### Construction Plan

**Turbine siting and surveys** 

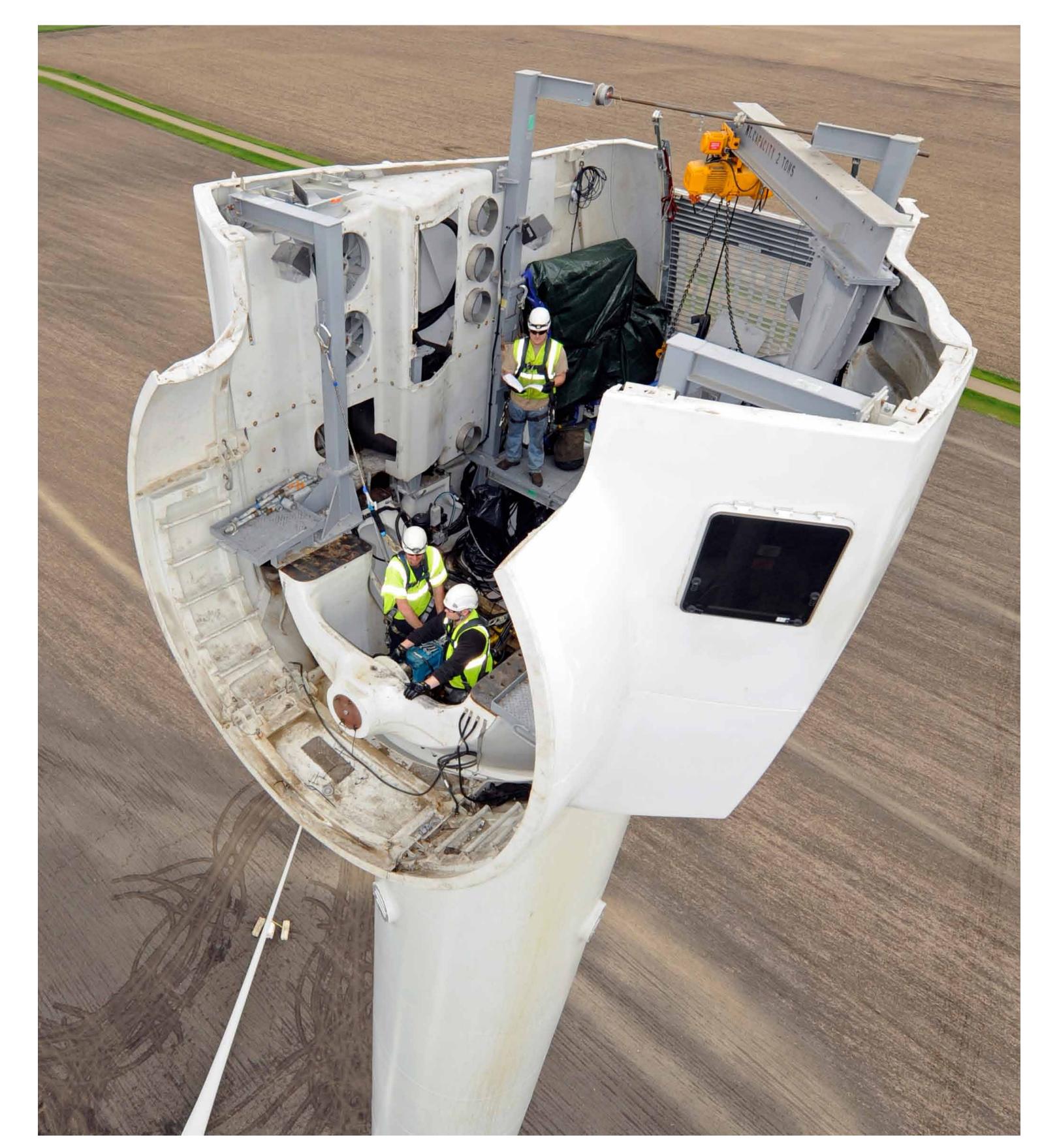
Site preparation will include final turbine siting and surveys

A During these surveys, boundaries of turbine sites will be staked and existing

#### buried infrastructure will be located and marked

#### **Access roads**

- Municipal and Provincial roads will be used to transport equipment to the construction sites
- Minor modifications may be required to some of the existing roads (e.g. widening the turning radius) to transport equipment
- New access roads will typically be 10 m (34 feet) wide during the construction phase
- No permanent paved roads will need to be constructed for the turbines
- Equipment will be delivered by truck and trailer as needed throughout the construction phase and stored at temporary laydown sites surrounding each turbine





### Construction Plan

**Electrical Collector System:** 

This system consists of a mixture of underground cables, pad mounted transformers and a substation

Ploughing and trenching will be used to install the underground cables
 The cabling will be buried at a depth that will not interfere with normal agricultural practices and maps of cable locations will be provided to landowners

#### Wind Turbines:

- Foundations will be made of poured concrete, reinforced with steel rebar to provide strength
- Each foundation will require an excavation of approximately 3 metres (10 feet) deep, and 20 metres (66 feet) by 20 metres (66 feet) square
- A Only the tower base portion of the foundation will be left above ground
- The turbine will then be anchored to the foundation by large bolts set in the concrete foundation
- Turbine assembly and installation will typically require 4 5 days per turbine
  Following commissioning, the area surrounding the turbine will be returned to its pre-construction state

#### **Operations and Maintenance Centre:**

- The centre will be located outside the project area and will be used to monitor the day-to-day operations of the wind farm and maintenance efforts
- Potable water will be supplied by a well or through the municipal water system and if required, a septic bed will be constructed for the disposal of sewage
- A These will be constructed in accordance with applicable municipal and provincial standards





### **Operations and Maintenance**

NextEra Energy believes in "prevention" versus "event response" through component condition and performance assessment

Experienced operations and maintenance managers on site

- On-going training and mentoring programs to maintain safe and efficient operation
- Site staff supported by centralized maintenance and environmental staff
- Supported by 24/7 Fleet Performance and Diagnostic Centre
- Local operations team available to answer questions and address concerns





### Decommissioning Plan

- A Decommissioning Plan is required as part of the REA approval.
- Project is expected to be operational for 25+ years



- Plan is in place to remove all turbines to the top of the foundations after 25 years
- Repair, refurbishment and replacement of turbines is typical of a preventative maintenance program
- Options exist other than decommissioning
- Components to be removed:
  - ▲ Turbines
  - Overhead lines and poles
  - Substation
- The top one metre (3 feet) of turbine foundations will be removed and replaced with clean fill and stockpiled with topsoil
- Areas will be reseeded where appropriate
- Access road removal will be dependent on the requirements of the landowner



### Your Concerns... Our Response

#### **Q: How much noise will there be from turbines?**

A: Wind projects must show that they meet the sound limit requirements prescribed by the Ministry of Environment. For non-participating residences (those that are not a part of the project) the sound limit is 40 decibels (dBA). This is quieter than many sources of sound within a home (i.e., 40 dBA is about halfway between a whisper and a normal conversation between two people less than a metre apart). Sound from a wind turbine diminishes over distance, as such; NextEra meets or exceeds the 550 metre minimum setback distance required by the Province between wind turbines and dwellings.

#### **Q:** What effects will there be on wildlife? (e.g. birds, bats etc)

A: When properly sited, wind turbines present less of a danger to wildlife than other structures such as buildings and roads. Turbines will be located as carefully as possible to minimize any effects on wildlife. NextEra Energy Canada will work closely with the relevant experts to assess any potential effects on wildlife, including birds and bats.

#### **Q: What risks are there to my health from turbines?**

A: There is little credible evidence to support any links between wind turbines and adverse effects on human health either related to noise or shadow flicker. NextEra will have a Complaint Resolution Process in place to address any concerns related to the project that may arise.

#### **Q: Why did the Study Area for the Project change?**

A: Confirmation in GE 1.6 MW turbines as the technology to be used required the siting of 14 turbines. Previously we had considered the Siemens 2.3 MW turbines which would only have required 10 turbine sites. Field work undertaken over the past couple of years identified a need to consider additional lands to site turbines in order to avoid impacts to natural features. Interest from additional landowners to take part in the project subsequently allowed us to expand the area, and look at better site designs which could avoid potential impacts to natural features.



### Your Concerns... Our Response

#### **Q: I am concerned about the effect on the value of my property.**

A: Based on available research, we are not aware of any credible evidence to indicate a decline in property values from the siting of a wind farm. Independent studies have been conducted by Ontario municipalities, leading universities, and other entities which have concluded that the construction of a wind facility does not detract from property values.

#### **Q:** What will it cost to decommission the turbines?

A: The decommissioning costs will be established through the Renewable Energy Approval process which will specify the requirements for a decommissioning plan and incorporate them in the permit under 0.Reg. 359/09. The public will have an opportunity to provide input and comment on the plan that will be apart of the application filed with the Ministry of the Environment. The project owner will be responsible for the cost of the decommissioning.

#### **Q: I have concerns about the impact on the landscape from the turbines.**

A: The visual impact of any development is highly subjective. Through our consultation we will present visualizations of our proposed development for public comment and feedback that may result in changes that would make the development more visually appealing.

#### **Q:** Is there a plan for handling emergencies?

A: An Emergency Response Plan will be developed as part of the Design and Operations Report. This Plan will be developed in consultation with the local municipality, local fire department and emergency services.

> For a complete list of comments and questions from the public, please visit the Frequently Asked Questions sections on our website. We will also publish concerns and inquiries in the public consultation report,

#### which will be filed with the REA documents and posted on our website.



# Thank you for attending!

• Thank you for attending this evening's Community Update Open House

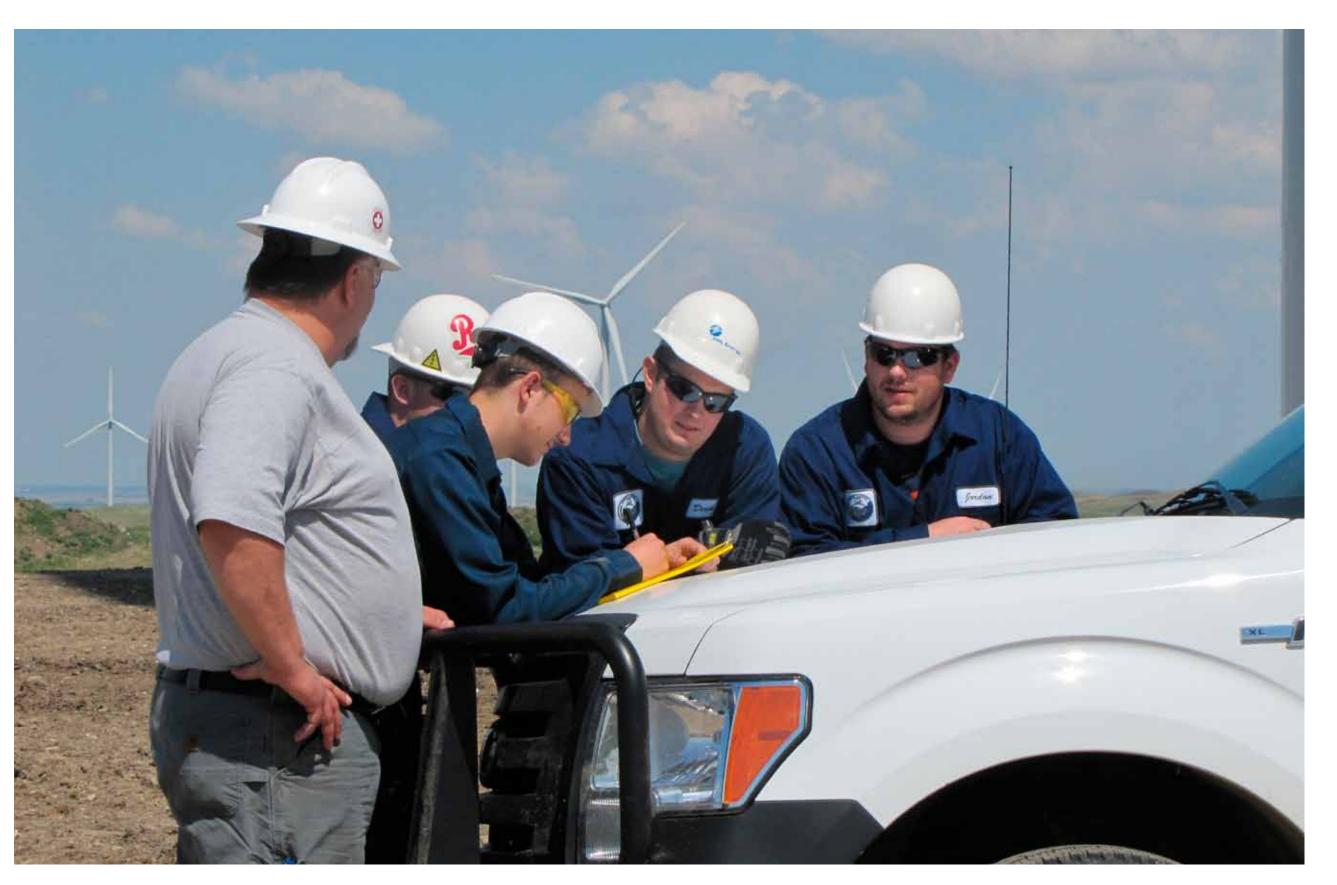
• Your input is important to us: please fill out an exit questionnaire and either leave it with

- us tonight or mail it to us using the contact information below
- At our next meeting we will provide the results of our studies, present the final turbine layout, and identify potential effects and mitigation measures
- Should you have any further questions or comments, please do not hesitate to contact us:

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