

## K2 Community Liaison Committee Meeting #3

K2 Wind Power Project / 160960741

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Date/Time: February 4, 2015 / 6:30 pm to 8:00 pm

Place: Benmiller Community Hall  
37252 Londesborough Road

Next Meeting: TBD

Attendees: Herb Shields (Stantec; CLC Chair), Andrea Terella (Stantec), Jim Bennett (CLC), Francis Hogan (CLC), Tony McNally (K2 Wind Construction Lead), Robin Maxwell (K2 Wind Operations Manager), Sean McMullen (Contractor), Jay Shukin (K2Wind), Joe Carter (K2 Wind), Pat Murray (K2 Wind), Joe MacIssac (Public), Margaret MacIssac (public), Della Bennett (public), Bill McWhinney (Public), Don Miltenburg (Public), Doug Ethelston (public), Joe Hendrick (public), Dan Hayden (public)

Absentees: Absentees

Distribution: Distribution List

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### Item:

#### Greetings – Herb Shields (HS)

- HS – welcomed and thanked all CLC members and public for attending the meeting.
- Introduced himself and indicated the location of the sign in sheet and copies of the agenda.

#### Safety Moment (Stantec)

- HS – provided a safety moment regarding always ensuring you check and have enough windshield fluid before driving to maintain visibility during winter months.
- Identified exits and the evacuation protocol and muster point location (in case of emergency, everyone exits the building and gather at the far end of the parking lot).
- Noted no lighting at the outdoor step, be cautious when exiting.

#### Introduction of CLC Members, K2 Wind Staff and Support Staff – HS

- HS went around the room to facilitate introductions of those in attendance at the meeting.
- Due to the small size of the group, HS indicated that questions would be received from the public throughout the meeting.
- Reviewed the meeting agenda.
- Introduced Tony McNally (TM), Construction Manager who will provide overview of K2Wind Project (the Project).

## Project Update

- TM provided an overview of the K2 Wind Project (the Project) through presentation materials.
  - Ninety towers erected as of that day (February 4, 2015)
  - All turbine foundations have been poured.
  - 18 out of 140 turbines mechanically complete.
  - Turbine foundations are complete and each foundation have 90,000 tons of steel.
- Sub-station commissioning will be complete around February 18, 2015
- Waiting for Hydro One for shutdown to provide back feed around February 27, 2015
  - Testing done by Hydro One and communication with K2 ongoing.
  - Waiting on permanent power for the Operations and Maintenance (O&M) building, expected in mid-February; overall should be fully operational by end of February.
  - K2 power lines will not be commissioned until end of March.
  - Cable installation – 219 km out of 225 km completed, all road allowance work is complete.
  - Currently working on turbine access roads for cable installation.
  - Winter weather has brought several pauses in the assembly schedule due to road closures and high winds.

*Public – How narrow will the access roads be cut back to?*

- TM – Access roads will be approximately 5 meters wide. The access roads are currently designed for heavy equipment delivery but these roads will be reduced once turbines have been installed. Similarly, land around the turbine pads will also be reclaimed.
- Large sections of the land required for construction will be turned back to its original state. It was estimated the average amount of land used per turbine (turbine pad and road) was less than one acre.

*CLC member – What will happen to the excess gravel from the turbine access roads?*

- TM – Advised the gravel belongs to the contractor (AMEC Black & McDonald, ABMD). The landowner can request to keep the gravel; however, it is at discretion of the contractor company whether they will leave it.

*Public – What happens with the extra topsoil, does it get taken away?*

- TM – The topsoil should not be removed from the property, but simply moved and piled up during construction, after which it will be replaced where required and the access will be provided to the landowner to use as they wish. The topsoil belongs to the landowner.

*HS - Who should landowners talk to about getting some gravel?*

- TM – Landowners should contact land agents (David Herlufsen & Steve Beasley)

*Public – Clarify how lands are selected and secured for wind turbine placement. What role does government have in the process?*

- HS – K2 Wind has long-term agreements with the owners of the land where turbines are placed. K2 Wind was required to secure a Renewable Energy Approval from government before building the Project.

### **Construction Progress (TM)**

- Last 6 km of collector line installation will occur along access roads.
- All the collector lines are buried, with the exception of 1 km on Lanesville Line.

*HS – Can you elaborate on how collector lines are being installed? What should residents expect to see, hear, experience?*

- Collector line placement has occurred in direct consultation with the ACW Township and Huron County.

*HS- Can you please elaborate on what kind of equipment is used to install these turbines?*

- TM – There are three main cranes on site being used, all turbines will be erected by cranes. A new crane is currently being used which was built in Germany.

*Public – What happened to the crane that collapsed? Does the entire machine go back?*

- TM – The crane was sent back to Germany; as much of the machine as possible was salvaged. TM noted that there were no injuries from the incident.

*HS – Can you discuss safety procedures for large cranes, what was learned from that event and what will change going forward?*

- TM – Explained the conditions and factors that determine when they can safely erect turbines and how fast. Wind speed needs to be down to ~15-20 km per hour to erect a turbine. There are often two cranes on site so when weather and wind speed are good, they can assemble a turbine faster.
- A change made after the October incident is all crane moves have engineering support. In particular, we assess soil conditions along the path where cranes will travel.

*Public - How heavy are the blades and hub?*

- TM- Blades are approximately 9-10 tons and the hub is approximately 150, 000 lbs.

*HS – during commissioning work, what should public expect to see in the fields and at sub-station locations?*

- TM – There will be about 30 workers at the sub-station performing commissioning testing. Testing of switches will occur and it is different from the tests that Hydro One performs, less noise expected.
- Hydro One is testing the feeds and ensures mechanics are working remotely. A generator will be providing temporary power. Testing will occur on grounding equipment. Lightning protection equipment is installed at the substation. Only general construction noise expected. Lights will be on at night when workers are performing tests.

*Public – Concerned about work lights at night?*

- TM – TM personally went around to sites at night to ensure only minimal lights were being used as required. Requested residents let him know if the lights are becoming bothersome; K2 Wind will do its best to accommodate and not disturb residents.

*HS – Can you confirm you are using a diesel generator at the substation? I assume there is a light hum to the generator when it is operational and there is some construction lighting happening?*

- TM – Yes it is diesel. The generator is not very noisy and is designed so workers can have a conversation and work next to it. Residents may hear a minor humming sound from the generator.

*HS – What is K2 responsible for vs. what Hydro One is responsible for?*

- TM – the Hydro One switch yard is essentially complete, with minor work remaining. This facility is operated by Hydro One. Night time lighting will be more substantial at this site.
- K2 Wind runs the substation east of the switchyard.
- Work on a storm water holding pond is nearing completion. This will be operated and managed by K2. Landscaping and tree planting will occur at the substation.

*Public- Will there be water in the pond?*

- TM – that depends on the amount of rainfall. This is designed to be “wet” ponds, meaning a constant body of water will be present.
- Work on a drainage system, linked to the Curran Drain, will be completed this spring (March).

*JS – Will there be noise during substation testing?*

TM - The work has been completed; minor noise may have occurred during testing.

*HS – K2 Wind has to provide testing for substation and turbines?*

TM – Once the substation is tested, back feed to circuit will occur. Siemens workers will also be in towers completing testing.

*JS – What is back feed power?*

TM – Back feed power is drawn from the grid to ensure the substations works under 'live' conditions. Take power from grid and back feed into the system to start up the turbines and start transformers, and reverse feed into the substation.

*Public – Will the back feed be a onetime event?*

TM – Yes

RM – Noted turbines can't generate unless a grid is commissioned to ensure all settings are correct. There are a few other additional tests Hydro One is requesting K2 complete, regarding ISO and emergency testing.

*Public – What if the government decided to end contracts and pull all the turbines down?*

HS – The project has a 20 year contract with the province of Ontario, and only technical components could change. Turbine erecting and decommissioning is not influenced by provincial elections.

TM – Residents may also see turbine blades rotating, Siemens will be performing pre-checks and pre-commission tests. The blades are not locked out so they will turn minimally from time to time.

*CLC member – how fast are blades rotating?*

- RM – 17 RPM or 2.3 meters/second

TM – The overall plan is to be operational by mid-year. But it is all dependent on weather, so that timeframe can be pushed back. Reclamation work has started and will carry on through to summer of 2015, and depending on frost and how wet it is will dictate how long it will take, will not impact turbine from starting. County roads will be repaired; trees will be replaced based on the REA requirements and tree replanting program in place.

JS – Roads will be repaired based on the Road User Agreement in place with the ACW Township and Huron County.

TM – an inspection by the Township and the County will occur after operations begin and when K2 has addressed and met all road user agreement conditions.

### **Overview of the Community Renewable Energy Benefit**

JS provided explanation of the Community Renewable Energy benefit:

- An annual payment of \$1,500 will be provided to landowners who have residence within 1 km of the project infrastructure, who are not already participating in the project
- The Benefit is voluntary and will continue over the 20 year life span of the project. Qualifying recipients are not required to support the project to receive the benefit.
- Key point is that is providing to landowners who actually have a residence that is 1 km from infrastructure. Not intended for property without residence like wood lots or farm land.
- The intent is to provide the landowners with the benefit. If there are renters at that residence, it is up to the landowner and tenant to discuss if benefits should be shared.
- First payment by K2 has not yet been confirmed. The timing of the payment will be determined later in 2015.

*Public - Does that include underground cables if residents are 1 km away from that?*

JS – Will have to confirm. **(Action Item)**

### **General Inquires**

*Public Comment – Project has been well organized; he has heard few negative comments from residents. Complemented team and is pleased how construction has progressed.*

TM – Try to take as much impact away from the residents, and maintain roads or one lane open. We have also been working with farmers during harvest time not to interrupt production.

*Public Comment – Contractor trucks and delivery trucks are typically driving more slowly than local residents.*

TM – Noted there were some complaints early on that contractor trucks were driving too fast. K2 responded by hiring off-duty OPP to patrol roads to ensure trucks were driving at safe speeds on the local roads.

*Public – does the left over topsoil have to stay on property or can it be moved to another property (farm/field) owned by the landowner.*

- TM – Topsoil will not be moved from the property; topsoil will stay as it belongs to the landowner. TM advised landowners to contact land agent to find out specifics.
- Overall topsoil will remain and is not to be removed.

+++ Break at 7:45 pm +++

### **General Inquiries from CLC members, Public**

*HS – I would like to ask the operations team present (Pattern and K2Wind) to provide an overview of operations. What should residents expect to see once this Project is in operations?*

RM – typically one year annual service by Siemens, (3-4 day service occur), 500 hour mark 100% torque tests, and checking components can be a busy time and lots of contractors around.

- Annual service will occur.
- Acoustic testing will occur in the summer; landowners will be contacted prior to testing.
- Bird/bat mortality testing will also occur as per provincial regulations.
- Mowing certain parts of a field around a turbine may occur, dependent on what is there and the requirement to be below provincial mandated thresholds.

*Public – when will fences around swamps and silt fences be removed?*

- TM – The fences were erected at beginning of project archaeology, and will come down once all construction is complete.

*Public – What is the life expectancy of a tower?*

- RM – 20 years typically as that's how long the engineers confirm base turbines could last. Each tower will be assessed to see how much longer they can be mounted on their bases.

*Public – has there been copper wire theft?*

- TM – no copper has been stolen from site, there was some vandalism, which will be repaired.

*HS – What will residents see in terms of maintenance activities?*

- RM – Siemens trucks and various rental vehicles will be used when performing tests.
- High voltage technicians will also be on site.
- Substation maintenance work – substation and turbines will be offline as federal law requirements.

*Public – how many workers typically*

- RM – Siemens will bring in around a 20-person crew; a typical turbine service requires 6-man days to perform service.

*HS – Regarding winter access, elaborate on whether access roads will be maintained throughout the winter? Who is doing that work?*

- RM – Towers will be accessed only when needed. Operations will hire local contractors and local people will be involved with ongoing maintenance.

*Public – Siemens has the maintenance work for the life of the project?*

- RM – K2 Wind has a 3 year service agreement with Siemens. After the 3 years, the Project will need to decide if they want to renew a service package with Siemens or seek out a new maintenance contractor.

*HS – How can residents contact K2 if they have concerns?*

- RM – website and operations contact information.
- Local number: 519-441-1067
- Email: k2wind@capitalpower.com

*Public – tile drainage will occur 25-50 feet apart, and wires and the tile drainage need to be fixed properly, which can take up to 2 years to notice if there is a problem. Will K2 still fix that?*

- RM – will have workers ensure they are repaired properly and will look at various options to correct the situation. Don't want to have long term impact on the farms.
- TM – contractors have 1 year warranty period that starts with the commissioning date. They will be responsible if there are any problems and contractor will be brought back to fix the problem. Will make sure problems are taken care of.

*Public – does local fire/EMS have training or procedures if they have to respond to something?*

RM – drill rehearsal with fire department and ambulance rescue at tower will go over what works what is need to be improved. Fire fighters will contain fire. Siemens have training and emergency evacuation. Siemens have annually certification.

*Public – what happens after 20 years?*

RM – As far as operations are concerned, all the pads will need to be tested. After testing, some of the towers may have to be dismantled and base pads rebuilt. This is all dependent on whether the owner of the Project wishes to continue operations or looks at other options.

*Public – What happens if the switch boxes by the side of the road are hit by snowplows or cars?  
They are getting covered by snowdrift right now.*

TM – concrete bollards will be put on to protect against direct impact with the boxes. We still have to install those.

*Public – Will those boxes be above or below the ground or at grad?*

TM – Buried cables will come up to the switch box (just above ground) and then go back underground.

*Public - What are the silver boxes located on the sides of the road?*

TM – Silver boxes are splice boxes. The electric cables are spliced together and those connections are protected by the boxes. After construction, those boxes will be lowered into the ground and you won't see them.

TM – Reclamation work will go throughout the summer such as repair of trees and ditches, tree replanting, landscaping around the sub-stations, landscaping on people's property and regarding topsoil once gravel is removed.

JS – Advised that next CLC meeting K2 would like to provide a tour of the project; by travelling to significant areas of interests. Tours would first be with CLC members and then the public. Have to confirm with construction schedule, but the tours could potentially occur at the end May or in June.

*Public – When is the last turbine expected to be erected?*

TM – The last turbine is expected to be erected at the end of March depending on weather. Noted the OPP determines whether turbine components can travel in poor weather. If the OPP determine it is not safe, they won't allow the trucks to travel and construction will be postponed until the weather and road conditions improve.



## Summary

*HS – Provided a summary of the general discussions:*

- Construction is ongoing. The schedule and day-to-day activity is dependent on weather and wind, but progress indicates K2 is nearing completion.
- Testing of the Project is well underway for cabling, switch yard and Hydro One interface.
- Towers being tested by Siemens.
- Testing will continue throughout the winter with some light construction trucks and work crews. Most testing K2 has control over will be during the daytime. Hydro One has their own work crews and timetables and their crews may work well into the night depending on circumstances outside of Project's control.
- Goal is to have Project operational by mid-2015. However, weather factors could delay this.
- Once construction is complete access roads and turbine bases will be reduced.
- Landowners with questions about gravel and topsoil on their land can contact land agents.
- If residents or stakeholders have concerns, questions or want to discuss operations, contracting and opportunities, they can contact K2 directly:
  - 519-441-1067
  - K2wind@capitalpower.com

TM- gravel belongs to the contractor. K2 can't guarantee access to it once construction is complete.

## Next Steps – HS

- K2 will work with Stantec to finalize meeting minutes and post on website.
- K2 will follow up with questions brought up at the meeting.
- K2 will work on details for potential tour of the project site as part of the next CLC meeting.
- Questions, concerns or feedback by the public can be sent to Herb Shields or K2 contacts.

The meeting adjourned at 8:30 pm

The foregoing is considered to be a true and accurate record of all items discussed. If any discrepancies or inconsistencies are noted, contact the writer immediately.

## **Stantec Consulting Ltd.**

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