ABOUT THE PROJECT

The Cypress Wind Power Project is a proposed wind project of up to **250 megawatts (MW) of generating capacity** to be developed, constructed and operated southeast of Medicine Hat, closest to the Hamlet of Dunmore, Alberta, **near the intersection of Highway 41 and Township Road 100 in Cypress County.** In addition to working with Cypress County, EDF EN Canada will seek necessary approvals for the Project from the Alberta Utilities Commission (AUC), the Alberta Electric System Operator (AESO), and Alberta Environment and Parks (AEP).

In the coming months, the Project team will engage with community members, local government officials and local businesses to make sure that the final Project design is socially, environmentally and economically sustainable. Our goal is to minimize potential impacts to the environment, local stakeholders and Aboriginal communities.

OPEN HOUSE

We invite you to come out and learn more about the Cypress Wind Power Project at our first community open house. Refreshments will be served. We hope to see you there!

THURSDAY, APRIL 27, 2017
5:00 - 8:00 PM

Irvine & District Agricultural Society
207 Francis St. Irvine, AB T0J 1V0

KEY PROJECT DETAILS

Wind Turbines The Project will consist of 59 - 125 turbines with a capacity of 2 - 4.2 MW per turbine. Each turbine will have a hub height between 80 - 112.5 metres (m) and have a rotor diameter of 110 - 141 m.

Electric System Each turbine will be linked to the Project substation by a medium voltage collector system. The low voltage cables will be buried underground, wherever practical. The location of the Project collector substation has not been determined at this time.

Interconnection The Project will be interconnected to the 240 kilovolt (kV) transmission system in the area being operated by AltaLink.

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. There will also be an operations and maintenance building located on or near the Project boundary. We will work with the municipality to develop a road use agreement. During construction, a temporary laydown area may also be required.

Meteorological Towers A number of temporary meteorological towers have already been installed at the Project site to measure wind speed, wind direction, air temperature, and barometric pressure Permanent meteorological towers will be installed for monitoring during the operational phase.

CYPRESS wind project

ANTICIPATED PROJECT TIMELINE

Q4 2016
- Initiation of Public consultation
- Commence environmental fieldwork

APRIL 2017
- First Project mail-out to affected stakeholders
- First open house

Q2 2017 / Q3 2017
Buildable areas phase 1 application submitted to AUC for review and approval

Q3/Q4 2017
Second open house

SEPTEMBER 2017
Update Project mail-out to affected stakeholders

Q4 2017
Completion of Environmental field studies

Q4 2017 / Q1 2018
Buildable areas phase 2 application submitted to AUC for review and approval

Q2/Q3 2018
Anticipated AUC approval

Q4 2018
Anticipated start of construction

Q4 2019
Anticipated commercial operations

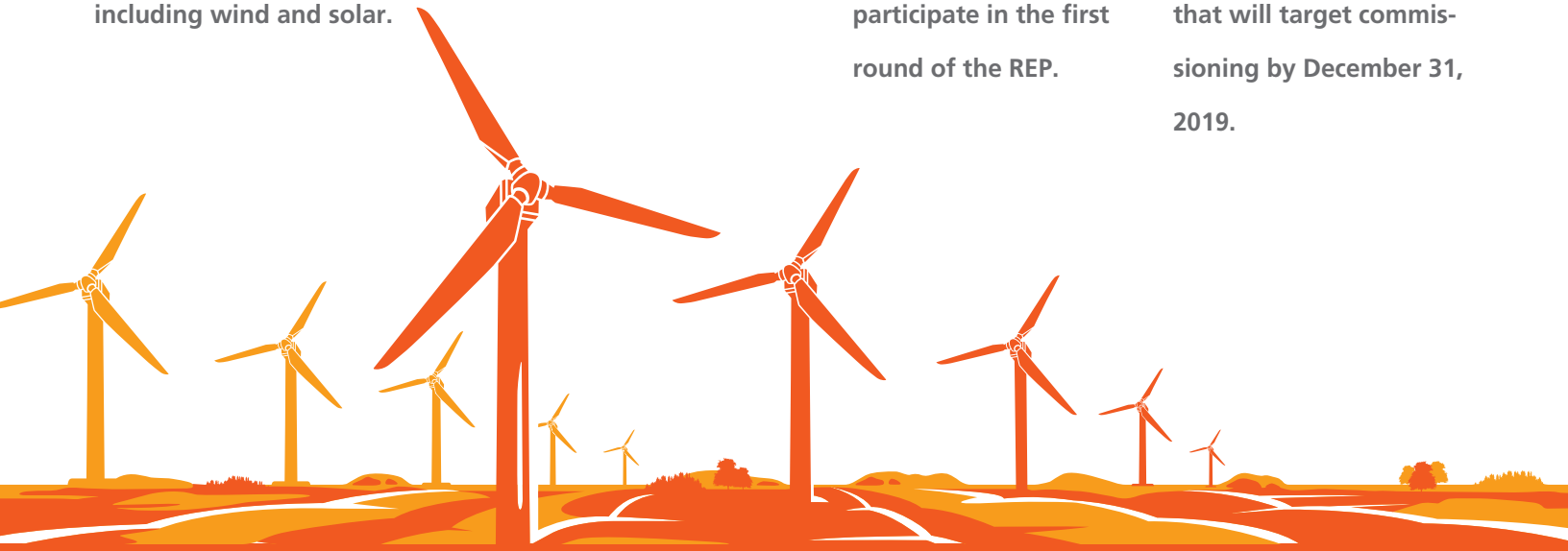
WHY WIND, WHY NOW?

Alberta is changing the mix of power generation to include a larger portion of renewable energy in the province, including wind and solar.

In March 2017, the Alberta Electric System Operator launched the Renewable Electricity Program (REP).

The program will be run in a series of competitions. The Cypress Wind Power Project intends to participate in the first round of the REP.

The first round of the REP, includes the procurement of up to 400 MW of renewable electricity for projects that will target commissioning by December 31, 2019.



Aboriginal Engagement

We are committed to sustainable stewardship of our natural resources and value the unique traditions and culture of Aboriginal communities. As part of this commitment, we will engage with potentially impacted Aboriginal communities to better understand their traditions and priorities.

IN YOUR COMMUNITY

Community Benefits

EDF EN Canada values the long-term benefits of working with the local community. If the Cypress Wind Power Project is approved, the local community will benefit from the following:

- **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.

Community Involvement

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

ENVIRONMENTAL WORK & TECHNICAL ACTIVITIES UNDERWAY

EDF EN Canada has completed desktop analysis and commenced field work on various Project aspects. As development progresses, additional field studies will focus on:

- **Wildlife** – birds, bats and other wildlife
- **Wetlands** – mapping and classification
- **Noise** – impact assessment
- **Heritage Resources**

Throughout the development of the Project, we will work closely with AEP to ensure a robust understanding of the site.

HOW WIND WORKS

1 **Turbine blades** generate lift from energy extracted from the wind with rotations between 9-16 RPM.

- 10.5 km/h (3 m/s) is the minimum speed needed to generate enough lift to start operation and electricity.
- 43 km/h (12 m/s) is the speed needed to produce at full power.
- 90 km/h (25 m/s) is the maximum speed. At speeds higher than this, the turbine shuts down to ensure safety and prevent equipment failure.

2 The **electrical generator** inside the turbine rotor converts mechanical energy into electrical energy. The electricity produced is then converted to the right voltage for distribution.

It might appear relatively small, but the powerful nacelle, which is the box at the top of the turbine, weighs roughly 70 tonnes and contains the majority of the wind turbine components, which includes the gearbox, rotor shaft, brake assembly and the transformer.

3 The **transformer** is located at the base of the turbine or inside the nacelle and efficiently transports electricity by the collector system.

The quantity of energy produced by a turbine largely depends on:

- wind speed
- the area swept by the blades
- generator size
- air density and temperature

4 The **collector system** carries electricity to the substation. Collector systems are underground circuits that connect wind turbines together.

5 At the **substation**, the voltage is transformed once more to higher voltages.

6 Electricity is metered and delivered to the utility.

ABOUT EDF EN CANADA

EDF EN Canada is a green energy pioneer and market leader with over 1,600 MW of wind and solar energy in varying stages of development, active construction and operation across Canada. We develop, design, build and operate renewable energy projects that harness the earth's renewable resources – helping to drive the green energy economy and create industries of the future.

EDF EN Canada is a Canadian entity and a wholly owned subsidiary of EDF EN.

CONTACT US

If you have any questions or concerns regarding the Cypress Wind Power Project, please contact a Project team member at:

cypresswindproject@edf-en.ca
844-55-EDF-EN / 844-553-3336

For more information about the Project, please visit the website at:

www.edf-en.ca/project/cypress-wind-power-project/

For more information about EDF EN Canada Inc., please visit our website at:

www.edf-en.ca

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