is restored to its original or equivalent land use.
 - Construction equipment will be utilized to remove infrastructure.
 - Underground infrastructure including electrical collector lines will be removed to a depth of 1 metre, or an agreed upon depth at the time of decommissioning.
 - Decommissioning and reclamation will be completed based on the *Conservation and Reclamation Directive For Renewable Energy Operations* and any updates at the time.
 - A decommissioning fund along with the salvage value of the equipment will cover the decommissioning and reclamation costs providing peace of mind for landowners and local government.
- Repowering:
 - Turbines and/or other infrastructure is upgraded to extend the project's life.
 - This is often attractive to developers since there will be many years of historical wind resource data and production.
- Waste and debris generated during decommissioning activities will be collected and disposed at an approved facility.



FALL 2021

PROJECT UPDATES

The project team has been busy behind the scenes preparing and advancing the project with environmental studies, and field work since spring 2018. Since then, the project team:

- Completed seasonal environmental studies to ensure all studies are up to date;
- Continued discussions with various turbine manufacturers and met with interested

commercial off-takers to discuss economic opportunities of the project;

- Completed installation of more meteorological towers to gather more wind data, analyze the wind resource, and optimize the project layout from Q4 2019; and
- Conducted geotechnical investigations at key locations and tested a number of local gravel pits for quality.



VIRTUAL OPEN HOUSE

We have created a virtual open house website where you can learn more about the project, such as:

- Updates to the proposed project
- The type of wind turbine technology under consideration
- The permitting and engagement processes, including timelines
- Benefits to the local community
- Construction and operations
- And more

You can also ask questions and share your feedback with the project team. Access the virtual open house anytime here: https://bit.ly/Bull_Trail_Openhouse

We look forward to connecting with you!



COVID-19 UPDATE

We are adhering to all public health official guidelines and will continue to monitor the COVID-19 situation as it evolves. Your safety is our priority, and we are committed to ongoing open communication and engagement that will keep you and your family safe. We remain available for any comments and questions through phone, email and/or video conferencing.

Anticipated project Timeline

2018

Commenced public consultation and environmental fieldwork in Q2 2018; first public mail-out to stakeholders; first open house



Q1 2021

AEP REPS submission



Q4 2021

Submission to the AUC



Q3 2023

Anticipated commercial operations



Q4 2019

Completion of environmental field studies



Q3 2021

AEP sign-off received
Second public project specific information package to stakeholders
Second open house (virtual)



Q3 2022

Anticipated AUC Approval
Anticipated start of construction

Schedule is subject to change.



ABOUT THE PROJECT

The proposed Bull Trail Wind Power Project is a renewable energy project with the capacity to generate up to 270-megawatts (MW) of electricity and will consist of up to 52 turbines. The project is owned by Bull Trail Renewable Energy Centre Limited Partnership, a subsidiary of EDF Renewables Canada Inc. ("EDF Renewables"). Bull Trail Renewable Energy Centre Limited Partnership will develop, construct and operate the project, which is located approximately 3 km south of the Hamlet of Irvine in Cypress County, Alberta. In Spring

2018, EDF Renewables distributed a Project-Specific Information Package (PSIP) and hosted an open house to introduce the project to the community. Since then, we have continued to engage with landowners and stakeholders to gather feedback about the project.

We have completed environmental work and submitted a Renewable Energy Project Submission (REPS) to Alberta Environment and Parks (AEP) in Q1 2021 and received sign-off in August 2021. We will be providing AEP a final project update in Q4 2021.

We will be submitting a Power Plant application to the Alberta Utilities Commission (AUC) in Q4 2021 under AUC Rule 007. This newsletter highlights project activities undertaken since 2018, including field studies, updated project timelines and the next steps.

We will be submitting a development permit application to the Cypress County in 2022. The project remains in compliance with all Cypress County bylaws.



INDIGENOUS ENGAGEMENT

We believe in protecting natural resources and developing clean, renewable energy. Harmonious collaboration with Indigenous communities creates opportunities for a sustainable and innovative future. We are committed to sustainable stewardship of the unique traditions and culture of Indigenous communities. As part of this commitment, we are engaging with nearby communities, as appropriate, to better understand their traditions and priorities.



PROJECT DETAILS

Wind Turbines

The project will consist of 52 turbines with a potential size of between 3.0 MW and 5.2 MW per turbine. We have not chosen a turbine model for the project but are exploring options with a maximum hub height of approximately 120 meters (m) and a maximum rotor diameter of 160 m.

collector system will be buried underground, wherever practical. The project collector substation will be located in the middle of the project site (NE 21-10-2-W4M).

Interconnection

Power generated by the project turbines will be transmitted through the electrical collector system to the substation, which is located within the project area. The substation will ultimately be connected to the provincial grid via a transmission line interconnection which will be constructed by AltaLink Management Ltd. ("AltaLink"). AltaLink will conduct a participant involvement program and file a separate application with the AUC to obtain the requisite authorizations to construct and operate the transmission line interconnection facilities.

Access Roads and Other Facilities

During development and operations of the project, existing municipal roads will be used to access the project site, wherever practical. We will be working with Cypress County to develop a road-use agreement to ensure safety and compliance of construction processes. During construction, a temporary laydown area to store equipment or allow access to the project site may be required. For project operation, an Operation and Maintenance (O&M) building will be constructed on or near the project.

Meteorological Towers

Five (5) temporary meteorological towers have already been installed at the project site to measure wind speed, wind direction, air temperature, and barometric pressure. Up to seven (7) permanent meteorological towers will be installed for monitoring during the operational phase.

EDF Renewables believes that every renewable energy project is the beginning of a lasting partnership with the local community. We strive to be a good neighbour and work closely with community members to design our project in a way that is respectful to the needs, heritage and future of Cypress County.



Maximum Rotor Diameter 160 metres

Maximum Hub Height 120 metres

Collector System and Substation

Each turbine will be connected to the project substation by a medium voltage (34.5 kV) collector system. The



COMMUNITY INVOLVEMENT AND BENEFITS

EDF Renewables values the long-term benefits of working with the local community. We are involved in every phase of the project, ensuring quality of our installations and guaranteeing a high level of reliability and performance. During the construction phase of the project, the local community will benefit from the following but not limited to:

- Employment opportunities for the construction and operations of the project;
- Contract opportunities for local businesses;
- Local investments into hospitality and construction services during the development, construction, and operations phases of the project;
- Tax revenues throughout the life of the project;
- Reduction in air pollution.





ENVIRONMENTAL AND TECHNICAL STUDIES UPDATE

EDF Renewables has completed desktop and environmental studies on the Bull Trail Wind site. Wildlife, vegetation and wetlands field work for the project was completed in 2018 and 2019. Additional studies will focus on noise and historical resources. The AEP REPS was submitted in January 2021 and sign-off was received in August 2021.

We will continue to complete the required field work to maintain the survey status as complete. Throughout the development of the project, we will work closely with AEP to ensure environmental compliance of the project site and address mitigation measures. If required, additional heritage resources work may be completed.

Noise We completed a third-party Noise Impact Assessment which follows AUC Rule 012: Noise Control, and includes cumulative sound emissions from nearby facilities, including oil and gas facilities. The results are outlined in the included map labeled: Project Layout, Noise, and Shadow Flicker Map. The project remains in compliance with AUC Rule 012 with the updated layout and proposed turbine technology.

Shadow Flicker The results of the shadow flicker analysis can be found in the included map labeled: Project Layout, Noise, and Shadow Flicker Map. This considers the probability of cloud cover, but it does not consider the orientation of the residences or the window location. Additional details available upon request.

Visual Simulations EDF Renewables conducted visual simulations which illustrate what views might look like if the project is approved. These representative simulations include turbine height, width, and overall size.



EDF RENEWABLES

EDF Renewables North America is a market leading independent power producer and service provider with 35 years of expertise in renewable energy. The Company delivers grid-scale power: wind (onshore and offshore), solar photovoltaic, and storage projects; distribution-scale power: solar and storage; and asset optimization: technical, operational, and commercial expertise to maximize performance of generating projects. The Company's PowerFlex subsidiary offers a full suite of onsite energy solutions: solar, storage, EV charging, energy management systems, and microgrids.

EDF Renewables' North American portfolio consists of 20 GW of developed projects and 13 GW under service contracts. EDF Renewables North America is a subsidiary of EDF Renewables, the dedicated renewable energy affiliate of the EDF Group.



NEXT STEPS

As the project advances through regulatory and permitting processes, we remain committed to ongoing open communication and engagement with stakeholders. The project team will continue to engage with community members, local government officials and local businesses to ensure the project is constructed and operated in a socially, environmentally and economically sustainable manner.

We truly appreciate the feedback we have received so far, and we encourage you to continue to provide us with comments and concerns. We will provide a comprehensive summary of stakeholder feedback as part of our application to the AUC, which we anticipate submitting in Q4 2021.

2,602+ MW

Put into Service,
Under Construction
or In Development
in Canada

EDF Renewables
53 Jarvis Street, Suite 300
Toronto, Ontario M5C 2H2
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1-844-255-5471

www.bulltrail.ca | www.edf-re.ca





BULL TRAIL WIND FARM

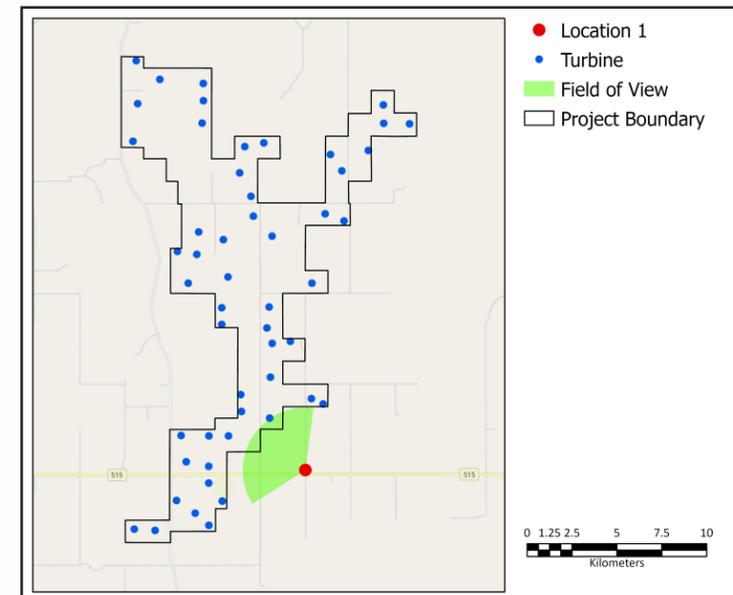
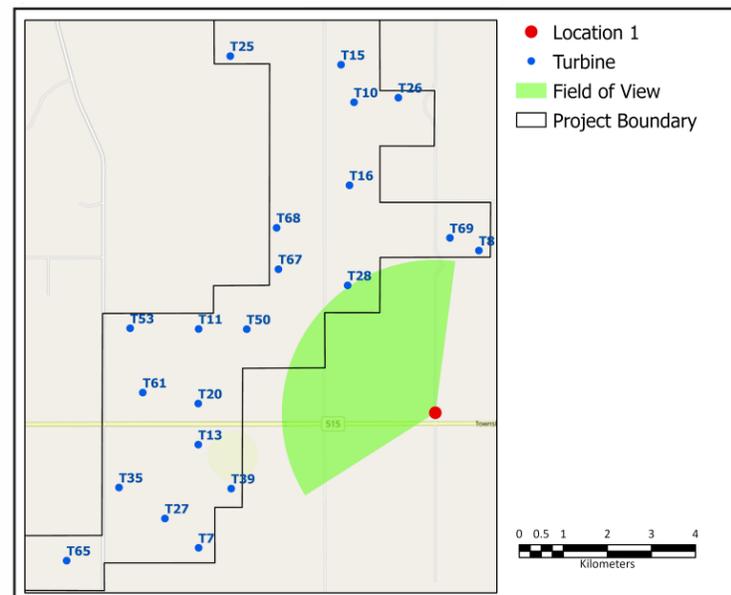
Visual Simulation: Location 1

49.7787507, -110.185577

West-northwest view

Notes: Photo and turbine locations and perspective are approximate and based on photos and turbine information provided.

The simulation employs a turbine with 160 meter rotor diameter and 120 meter hub height.



Prepared by: ArcVera Renewables

Author: Matthew Gagne

Date: 9/20/2021

Review: Bill Colgrove

Bull Trail Visual Simulation - Location 1

v3.pdf Version: 3



BULL TRAIL WIND FARM

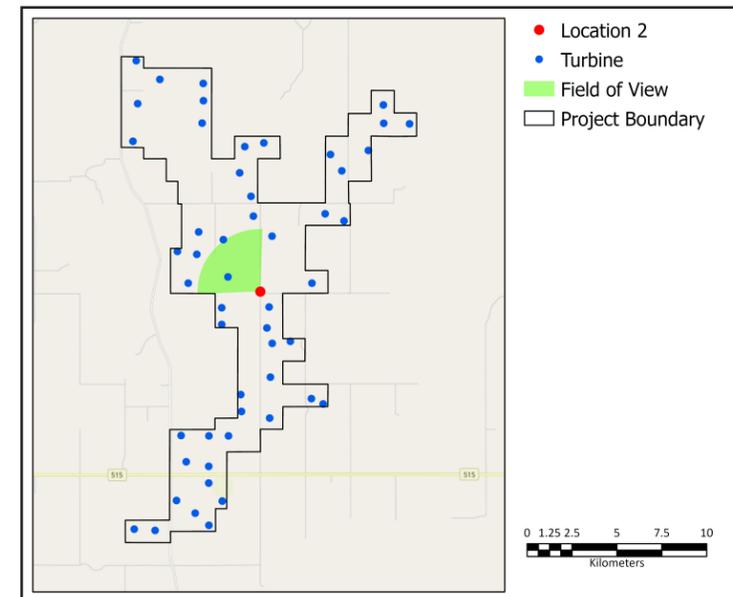
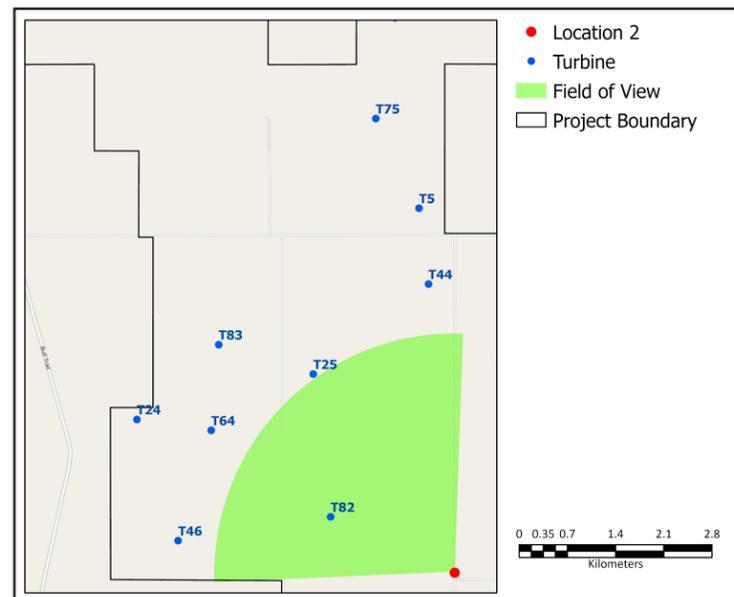
Visual Simulation: Location 2

49.844982, -110.208161

Northwest view

Notes: Photo and turbine locations and perspective are approximate and based on photos and turbine information provided.

The simulation employs a turbine with 160 meter rotor diameter and 120 meter hub height.



Prepared by: ArcVera Renewables
 Author: Matthew Gagne
 Date: 9/19/2021
 Review: Bill Colgrove

Bull Trail Visual Simulation - Location 2
 v2.pdf Version: 2



BEFORE



AFTER

BULL TRAIL WIND FARM

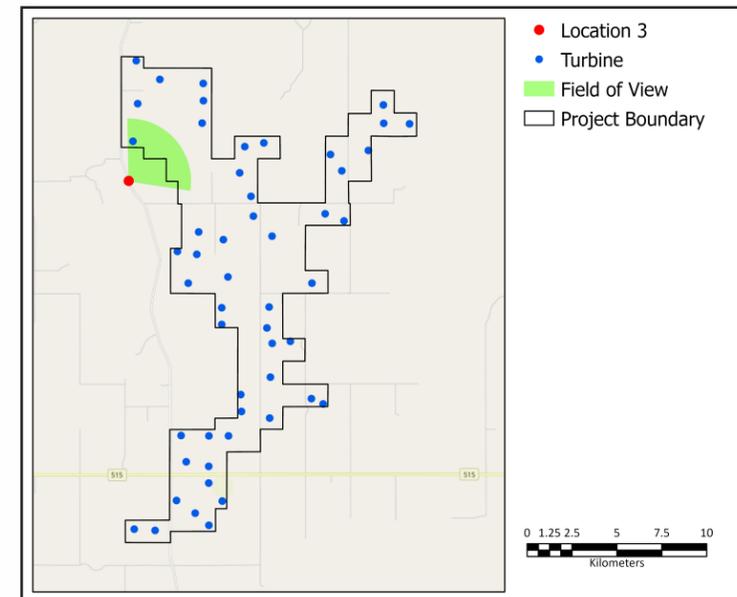
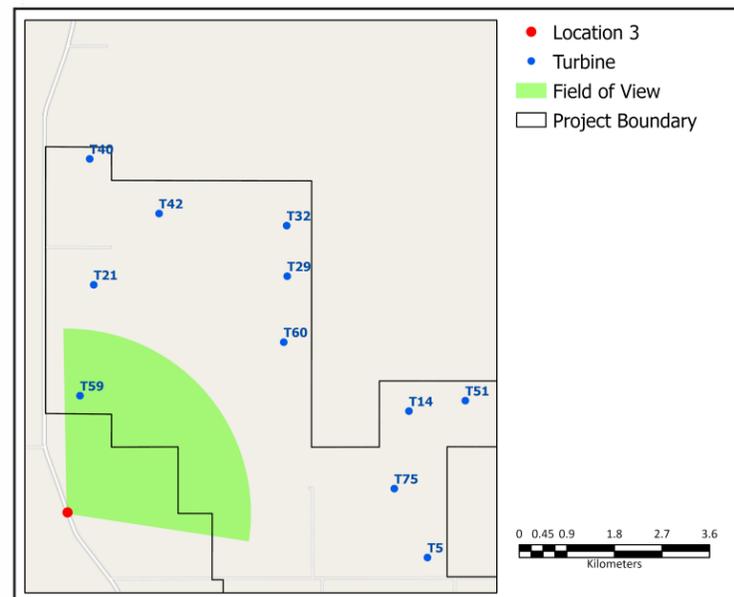
Visual Simulation: Location 3

49.880534, -110.273956

Northeast view

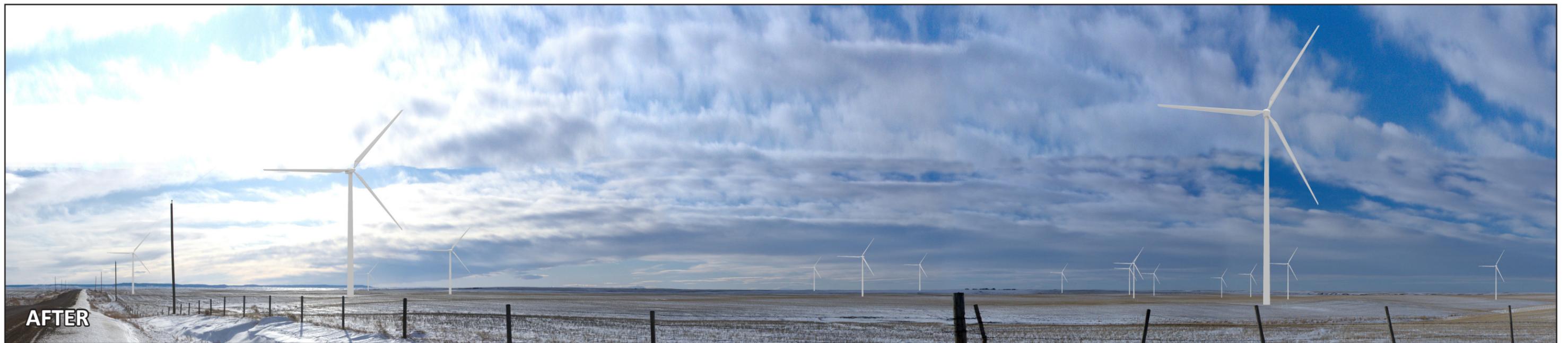
Notes: Photo and turbine locations and perspective are approximate and based on photos and turbine information provided.

The simulation employs a turbine with 160 meter rotor diameter and 120 meter hub height.



Prepared by: ArcVera Renewables
 Author: Matthew Gagne
 Date: 9/20/2021
 Review: Bill Colgrove

Bull Trail Visual Simulation - Location 3
 v2.pdf Version: 2



BULL TRAIL WIND FARM

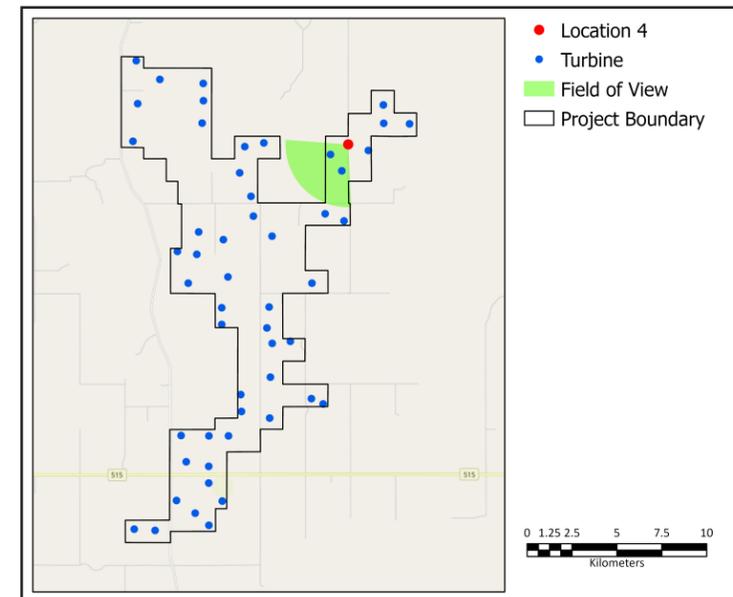
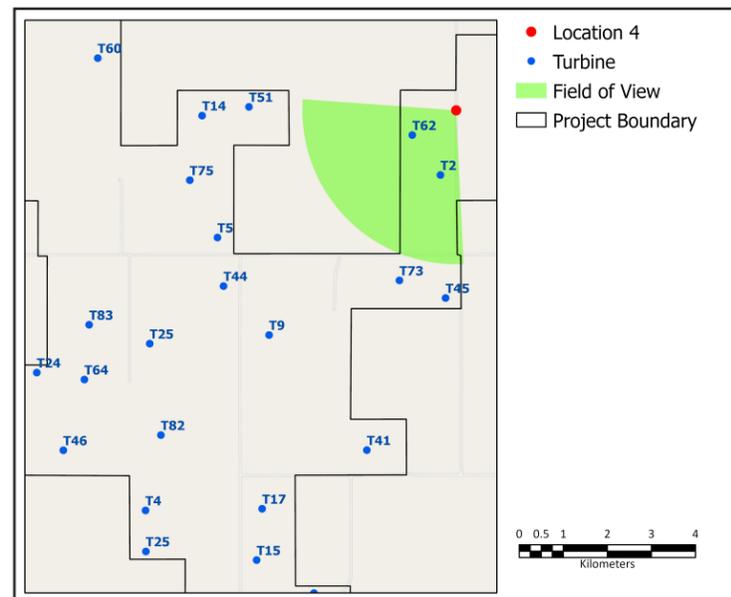
Visual Simulation: Location 4

49.892295, -110.164132

Southwest view

Notes: Photo and turbine locations and perspective are approximate and based on photos and turbine information provided. Sky above the "before" image was created artificially due to the height of the turbines in the image.

The simulation employs a turbine with 160 meter rotor diameter and 120 meter hub height.



Prepared by: ArcVera Renewables
 Author: Matthew Gagne
 Date: 9/21/2021
 Review: Bill Colgrove

Bull Trail Visual Simulation - Location 4
 v2.pdf Version: 2



BULL TRAIL WIND FARM

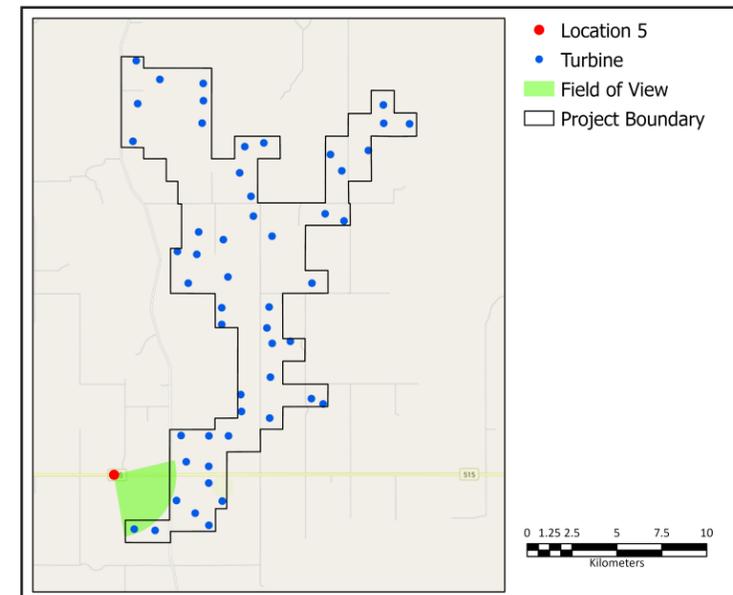
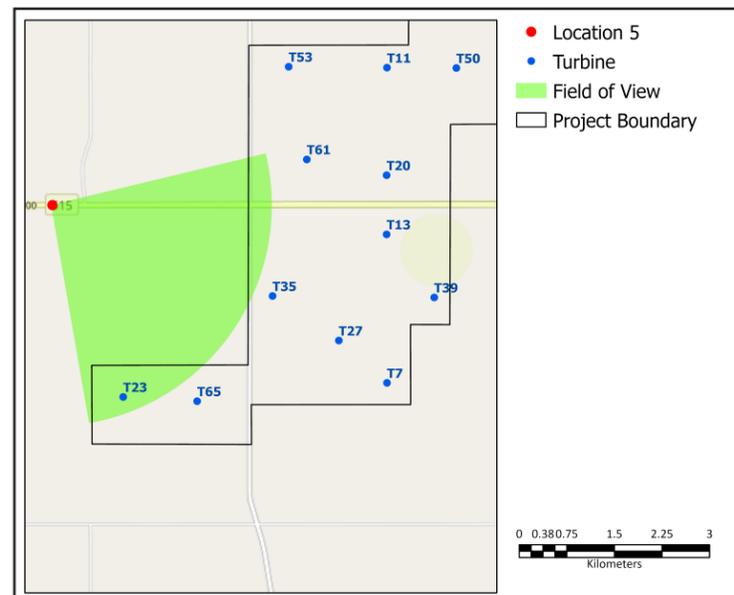
Visual Simulation: Location 5

49.785974, -110.281265

East-southeast view

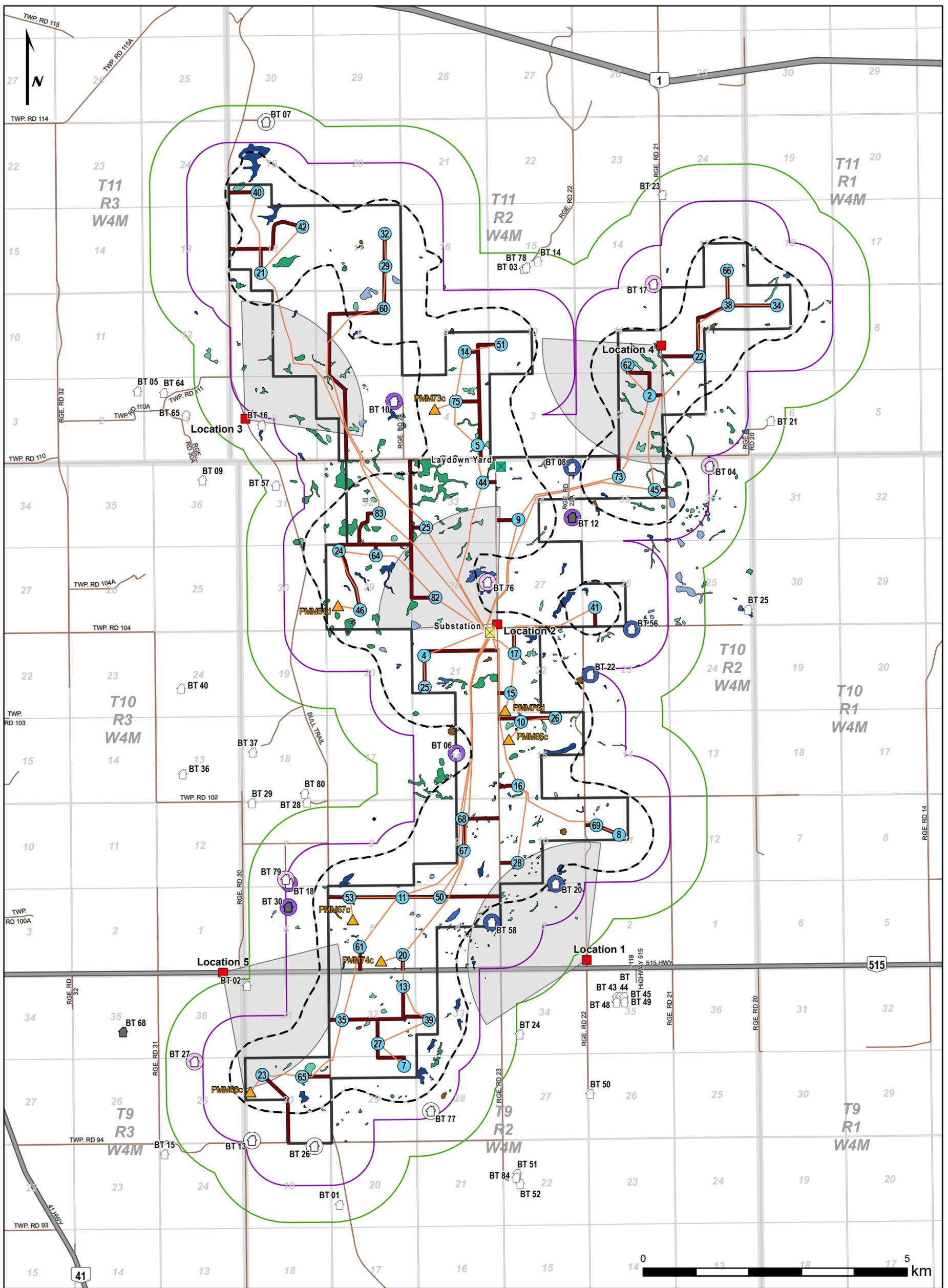
Notes: Photo and turbine locations and perspective are approximate and based on photos and turbine information provided.

The simulation employs a turbine with 160 meter rotor diameter and 120 meter hub height.



Prepared by: ArcVera Renewables
 Author: Matthew Gagne
 Date: 9/19/2021
 Review: Bill Colgrove

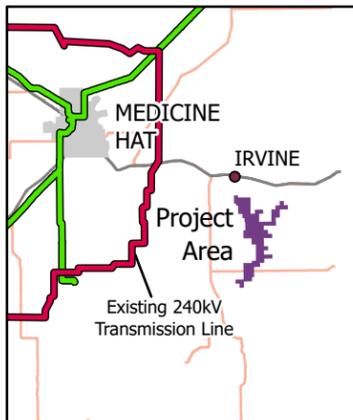
Bull Trail Visual Simulation - Location 5
 v1.pdf Version: 1



- Shadow Flicker (hours)**
- 0 Hours per Year
 - 0 - 8 Hours per Year
 - 8 - 15 Hours per Year
 - 15 - 30 Hours per Year
 - ⬛ Abandoned Residence
 - ⬛ Occupied Residence
 - ⬛ Photomontage Location
 - ⬛ Photomontage Field of View Arc
 - 38.3 dBA Noise Contour

- Proposed Turbine Location
- ⬛ Proposed Substation
- ⬛ Proposed Laydown Yard
- ▲ Proposed Meteorological Tower
- Proposed Collection Line
- Proposed Access Roads
- Notification Zone (1.5km)
- Consultation Zone (800m)
- Project Area Boundary

- Wetlands**
- Class I
 - Class II
 - Class III
 - Class IV
 - Class V
 - Dugout
 - Highway
 - Existing Roads
 - Township Boundary



BULL TRAIL RENEWABLE ENERGY CENTRE LIMITED PARTNERSHIP

BULL TRAIL WIND POWER PROJECT

PROJECT LAYOUT, ADJUSTED CASE SHADOW FLICKER, AND NOISE IMPACT MAP

LAYOUT: LV12F
 DATE: 2021-10-19
 AUTHOR: A.G.
 CHECKED: J.G.

Prepared by Solas Energy Consulting Inc.
 Coordinate System: NAD 1983 UTM 12N
 Data: ESRI, EDF Renewables Canada Inc., Canvec, RDWI, OpenStreetMap

FREQUENTLY ASKED QUESTIONS



How long will construction take?

We anticipate construction will start in Q3 2022 and will end by Q3 2023. Construction typically includes civil works, access road preparation, foundation installation, turbine delivery and erection, collector system installation, and electrical and mechanical completions.



How do you plan to manage construction dust and increased traffic?

With any large infrastructure project there will be increased traffic during the construction phase. We will implement traffic control and dust mitigation measures during the Project's construction. We will determine these measures in consultation with Cypress County. We will also discuss haul routes for turbines and other infrastructure with Cypress County. We will limit the time for construction-associated traffic in consultation with local authorities and work with local residents to ensure a safe process with as few impacts as possible to local residents and their seasonal agricultural practices.



Do wind turbines impact human health?

There have been some claims that noise from wind turbines can impact human health. EDF Renewables has completed a third-party noise impact assessment. The assessment considers Alberta Utilities Commission Rule 012: Noise Control, and it includes cumulative sound emissions from nearby facilities, including oil and gas facilities. Noise levels must not exceed 40 decibels at nighttime. Our Project must comply with this Rule otherwise the AUC will not approve the Project. The results of the assessment are demonstrated in the Project Layout.

Health Canada completed a \$1.4 million study from 2012 to 2015 assessing if wind turbines affected health. The study found that there is no scientific evidence to support negative effects on human health resulting from exposure to wind turbine noise. More information is available from the Health Canada study at www.canada.ca



What is shadow flicker?

Shadow flicker can occur at certain times of the year. Blades can cast a moving shadow over windows, creating a flicker effect indoors which can cause annoyance. Shadow flicker can occur when turbines are sited close to homes. A shadow Flicker Analysis Summary Report is available upon request.

EDF Renewables has conducted an independent shadow flicker analysis to ensure turbines are properly located to mitigate potential shadow flicker impacts. This study considers the probability of cloud cover, but it does not consider the orientation of residences or the location of windows in residences. The results of this study are available in the Project Layout, Shadow Flicker and Noise Map. All residences fall within internationally accepted thresholds.



What is the emergency response protocol in the event of a fire?

Safety is a core value of EDF Renewables Canada Inc. During construction, we will employ robust safety protocols, including restricting public access to the construction site. In addition, there will be security controls on site and we will employ traffic mitigation strategies. We will continue to consult with the community throughout the process.

During operations, the Project will have a supervisory, control, and data acquisition system that connects each turbine to a central operating system. This system monitors the turbines 24 hours a day, seven days a week. In the event of an emergency, the controller will send an automatic alarm notification to the operations staff and the remote operations centre. The on-site staff or the remote operating staff will initiate a shut down. If a fire is detected, staff will immediately call 911 to dispatch the local fire department, and staff will implement the protocols outlined in the emergency response procedures. EDF Renewables will be working closely with local emergency services to develop an emergency response plan.

Will my property value be impacted?

There is no conclusive evidence in Alberta about whether property values are affected by neighbouring wind power projects. Three wind power project applications in Alberta received by the AUC considered the potential impact of wind power projects on property value. The AUC concluded the following:

“The Commission was not presented with sufficient evidence in this proceeding to suggest that the project will result in an adverse impact on property values of parcels adjacent to the project.” — Grizzly Bear Creek Wind Project (E.On Climate & Renewables Canada Ltd.)¹

“The Commission has not been presented with sufficient cogent evidence in this proceeding to suggest that the project will result in an adverse impact on property values of parcels adjacent to the project and finds that any limitations on subdivision potential is too speculative.” — Bull Creek Wind Project (BluEarth Renewables Inc.)²

“The Commission finds that there was insufficient evidence presented to show that land use would be impacted by the project, particularly given that no components of the project will be sited on nonparticipating landowners’ property. With respect to the project’s potential impact on property values, the Commission was not presented with sufficient evidence in this proceeding to suggest that the project will result in an adverse impact on property values of parcels adjacent to the project.” — Halkirk 2 Wind Project (Capital Power)³

There have been numerous studies completed on this subject and the general consensus is that there is little evidence to support claims that property value is impacted by neighbouring wind power projects. To date, the most comprehensive study on wind power projects and property values was conducted by the Lawrence Berkeley National Laboratory. The study analyzed more than 50,000 home sales near 67 wind power projects across nine U.S. states over ten years and found no statistical evidence that operating wind power projects have had any measurable impacts on home sale prices.

Similarly, the Municipal Property Assessment Corporation (MPAC) evaluated these claims in a detailed study in 2008, 2012 and 2016 entitled *Impact of Industrial Wind Turbines on Residential Property Assessment* in Ontario. This report studies properties within five kilometres of a wind turbine, and whether their assessment is equitable to those situated more than five kilometres from a wind turbine. The assessed value of a property does not change due to nearby wind turbines. This finding is consistent with MPAC’s reports.



What steps are you taking to protect the environment, specifically birds and bats?

EDF Renewables has completed environmental studies for the Project. The subjects of these studies included vegetation, wildlife, and wetlands. Based on the survey results, we have applied the appropriate setbacks for the Project infrastructure from sensitive environmental features. We submitted the results of our surveys and our environmental evaluation to Alberta Environment and Parks (AEP) for their review. AEP has provided a Renewable Energy Referral Report for the Project.

All wind power projects in Alberta must consider their potential impact on wildlife. Examples of precautionary measures include implementing setbacks from habitats, avoiding the extensive use of above-ground transmission lines, and ensuring an appropriate distance between each turbine. EDF Renewables will complete post-construction monitoring as required.



1-AUC Decision 3329-D01-2016, May 19, 2016.
2-AUC Decision 2014-04, February 20, 2014.
3-AUC Decision 22563-D01-2018, April 13, 2017.



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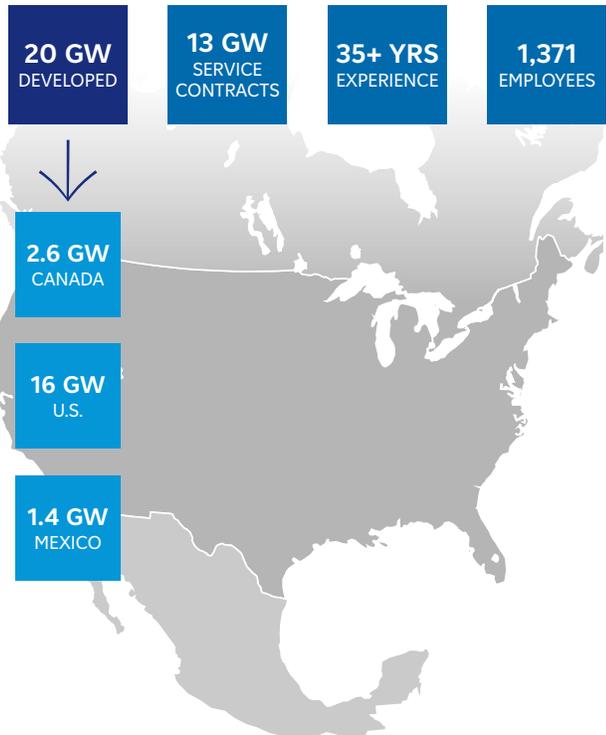
25 GW

of development across North America (as of 12/2020)

EDF Renewables North America is a market leading independent power producer and service provider. Delivering **grid-scale power**: wind (onshore and offshore), solar photovoltaic, and storage projects; **distributed solutions**: solar, solar+storage, electrical vehicle charging and energy management; and **asset optimization**:

technical, operational, and commercial skills to maximize performance of generating projects.

EDF Renewables' North American portfolio consists of 20 GW of developed projects and 13 GW under service contracts. The Company is a subsidiary of EDF Renouvelables, the dedicated renewable energy affiliate of the EDF Group.



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EDFR NA is a technology agnostic provider of renewable generation, storage, and management solutions.



ORIGINATION

Comprehensive analysis, identification and evaluation of prospective sites and matching those sites with customer needs.



DEVELOPMENT

Resource assessment, permitting, site design, interconnection rights and technology selections.



TRANSACTION

Securitization of energy offtake and financing.



CONSTRUCTION

Implementation of all aspects of the system design, installation, and construction to ensure a quality build.



OPTIMIZATION

Operations and maintenance, asset management, monitoring and maintenance to ensure profitable and optimal performance of facility.

Let's talk energy.



CORPORATE HEADQUARTERS

EDF Renewables
15445 Innovation Drive
San Diego, CA 92128
858.521.3300

www.edf-re.com

