

**Suncor Energy Adelaide Wind Power Project
October 3, 2012 Public Meeting Comment Response Table**

The following table summarizes the comments provided during and after the October 3rd, 2012 Public Meeting for the Suncor Energy Adelaide Wind Project (the Project) via the questionnaire and email. The number in the bracket beside each theme indicates the number of similar comments received.

Theme	Comment	Response
Cost	All neighbours should be entitled to revenue sharing, not just those who have signed an option agreement with Suncor.	Suncor continues to explore avenues for participation by the community in the project. If you are interested in participating in the proposed Adelaide wind power project, please contact us via email at Adelaide@suncor.com . Please include your address and contact information.
Infrastructure (2)	Would like to see final plan/map of the electrical infrastructure, in order to assess what it will look like.	All Project infrastructure, including the proposed locations of electrical infrastructure such as collector lines and the substation, have been provided within the site plans (see the Project Description Report on www.suncor.com/Adelaidewind). As described in the Report, the collector lines may be underground or overhead and if overhead, the lines would be constructed on monopoles.
	There are too many trucks of concrete.	The number of concrete trucks required for the installation of the foundations is based on the material requirements to safely construct a wind turbine foundation and are consistent with standard

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		construction activities.
Health (2)	<p>Concerned about health problems and safety. Why not wait for the health study that is currently being completed by Health Canada before adding turbines.</p>	<p>Health Canada, in collaboration with Statistics Canada, recently announced that it will conduct a research study to explore the relationship between wind turbine noise and health effects reported by, and objectively measured in, people living near wind power developments. Suncor is supportive of additional peer reviewed scientific studies on the topic and is committed to improving our best practices of wind power project design and operation as these studies draw scientifically peer reviewed conclusions on the topic.</p> <p>Suncor has contractual commitments related to the in-service date for the Adelaide project.. At the current time, those contractual obligations do not allow for a delay until the completion of the federal health study.</p> <p>Ontario's Chief Medical Officer of Health in a report entitled "The Potential Health Impact of Wind Turbines" (May 2010), examined the scientific literature, including studies from Europe, related to wind turbines and public health, considering potential effects, such as dizziness, headaches, and sleep disturbance.</p>

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		<p>The report concluded that:</p> <p><i>“...the scientific evidence available to date does not demonstrate a direct causal link between wind turbine noise and adverse health effects. The sound level from wind turbines at common residential setbacks is not sufficient to cause hearing impairment or other direct health effects, although some people may find it annoying”.</i></p> <p>The report also concluded that low frequency sound and infrasound from current generation upwind model turbines are well below the pressure sound levels at which known health effects occur. Further, there is no scientific evidence to date that vibration from low frequency wind turbine noise causes adverse health effects.</p>
	<p>Concerned about noise impacts, since the turbines will be very loud.</p>	<p>A Noise Impact Assessment has been conducted for the Project in accordance with Ministry of the Environment (MOE) guidelines. The report concluded that the sound produced by the Project including cumulative sound of other adjacent turbines will be within the acceptable limits established by the MOE at all “noise receptors” (as that term is defined in O. Reg 359/09).</p>
	<p>Concerned about the effect of shadow flicker</p>	<p>There are no current provincial guidelines for ‘shadow flicker’. Individuals who are concerned about shadow</p>

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	and whether or not their house will be affected.	flicker can contact Suncor directly at Adelaide@suncor.com and we will undertake to review shadow flicker models for their location.
Property Values	Concerned about property values and house purchasing.	<p>We have heard from a number of people in this community that their property values are very important to them and they don't want the value of their homes and quality of their lives to be impacted by this project.</p> <p>There are conflicting views on the effects of wind power projects on property value.</p> <p>We are aware of the following studies:</p> <p>Two recent studies conducted in southern Ontario (Municipality of Chatham-Kent (2010) and Township of Melancthon, Township of East Luther Grand Valley and County of Dufferin (2006)) both indicate that there was no decrease in the property value due to the construction of wind power projects in the area.</p> <p>REMAX Market Trends Farm Edition 2011 indicated significant increases in the price of farmland from 2010 values across Ontario. The report also mentioned that additional sources of income from solar panels, windmills and gas leases can potentially net the average farm additional income above and beyond crop value on their land, which in part, has contributed to increases in farmland prices.</p>

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		<p>A recent case study published on www.ontario-wind-resistance.org was provided to Suncor staff via email following the October 3 public meeting. The case study “Diminution in Value – Wind Turbine Analysis” was completed by Lansink Appraisals and Consulting. The report focuses on 5 properties within the wind farm purchased and sold by the wind farm operator.</p> <p>CanWEA is reviewing the details of the report and has identified areas of concern with respect to the design and results of this study. Suncor continues to stay abreast of this review..</p> <p>http://www.canwea.ca/news/release/release_e.php?newsId=159</p> <p>Suncor will continue to review third party studies related to property values.</p>
Opposition (2)	Don't want turbines in the local area. Turbines do not look good.	<p>Stakeholder consultation is a significant component of any project. As part of our consultation process, Suncor seeks feedback from the community and will incorporate this feedback into the Project design where appropriate. As a result of community feedback, Suncor selected a wind turbine which will require a reduced number of turbines to fulfill the project capacity.</p> <p>The intent of the Public Meetings is to provide a summary of the findings of the Draft Project Description Report (PDR); ask for input from stakeholders, and address any questions or concerns</p>

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		<p>related to the report or the Project in general.</p> <p>Suncor will continue to consult with stakeholders regarding the Project over the course of the Renewable Energy Approval (REA) process and will document this information as part of our submission to the Ministry of the Environment.</p>
Technology	Turbines are too high.	<p>Thank you for your feedback. One feature about wind energy is that increased efficiency is possible by increasing both swept area and tower height. Typically tower height will place the rotor in stronger winds and a larger rotor can capture more energy - thus producing more clean energy for Ontario residents with fewer turbine locations.</p>
Land use	Concerned about impacts to dairy farms, in close proximity to turbines. (for example, stray voltage could severely impact the dairy farm)	<p>The term stray – or ‘tingle’ voltage – refers to a low-level electrical current or shock (typically under 10 volts) that results primarily from an improperly grounded or, in some cases an underground, electrical distribution system. Stray voltage can be found in any electrical system and is strictly a power distribution issue – improper grounding causes low voltage current to travel along a neutral wire. An electrical wiring system (such as the one that is proposed for the Project) is grounded in order to keep potential voltage differences between the neutral wire and the ground, below levels that could be considered</p>

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		<p>harmful. Suncor is required to purchase equipment and install electrical components as the Electrical Code and approved by the Electrical Safety Authority significantly reducing the risk of stray voltage. Suncor's primary focus is safety and as such carries out its operations in a reasonable and prudent manner in order to ensure compliance with all applicable regulatory guidelines.</p> <p>Suncor is committed to regulatory compliance and infrastructure would be built according to the codes set by the Ontario Energy Board..</p>
	<p>Indicated Suncor and its affiliates, including Stantec will be held accountable for any negative impacts that the development and operations of the wind farm, has on farms/farmland, including but not limited to good farming practices.</p>	<p>Should Suncor receive approvals to construct and operate the wind power project, a complaint response protocol will be implemented for the community to report complaints.</p> <p>In our 10 years of operation of our wind power projects, we are not aware of significant issues impacting farms/farmland and good farming practices. If our project receives approval, Suncor's intent would be to work with landowners to address concerns, should they arise during construction or operations.</p> <p>Note: Stantec is not an affiliate of Suncor but has been hired by Suncor to support the preparation of Renewable Energy Approval (REA) applications.</p>

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Setback (2)	<p>Concerned about setbacks and the proximity of turbines and transmission lines to homes.</p>	<p>A key component of the REA process is the establishment of common setbacks for all renewable energy facilities in the Province. Where Project related infrastructure will be located within the setbacks, additional analysis (i.e., Environmental Impact Study) has been provided.</p> <p>Prior to the Green Energy Act, rules for wind energy development differed significantly between jurisdictions in Ontario. The Green Energy Act attempted to provide a single set of rules in the Province for projects to adhere to. The Township of Adelaide Metcalfe identified the potential of the wind energy resource in their community and supports energy efficiency and improved air quality through land use and development patterns which maximize the use of renewable energy, such as solar and wind energy (Adelaide Metcalfe Official Plan, 2011).</p> <p>A comparison of REA setback requirements and Township zoning restrictions has been conducted, and the setbacks prescribed in O. Reg. 359/09 are more stringent than the local requirements to off-site dwellings.</p>

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Location	<p>Concern for the location of turbine 19; should be relocated between turbines 15 and 16. Also, noted that all adjacent neighbours and landowners are opposed to the current location of turbine 19.</p>	<p>The location of turbine 19 meets all setbacks as per Ontario Regulation 359/09. We have looked at moving the turbine to the property between turbines 15 and 16 as requested; however this location would cause a non participating “receptor” to exceed the Ministry of the Environment (MOE) sound level limits.</p>
	<p>Recommend that the location of the underground cables be on the south side of Cuddy Drive.</p> <p>Underground power lines would be preferred to overhead lines.</p>	<p>Utility pole and buried cable locations within road rights-of-way have not yet been confirmed and will be determined during detailed design prior to construction.</p> <p>It is Suncor’s preference to bury the cables within the road rights-of-way where physically possible; however Suncor is working with the municipality on the design and grant of access to the right of way.</p> <p>The routing and placement of the collector lines will be dependent upon several factors including but not limited to environmental constraints, other existing utilities within the rights-of-way, municipal considerations, and public consultation.</p>
Natural Environment	<p>Concerned about the vibrational impact to earthworms.</p>	<p>No scientifically reviewed information has been identified regarding potential impacts to earthworm populations as a result of wind turbine operation including vibrational effects.</p>

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		<p>Suncor has constructed and operated wind power projects for 10 years and landowners with operating turbines have not reported loss of yield attributed to the operation of wind turbines.</p>
<p>Consultation (3)</p>	<p>Suggested that all the neighbours should be consulted for approval.</p>	<p>Stakeholder consultation is a significant component of any project. As part of our consultation process, Suncor seeks feedback from the community and has incorporated this feedback into the Project design where appropriate. The intent of the Public Meetings was to provide a summary of the findings of the Draft REA reports; ask for input from stakeholders, and address any questions or concerns related to the report or the Project in general.</p> <p>Suncor will continue to consult with stakeholders regarding the Project over the course of the REA process.</p>
	<p>Indicated that the Township of Adelaide Metcalfe does not support wind energy, contrary to what is identified in the Draft Project Description Report, and supports a Moratorium on wind energy, until (health) studies are completed.</p>	<p>The Project Description Report explains the following with respect to the Township of Adelaide Metcalfe's position on wind energy development.</p> <p>“The Township of Adelaide Metcalfe identified the potential of the wind energy resource in their community and supports energy efficiency and improved air quality through land use and development patterns which maximize the use of renewable energy, such as solar and wind energy</p>

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		(Adelaide Metcalfe Official Plan, 2011)".
	There should not be a final meeting until there is a finalized plan (e.g. the site plan shown at the meeting contained fewer turbines than what was provided in the Draft REA Reports).	<p>The Project was initially proposed at up to 28 wind turbine locations with a clear understanding that the final number of turbines could be fewer than 28 based on the wind turbine model selected. The Draft REA Reports identified and assessed (from all technical perspectives including sound, natural environment and archaeology) all 28 proposed locations so that the public would be fully aware of the potential effects associated with the Project.</p> <p>The October 3rd public meeting provided an opportunity for Suncor to display and consult on a reduced turbine layout (22 locations). Most importantly, all of the 22 turbine locations shown at the meeting were located in the exact same locations as documented in the Draft REA reports. The plan presented on October 3 represents the finalized plan that Suncor is submitting for regulatory approval.</p>
	NextEra and others should be at the same meeting together, so the full impact can be discussed. Also, consider a Suncor & NextEra joint study.	We understand that the community is being impacted by multiple projects at the same time. However, we are distinct and separate corporate entities and manage our proposed wind power projects independently.

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		<p>At the Oct 3 public meeting, Suncor did include the locations of NextEra's proposed wind turbines as well as the sound model of the combined projects within Suncor's project area.</p>
	<p>There is a lack of responses to concerns.</p>	<p>Municipal engagement and consultation is an important part of the renewable energy development process. Suncor has consistently promoted an open and genuine dialogue with stakeholders to ensure questions about our wind energy projects are heard, understood and answered. If there are specific concerns that you feel have not been addressed through our consultation process, please contact us at Adelaide@suncor.com.</p>
	<p>Who will be the contact person to voice concerns and health problems that have developed once the turbines are built? (i.e., what will the response time be? What doctor/crisis line will be provided?)</p>	<p>A telephone number for contacting Suncor along with the mailing/e-mail address will continue to be posted on the Project website (http://www.suncor.com/adelaidewind) and provided directly to the Township and MOE. These would be the direct contact points for Suncor during all phases of the Project. The Emergency Response Plan will include key contact information for emergency service providers, a description of the chain of communications and how information would be disseminated between Suncor and the relevant responders. This information will be obtained during</p>

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		<p>consultations with the Township's/County's Emergency Services Departments.</p> <p>The telephone number provided for the reporting of concerns and/or complaints would be equipped with a voice message system used to record the name, address, telephone number of the complainant, time and date of the complaint along with details of the complaint. All messages would be recorded to maintain a record of all messages. All reasonable efforts would be made to take appropriate action as a result of concerns as soon as possible. The actions taken to remediate the cause of the complaint and the proposed actions to be taken to prevent reoccurrences of the same complaint in the future would also be recorded. If appropriate, the MOE Spills Action Centre would be contacted to notify them of the complaint. Correspondence would be shared with other stakeholders, such as the MOE, as required and/or as deemed appropriate.</p> <p>Ongoing stakeholder communication would allow Suncor and/or the Contractor to receive and respond to community issues on an ongoing basis.</p>
Other	How will turbines impact crop dusting (insurance and fly zones)?	We work with local aerial crop spraying companies to identify the spray frequency to property (and surrounding properties) and to identify if there are any concerns. Suncor has experience at other projects we

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		<p>have built in working with local crop spraying companies</p>
	<p>Would like the opportunity to comment on and review the transmission infrastructure as part of the municipal review process.</p>	<p>The Adelaide Project is currently proposed to have a transformer substation located directly adjacent to the existing Hydro One transmission easement east of Kerwood Road. No high voltage transmission lines are being proposed because of the proximity of the existing line to the project.</p> <p>If there are additional comments regarding the transmission infrastructure, please contact us via email at Adelaide@suncor.com.</p>