



AECOM
215 – 55 Wyndham Street North
Guelph, ON, Canada N1H 7T8
Tel: 519 763 7783 Fax: 519 763 1668

Meeting Summary – Adelaide Community Liaison Committee

Attn.: CLC members, NextEra Staff

Subject: Adelaide Wind Energy Centre, Community Liaison Committee (CLC): Meeting No.1

December 11, 2013 6:00 pm to 8:00 pm

Gemini Sportsplex - WesCast Room

667 Adair Blvd., Strathroy, ON

Present:

CLC Members

- Kurtis Smith, Mac Parker, Donna Hornblower, Carolyn Cornelissen, Ron Peters, Shirley Miller

NextEra

- Ben Greenhouse, Doug McIntosh, Andrea Garcia

Borea Construction

- Scott Langstaff

DNV GL Energy

- Gabriel Constantin

AECOM

- Avril Fiskien, Adam Wright

Absent:

- Dean Jacobs, Fallon Burch, Jeff Damen



Item Discussed	Action
<p data-bbox="188 464 743 495">1. Welcome and Introductions (slides 1-3)</p> <p data-bbox="188 533 1122 600">Avril Fisken (CLC Chair) welcomed the CLC, and reviewed her role to facilitate a robust and respectful dialogue.</p> <p data-bbox="188 640 1179 814">She then welcomed the public and reinforced that anyone is able to provide a deposition to the Committee; people wishing to do so should submit an application to Avril one week in advance of the next meeting. It is the Committee’s role to review and approve any deposition. The agenda and presentation deck were distributed for the public’s review.</p> <p data-bbox="188 854 1179 1064">Avril thanked all for participating in these meetings and informed that Adam will be taking minutes for the meeting. A meeting summary will be circulated to the CLC members and to NextEra for approval; while minutes are not intended to be verbatim, they are provided to participants to ensure that discussions have been accurately captured. Finalized minutes will be posted on the project website at: http://www.nexteraenergycanada.com/projects/adelaide.shtml</p> <p data-bbox="188 1104 1105 1171">Committee members then introduced themselves and stated their interest in participating in the CLC.</p> <p data-bbox="188 1211 358 1243">CLC Members</p> <p data-bbox="188 1249 1154 1346">Kurtis Smith – I am a Councilor for Adelaide-Metcalf, I want to bring information from this committee to council so I can get their feedback to bring back to this committee.</p> <p data-bbox="188 1386 1097 1493">Donna Hornblower – I am concerned with health and safety issues. I want an opportunity to listen to what is being said. I have attended all or most of the meetings relating to this project and have been involved all along.</p> <p data-bbox="188 1533 1159 1600">Shirley Miller – Landowner and real estate agent – I get questions all the time and want to be able to tell people what is going on.</p> <p data-bbox="188 1640 1190 1747">Carolyn Cornelissen – We farm in Middlesex and Lambton county and own land with a turbine on it. We also have solar and geo-thermal energy on the farm and want to see the use of more renewable energy in the future.</p> <p data-bbox="188 1787 1166 1854">Ron Peter – Landowner and Small Business Owner – I joined to keep informed and see what everything is all about. I have been active with this project since 2007.</p>	



<p>Mac Parker – Landowner and former Reeve for Warwick township – I have been involved in these types of forums before, including 19 years for a landfill committee.</p> <p>NextEra / Borea Construction Team</p> <p>Ben Greenhouse – Director. I have been involved with this project since 2009, since we acquired it from a company called TCI Renewables. My role is to ensure that people know how their work can support the Adelaide project, as well as providing ‘big picture’ support for the project.</p> <p>Andrea Garcia – I will support the Adelaide project through coordinating environmental permitting.</p> <p>Gabriel Constantin – Consultant from DNV GL Energy – I provide support in environmental permitting for renewable energy projects.</p> <p>Doug McIntosh – Lead for operations in Ontario for NextEra – There will be four to seven technicians and office staff that are dedicated to the Adelaide project.</p> <p>Jeff Damen – (not in attendance) Sends regrets but will be involved moving forward.</p>	
<p>2. Review CLC Terms of Reference / Charter (slides 4-8)</p> <p>Avril reviewed the following items;</p> <ul style="list-style-type: none">○ Purpose, objectives and composition of the Committee; explaining that the CLC is a mandate of the REA process (Slides 4&5)○ Reinforced that the mandate of the Committee is not to revisit those matters already addressed through the MOE approval process○ Reviewed the efforts made to recruit members and the intended membership composition○ Confirmed that members were appointed to the Committee regardless of their position on the project○ Confirmed that all people who completed an application and confirmed their agreement with the CLC Charter by signing were welcomed to the Committee○ Outlined that as the meetings move forward there may be questions that cannot be addressed, to ensure questions are not forgotten a “parking lot” was set up so the question can be answered in a thorough manner. <ul style="list-style-type: none">● Outlined role of CLC members, NextEra representatives, and AECOM (Slides 6&7)<ul style="list-style-type: none">○ Relayed that both CLC members and NextEra representatives are expected to work within the rules of the Charter (i.e., attend all	



<p>meetings, review materials, listen to and consider the feedback of others, respectfully participate in discussions and provide constructive feedback.</p> <ul style="list-style-type: none"> ○ Emphasized that committee members should share the committee’s findings with the community. <p><u>Questions</u></p> <p>Are there expenses reimbursed or per diems to the members? The CLC is a voluntary process and as such there are no re-imburements or per diems for committee members.</p> <p>Are we taking motions for the meeting, i.e., Roberts’s rules of discussion? I prefer the formal aspect using motions, that way everyone knows what was said or done. This Committee is not by nature a decision-making body although some decisions regarding dispositions or membership may be required. In these cases, we could elect to use motions if the Committee wishes, but for the most part a formal decision-making process will not be required.</p> <p>Will the minutes be available after the meeting? The minutes will be circulated to the Committee and to NextEra for review and approval. Once approved, the minutes will be posted on the NextEra website (http://www.nexteraenergycanada.com/projects/adelaide.shtml)</p> <p>Avril introduced Ben Greenhouse (Project Director, Adelaide Wind Energy Centre) to speak about the Adelaide Wind Energy Centre and provide details regarding construction plans.</p>	<p>Confirm CLC’s expectation regarding how quickly they should receive the meeting summary for review.</p>
<p>3. Present Adelaide Wind Energy Center and Discuss Construction Plans (slide 9-12)</p> <p>Ben provided an overview of the approved wind energy centre, including a discussion around the project location and highlights of the study area (slides 9-11).</p> <ul style="list-style-type: none"> ● There will be 37 wind turbines operational for the project, although 38 are permitted. This is done to meet the capacity of the FIT contract (i.e., 60 megawatts) while still accounting for things that may happen on the ground. ● The majority of the project is in Adelaide-Metcalf, but a portion of the project extends into the municipality of North Middlesex ● The project will occupy 16 hectares of farmland; at the end of the project’s lifecycle this land will be remediated back to farmland. 	



- The development infrastructure is located entirely on private land.
- Land surveyors are at work right now, and landowners can expect to see them on the land sometime soon if they haven't already.

What happens to the materials that are removed?

The removal process was explained including that the use of licensed archeologists is required. Artifacts get cleaned and catalogued according to standards set out by the Ministry of Culture, Tourism and Sport (MCTS). After this, the artifacts are stored in a warehouse.

Andrea explains the Archaeological Assessments process:

Stage 1 – Desktop

Stage 2 – Field is plowed, and then walked and searched (i.e., surveyed)

Stage 3 – Random, more intensive investigations of a select area

Stage 4 – Complete excavation of an area

Stage 3 and 4 archaeological field work for Adelaide is complete, with all reports having been submitted to the Ministry of Culture, Tourism and Sport (MCTS). Almost all the reports have been approved; just awaiting approval on one Stage 3 report and three Stage 4 reports.

Details of the FIT contract are outlined, generation of 60 MGW over a 20 year period.

Details regarding environmental permitting are outlined. Ausable Bayfield Conservation Authority (ABCA) permits are complete. St. Clair Regional Conservation Authority (SCRCA) permits are mostly complete, and are expected to be approved shortly.

NextEra indicated that the Adelaide and Bornish operations and maintenance teams will share a building.

Ben continued to review slide 11

- Explains the REA for the construction disturbance area, where infrastructure will be located.
- Borea takes considerations and then applies them to meet the landowner's



<p>requirements as best they can.</p> <ul style="list-style-type: none">• For a 16 ft. road with gravel and a stable structure, the permit area is 200' (feet).• Transmission line is on Kerwood road until it meets the Bornish switchyard.• This info can be found on the NextEra website: http://www.nexteraenergycanada.com/projects/adelaide.shtml <p>Is the substation going to be located in Bornish? No. Adelaide's substation is at the Keyser pumping station on Kerwood, this will then run up Kerwood Road to the switchyard at Bornish where the Adelaide, Bornish and Jericho lines will meet up and then get combined and sent to a substation at Alisa Craig.</p> <p><u>Construction process continued to be reviewed;</u></p> <ul style="list-style-type: none">• Roads are being staked out right now to determine access points onto farmland.• Will reclaim compacted soil, de-compact it and return it to farmland; all the soil on the site will stay on site and be feathered out.• Required by REA to stay within the 400m area, all activities stay within this 400m zone, no activity outside this area. <p>How big of an area is the base of the footing for the turbines? The base is three (3) metres deep and 18 metres in diameter; it's in the shape of an octagon. The steps for constructing a turbine base are reviewed:</p> <ul style="list-style-type: none">• Dig a pit about 65 feet in diameter to a depth of eight (8) feet• Build a rebar cage, on top of the mud mat, into a cone shape• Apply a four (4) foot pedestal of concrete on top of the cone. All the soil that is dug is put back on top of this and the compacted soil is part of the base. <p>Doug offered to bring pictures of sites to the next meeting.</p> <p>When the de-commissioning process has been complete is the rebar removed? No, not all of the rebar is removed. A portion stays – below the depth that will be used for farming. The goal is to return the land to its former productivity.</p>	<p>Plan for a slideshow presentation at next meeting.</p>
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How many tiles drains will be damaged, do you have maps of the areas?

When maps indicating the presence of tile drains are available, we use them. We have maps for the municipal drains, but not for the non-municipal areas. We have also hired someone to investigate particular areas so that we have a better understanding of what lays beneath the ground. We also have a meeting with each landowner to identify where the tile drains are so we can avoid them. If damage occurs, we compensate the owners.

Do you know exactly where the turbines are going to be placed?

The REA outlines where the turbines will be located; we are required to stay within 10m of this approved area.

CLC member discusses the issue of shadow flicker on the 402 that may distract drivers. Wants to know how close the turbines are located to the 402?

This was discussed at the ERT by Shant. In a moving vehicle there are a lot of things that can cause shadows within the car. Shant deemed that these may distract a driver just as much as shadow flicker from turbines. Ben goes on to explain the shadow flicker effect and the predictability of the process, also the potential for mitigation.

Are you saying that NextEra will locate via GPS the tiles that have been cut / destroyed?

Yes that is correct, we are locating via GPS the areas where tiles have been destroyed. Regarding municipal drains, we are still working on a road use agreement; one core component is putting a mechanism in place to compensate when roads are impacted by heavy loads. NextEra can either pay to repair, or the municipality can draw upon a fund that has been put in place.

Is there a potential for ice accumulation on the blades? If so, will the wind turbine shutdown? What about the potential for ice throw?

NextEra Energy prefers to take a pro-active approach to avoiding icing; each turbine is monitored 24/7/365 by the site diagnostic and performance team. The Fleet Performance and Diagnostic Centre (FPDC) monitors the local weather conditions and an alarm is generated if weather stations indicate conditions that are conducive to icing. Our experience has shown that ice will only accumulate on moving blades. By shutting down turbines in advance, we can avoid most icing events. In the unlikely event that, despite the preventative protocol, there is an ice accumulation on the blades, the turbines will shut down automatically as the blades will be



unbalanced and the turbine will automatically shut down due to vibrations. If turbines are shut down due to vibrations, they will not be restarted until they have been visually inspected.

When turbines are delivered by GE, they ensure that all of the safety shutdown mechanisms work. They do this by simulating a high vibration trip or an overheating shutdown.

Are there issues with cracked blades; heard that Siemens’ turbines are having issues with this.

We haven’t seen any issues with cracked blades in the GE models. We do inspections once the blades are delivered. We have an in-house blade repair team.

What conditions could cause a leakage in the turbine’s housing, and whose responsibility is it to clean up? How much fluid is there in the turbine?

It is NextEra’s responsibility, not the landowner’s, to clean up any spills. Gear box and pinion temperatures are constantly monitored; if there is any sign of a potential leak (i.e., the wind turbine is running too hot or too cool,) the machine automatically shuts down. Depending on the model, the turbines house around 42 to 80 gallons.

How many transmission lines are above / below ground?

It is important to distinguish between transmission and collection lines. Collection lines are typically below ground; this reduces outages. The higher voltage lines are located above ground as it is expensive and technically difficult to dissipate heat associated with the higher voltage.

What is located on Kerwood road?

A collection line is located south of the substation. Going north at Kaisers will be an above ground line. This will be a pole with three (3) wires hanging below, and a communication wire on top which will serve as a grounding wire. Everything south of Kaiser will be underground.

Is this transmission line on the road Right of Way (ROW)?

Approximately half of the transmission line from Adelaide to Bornish will be on the County’s Right of Way, and approximately half on private land. The line from Bornish to Ailsa Craig will also located on a mix of private land and County Right of Way.



Are there going to be any electricians monitoring for stray voltage? Specific to the Pederson dairy farms.

Ben noted that this was discussed in detail at the Environmental Review Tribunal. Ben summarized NextEra engineer Jim Arkerson’s evidence that, in normal operation there is not expected to be any issues with stray voltage. Some of the concerns raised at the ERT had to do with concerns during fault conditions. Ben suggested that Jim Arkerson come in to give more detail on the concern raised.

This is a major concern for me and Dairy farmers. Is there going to be someone on the ground?

The on-site staff will consist of one leader and typically four (4) field technicians. They will do regular inspections of the turbine locations. We do not expect our facilities to cause stray voltage, but we will have operators on-site dedicated to this facility.

NextEra (Ben) continues to review Operations (slide 11)

- Once we have an idea when the site will be operating, we generally work backwards to determine the timing for training and the implementation of business services.
- Staff will be available Monday to Friday. They will also be on-call 24/7, and will visit locations to attend to calls if needed.
- Regarding employment we have a job fair that is up-coming; this will be the 2nd job fair for Borea.

Borea reviews construction schedule (slide 12)

- Nov 26th started construction process - Pushing access roads to get this started second week of December
- Two laydown areas, one south of the 402 and one at the substation
- Crane pad construction will start in December, assuming all required permits are received
- Accepting delivery of wind turbines in January
- Installations will start in Jan and end in May
- Transmission lines will get started soon and will proceed until April; currently awaiting some permits

Will have someone present at meeting #2 to talk about the risks associated with Stray Voltage for the Adelaide project.



- Clean up repairs – will start a bit earlier than what is on the schedule. As we finish construction in an area, we start the clean-up in that same area. This is a continual process throughout the construction process.

What happens if there is a fire? What’s happened in the past?

We haven’t experienced any fires with this machine, but turbine fires have occurred. NextEra conducts all the firefighting and self-rescue if there is a fire. Local fire crews will set up a perimeter, but the actual fire response will be undertaken by NextEra. Each access route has an individual 911 response number and each turbine is numbered for easy identification.

NextEra will meet up with local fire chief at a kick-off session. At this time, NextEra will conduct a self-rescue drill, show how the system works for self-rescue and will simulate a call-in to first responders.

Discussion between fire chief and Borea re: fire response during construction

There is more risk for fire during construction than during operations; historically this is what I have heard from other fire chiefs across the country (Fire Chief).

Peter (Borea) – Traditionally we publish maps and emergency numbers, and conduct an orientation for each person working on the site. EMS and regional police are spoken with to ensure everyone has the information they need. We also invite people to come out and see the facility. The door is always open for a guided tour.

We should get together sooner rather than later as the fire service is getting a new dispatch fairly soon (Fire Chief).

Trailer should be set-up tomorrow and inspection needs to happen, but things should be up by the end of week. Let’s set up a communication shortly (Borea).

Slide 13 discussion – Q and A

Environmental Review Tribunal (ERT) Update –

- NextEra received REA in August, which was appealed by two parties. Appeals go through an independent ERT. A decision is required within 6 months of this review. There were 2 weeks of hearings in October, therefore the panel has until Feb 17th to make their decision.

Borea to meet with local Fire Department RE: construction plans



Landowner and Resident Concerns

- There is contact info in the communication and consultation report. Jeff Damon will field most of the questions along with Scott.
- There is a formal Complaint Process; we will respond to a complaint within 48 hours, provide written response within 5 days and provide a written response to the ministry within 8 days.

To report a concern you can email Adelaide.wind@nextenergy.com or call 1-877-257-7330 – or visit the website www.Nexteraenergycanada.com

Are there land requirements in the future?

At this time no, our contract and REA is for approximately 60MW. If there are additional land requirements, there would need to be another REA process.

Description of Community Vibrancy Fund

In addition to the economic benefits that the Adelaide Wind Energy Centre will bring on its own, NextEra Energy Canada is looking for ways to contribute to and invest in the community, either through the local government or community-based organizations.

We have been discussing with the Township how to best make this investment; however, the commitment would present significant and long-term investment opportunities for the community. As an example, the agreement we struck with Haldimand County for our Summerhaven project spans a period of 20 years and contributes an estimated \$210,000 annually to the community. The funds may be used in a variety of ways including: land stewardship initiatives, such as habitat creation and tree planting, upgrading an arena or pool; improvements to infrastructure, community and protective services, such as roads, police and fire services; or any other undertakings deemed appropriate.

Potential funding and community improvements for the Adelaide WEC?

As a model, NextEra has provided a Community Vibrancy Fund (CVF) to municipal governments. They arose for two main purposes: 1) in the U.S., we had PILOT (Payment in lieu of taxes) agreements. Taxes are set at 40,000 a megawatt or roughly \$64,000 for the tax assessment. 2) NextEra wanted to contribute revenue to the broader community in order to ensure that people who are not directly involved in



<p>the project see more benefits.</p> <p>Point of clarification; was it \$64,000 for all the towers in Adelaide-Metcalf? That is the assessment for the turbine itself. The land associated with each turbine would also be taxed.</p> <p>As there are some contractual issues with this format on behalf of the municipality; NextEra is exploring ways to help the community benefit without the contractual agreements.</p> <p>Kurtis (Councillor for Adelaide Metcalfe) – In my opinion this has not been formally brought to Council, and has only been discussed once. This needs to be discussed in a formal manner and brought to council again.</p> <p>Ben – We will make a note to bring this matter to the Adelaide- Metcalfe council</p> <p>Has the Community Vibrancy Fund always been offered through council? Typically, we try to work with the lowest level of government in the project area. However, NextEra does work with local organizations in some situations. In Conestoga, we contributed to a local organization (i.e., Trees for Mapleton) which is not related to the area council. We want to be an active member of the community.</p> <p>How many towers in Adelaide-Metcalf? There are 37 turbines.</p> <p>I am from Arkona and there are a lot of artifacts in this region. Were any of the lease signers denied because of artifacts found on their land? We have not moved any project infrastructure due to construction impacts on archaeology. There might have been some shifting of project infrastructure to reduce impact, but nothing has been denied due to archeological impacts.</p> <p>How are people hired; do you go straight to the contractors? Borea uses different methods; I am from the area so I know a lot of people. We had an opportunities workshop in Exeter to provide people with information about the available work and to understand who might be available to help. If you have a business let us know, we can feed that information along.</p> <p>The contractors NextEra use are good at engaging local businesses and make this a priority; there are a lot of people being hired locally. If people are brought in from</p>	<p>Approach Adelaide- Metcalfe Council RE: CVF</p>
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<p>elsewhere to work on the project, they typically rent accommodation.</p>	
<p>4. Future Items for Discussion (slide 13-16)</p> <p>Avril introduced Slide 14 and discussed potential topics for conversation at future meetings.</p> <ul style="list-style-type: none"> • Any ideas from the committee? All members can email any ideas they may have in the future. <p><u>Avril outlined the deposition process (slide 16)</u></p> <p><u>Timeline for next meeting</u></p> <ul style="list-style-type: none"> • March or April – once the turbines are up. • Open invitation to the Rescue Drills BBQ; this is a good opportunity to talk with the community about safety. We could plan a CLC around this event; possibly our third meeting. 	
<p>Meeting Wrap Up</p> <p>Avril concludes meeting</p>	

PARKING LOT

Parking Lot Topic	Response / Action
<ul style="list-style-type: none"> • Stray Voltage • Pictures of Adelaide Site 	<ul style="list-style-type: none"> • Will have someone present at meeting #2 to talk about this issue and explain the risks associated with Stray Voltage for the Adelaide project. • Will bring these to meeting # 2.