
Meeting purpose	Adelaide Community Liaison Committee
Meeting date	March 18, 2015, 6-8 p.m.
Report date	March 23, 2015
Location	Township of Adelaide-Metcalfe Banquet Facility 2340 Egremont Drive, Strathroy
Attendees	Eric Denison, Henry Aukema, Don Schieck, Dean Jacobs, Kurtis Smith, Donna Hornblower, Jocelyn Kelln
Not in attendance	Brian Lima, Fallon Birch, Frank Devet, Linda Moore
Suncor Representatives	Dan Visser - Major Projects Engineer, Jason Weir - Operations Lead

Subject

Adelaide Community Liaison Committee Meeting #3- Operations Update

Welcome and Introductions

Some personnel changes at Suncor:

- Dianne Zimmerman and Holly Davidson have left the organization
- Jocelyn Kelln will be taking over the Stakeholder and Aboriginal Relations role

Safety Moment - Dangers of cellphone use while driving

Adelaide Project update

- Adelaide is now 100% operational
- COD (Commercial operating date) January 29, 2015
- Site restoration and minor adjustments will be completed in the Spring
 - This includes civil works, topsoil grading etc.
 - As fields thaw and dry out we will be able to move equipment and material
 - Currently, we are waiting for some municipal and county road bans to be lifted before moving material
- Outstanding actions include:
 - Site restoration - replacing topsoil, road work
 - Minor adjustments to infrastructure
- Turbines and commissioning project
 - This includes meeting our REA (Renewable Energy Approval) requirements for noise monitoring

Contact Information

Operations Lead: Jason Weir

Stakeholder and Aboriginal Relations: Jocelyn Kelln

Email: Adelaide@suncor.com

Toll free: 1-866-344-0178, Option #3

Community Update

Upcoming community activities include:

- Syrup season - approximately one month generally beginning in late February/early March. Community activities include pancake breakfasts, sleigh rides and other local festivities.

Cedar Point Construction Update

Construction is now underway for Cedar Point Wind Project, consisting of 46 turbines. You can read more about the project and see a map outlining turbine locations at suncor.com/cedarpoint.

Construction activities and milestones include:

- Construction of entrances, transmission line, trenching for collection system is underway
- Construction of substation and access roads will begin shortly once fields have dried and road bans have been lifted
- Construction of turbine foundations will begin in April in order to facilitate the arrival of turbine components starting in mid-May
- Construction is anticipated to be complete by October 2015

Questions

Q: Wood Road will require repairs following the project. What are the plans and who will be responsible: Suncor or Adelaide Metcalfe?

A: Wood road may be used during final site restoration. Once the project is 100% complete Suncor and the Road Supervisor will review the road and determine the extent of required repairs. There are two options for proceeding: either Suncor will oversee and manage the work to bring the road back to standard, or the township will manage the project and Suncor will pay for the work. The township will decide once they have received the final report. The timeline for progress on this work is Spring 2015.

Q: What has changed in the last 4-5 weeks that impacts restoration?

A: Temperature, weather conditions and field conditions all contribute to muddy/wet conditions that limit the work that can be done.

Q: Was Adelaide's Commercial Operation Date (COD) ahead of schedule?

A: It was very close but slightly delayed due to one of the suppliers.

Q: How long do you measure sound following the start of operations?

A: The REA requires we provide sound reporting for receptors at 9 and 16 months from COD. The sound measuring protocol requires that sound data is collected for a specific set of wind speed and direction bins, In order to collect a representative sample of data that reflects a variety of different conditions (outlined in the MOE sound measurement guidelines) generally we need at least 6 months of data collection.

- Comment: One year of data may provide more accurate numbers.

Q: Where are the sound testing sensors placed?

A: There are three different sound tests. The first is for the transformer; Suncor has completed this test and the transformer has been shown to produce less sound than designed. The second test is at the turbine itself (Sound Emission), and various sensors are placed near a turbine in accordance

with REA requirements. The final test is for sound immersion at points of reception. Based on the sound modeling that was done for the project initially, three locations are selected based on the predicted highest sound levels. Sound and environmental measurements (temperature, wind speed and direction, humidity etc.) are recorded at the selected receptors and compared to the modelled results.

Q: Sometimes, turbines are not operating. How often are they shut down and why?

A: The turbines are designed to run 24 hours a day, 7 days a week. We do shut down twice in the first year of operations for planned maintenance, once at 500 hours of operation time and once after one year following the handover date. After that, maintenance is completed annually.

Q: Do you shut down the turbines if there is no need for power?

A: Turbines rely on specific wind conditions to produce power, so occasionally they are producing during off-peak consumption. With current technology, we are not able to store power and the grid capacity is sometimes a limiting factor. On occasion, there may be a situation where the supply for energy exceeds the demand and we will be asked to curtail our production. We have been awarded a FIT (Feed in Tariff) contract Adelaide holds with the OPA (Ontario Power Authority) which limits such curtailment to 10%.

Q: What percentage of power in Ontario is supplied by wind energy?

A: In 2014, approximately 4% of Ontario's power was supplied by wind. You can read more about Ontario's energy mix here: <http://www.ieso.ca/Pages/Power-Data/Supply.aspx>

Q: How long is Suncor liable for tile drainage repairs on private property?

A: The leases that we sign with landowners state that we will restore any tile drainage system impacted by our project back to, or better than, its original state. Within the first 5 years of operations, we conduct a tile drainage program which is approved by the landowners. If anything is missed, we will correct it and restore the tile drainage system. If there is trouble in the following spring seasons, we will continue to work to correct it.

Q: The turbines used in Adelaide and Cedar Point have a 3-stage power output. Why was that decision made?

A: The various stages allow us to ensure we meet all sound requirements associated with the REA. As a result of land configuration and the number of turbines in the project, there was a need to address variations between locations.

Q: In regards to permissible sound levels, are higher levels permitted during the day than during the night?

A: According to the MOE (Ministry of Environment) regulations, we operate our turbines to the most restrictive limit at all times. That limit is 40 decibels.

Q: What can you do to reduce sound once turbines are operational?

A: There are a number of things that can be done to address sound levels such as checking to ensure the machine is operating properly, changing the pitch on the blade angles, and slowing the turbine. When we receive feedback regarding the sound produced by a machine, we investigate to understand the conditions at the time of the call such as the windspeed, direction of wind, temperature, and humidity. Often, it is due to very specific conditions that the sound has become a factor.

Q: What does 40 decibels sound like?

A: Roughly the same as a running refrigerator or the murmur in a library.

Q: Where are the turbines controlled from?

A: The turbines can be monitored and controlled from various locations. In the case of Adelaide, the operations lead can monitor and control the turbines from his computer at the operations building or even from his home. The turbines are also monitored from Suncor's head office in Calgary. Siemens, the manufacturer, monitors all of its turbines worldwide from a central office in Denmark. The turbines can be remotely controlled from any of these locations.

Discussion: Sound and sound monitoring

Observations:

- Some people commented that the sounds they hear from the turbines are less of a “swooshing” sound and more of a regular droning sound
- For some, the turbines do not produce sound as much as a feeling of changing pressure associated with the motion
- Others noted that the type of sound experienced depends largely on your location relative to the turbine, the wind direction at the time and other ambient conditions such as precipitation and air temperature

Given the limitations on collecting statistically relevant data, the CLC recommends continuing sound monitoring for one year past COD.

Key decisions made

- Request made to Suncor to continue sound monitoring for a full year past COD
- Although there is only one more CLC meeting required to meet the terms of the REA, the group will meet two more times:
 - First, in approximately 6 months (end of August, beginning of September) to review the sound monitoring results to date
 - Second, once sound monitoring is complete to review final reports

Actions and responsibilities

Action	Responsibility	Deadline
Provide a comparison of decibel levels to everyday examples	Jocelyn Kelln	March 25, 2015
Circulate meeting minutes and supplementary materials	Jocelyn Kelln	March 25, 2015

Next meeting

Tentatively scheduled for last week in August/first week in September 2015