Environmental Review Tribunal
Tribunal de l'environnement

ISSUE DATE: December 23, 2014 **CASE NOS.:** 14-051
14-052

Gillespie v. Director, Ministry of the Environment

In the matter of appeals by John Gillespie and the Municipality of Bluewater filed July 14, 2014 for a Hearing before the Environmental Review Tribunal pursuant to section 142.1 of the *Environmental Protection Act*, R.S.O. 1990, c. E.19, as amended, with respect to Renewable Energy Approval No. 5186-9HBJXR issued by the Director, Ministry of the Environment, on June 26, 2014 to Grand Bend Wind GP Inc. as general partner for and on behalf of Grand Bend Wind Limited Partnership, under section 47.5 of the *Environmental Protection Act*, regarding the construction, installation, operation, use and retiring of a Class 4 wind facility with a total name plate capacity of 100 megawatts known as the Grand Bend Wind Farm, generally bound by Lake Huron to the west, Main Street/Grand Bend Line to the south, Bronson Line to the east, Staffa Road to the north, and a transmission line along Sararas Road, Rodgerville Road, and Road 183, in the Municipalities of Bluewater, South Huron, and Huron East, in Huron County, and the Municipality of West Perth, in Perth County, Ontario.

Heard : September 9, 10, 11, 23, October 9, and November 21, 2014 in Varna, Ontario.

APPEARANCES:

Parties	**Counsel**
John Gillespie and The Municipality of Bluewater	Eric Gillespie and Graham Andrews
Director, Ministry of the Environment	Sarah Kromkamp, Danielle Meuleman, Courtney Harris*(*on November 21, 2014 only)
Grand Bend Wind GP Inc.	Adam Chamberlain and Robert Eeuwes
Presenter	
Sarah Drake	Self-represented

DECISION DELIVERED BY MARCIA VALIANTE AND DIRK VANDERBENT

REASONS

Background

[1] On June 26, 2014, Vic Schroter, Director, Ministry of the Environment ("MOE") issued Renewable Energy Approval No. 5186-9HBJXR (the "REA") to Grand Bend Wind GP Inc. (the "Approval Holder"). The REA is for a renewable energy project known as the Grand Bend Wind Farm, consisting of the construction, installation, operation, use and retiring of a Class 4 wind facility with 40 turbines, with a total name plate capacity of 100 megawatts located within the municipalities of Bluewater and South Huron, in Huron County. Portions of the transmission line also traverse the Municipality of Huron East, in Huron County, and the Municipality of West Perth, in Perth County (the "Project").

[2] On July 14, 2014, John Gillespie and the Municipality of Bluewater ("the Appellants") jointly filed a notice of appeal of the decision of the Director to issue the REA with the Environmental Review Tribunal (the "Tribunal"). They appeal under s. 142.1(3) of the *Environmental Protection Act* ("*EPA*"), on the grounds that engaging in the Project in accordance with the REA will cause serious harm to human health (the "Health Test"). The Appellant, Mr. Gillespie, also filed a notice of constitutional question on the same day. He alleges that the REA violates his right to security of the person under s. 7 of the *Canadian Charter of Rights and Freedoms* (the "*Charter*").

[3] At the preliminary hearing, held on August 12, 2014, the Tribunal granted presenter status to Sarah Drake.

[4] The hearing was held over six days in September, October, and November, 2014 in Varna, Ontario. Closing submissions were filed in writing by the parties, supplemented by brief oral submissions heard on November 21, 2014.

[5] The Tribunal has considered all the evidence of the parties and presenter, and the parties' submissions, in detail. However, because this comprises a large volume of information, it is not feasible to produce a full synopsis of the evidence and submissions within a written decision of reasonable length. Consequently, in this decision, the Tribunal has only included a summary of the more salient evidence and submissions provided to the Tribunal in this proceeding.

Relevant Legislation

[6] The relevant legislation is:

Environmental Protection Act

> 1. (1) "natural environment" means the air, land and water, or any combination or part thereof, of the Province of Ontario;
>
> 145.2.1 (2) The Tribunal shall review the decision of the Director and shall consider only whether engaging in the renewable energy project in accordance with the renewable energy approval will cause,
>
> (a) serious harm to human health; or
> (b) serious and irreversible harm to plant life, animal life or the natural environment.
>
> (3) The person who required the hearing has the onus of proving that engaging in the renewable energy project in accordance with the renewable energy approval will cause harm referred to in clause (2) (a) or (b).
>
> (4) If the Tribunal determines that engaging in the renewable energy project in accordance with the renewable energy approval will cause harm referred to in clause (2) (a) or (b), the Tribunal may,
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> (a) revoke the decision of the Director;
> (b) by order direct the Director to take such action as the Tribunal considers the Director should take in accordance with this Act and the regulations; or
> (c) alter the decision of the Director, and, for that purpose, the Tribunal may substitute its opinion for that of the Director.

Canadian Charter of Rights and Freedoms ("*Charter*")

> 7. Everyone has the right to life, liberty and security of the person and the right not to be deprived thereof except in accordance with the principles of fundamental justice.

Issues

[7] The issues are:

1. Whether engaging in the Project in accordance with the REA will cause serious harm to human health;
2. Whether the Appellant Gillespie's right to security of the person has been violated under s. 7 of the *Charter*.

Preliminary Matters

[8] During the course of this proceeding, the responding parties submitted that the following witnesses should not be permitted to give evidence in the main hearing: Dr. David Michaud, Dr. Hazel Lynn, Hal March and Keith Locking. They also submitted that a portion of Sarah Drake's evidence should be excluded. The Appellants submitted that Dr. Kenneth Mundt should not be permitted to give evidence at the main hearing. The Tribunal will address each witness in turn.

<u>Dr. Michaud</u>

[9] Prior to the commencement of the main hearing, the Appellants requested that the Tribunal issue a summons to Dr. Michaud. On August 21, 2014, by way of telephone conference call ("TCC"), the Tribunal heard submissions from the parties and counsel for Dr. Michaud. At that time, the Appellants proposed, in lieu of issuing a summons, that the Tribunal admit, as evidence in this proceeding, a transcript of Dr.

Michaud's testimony in the case *of Dixon v. Director, Ministry of the Environment* (2014), 85 C.E.L.R. (3d) 153 ("*Dixon*"), a Tribunal decision in a renewable energy appeal proceeding which addressed issues similar to those in the current appeal. In addition to this testimony, the Appellants further requested Dr. Michaud to provide a written statement regarding the progress of his study for Health Canada. The Approval Holder and the Director agreed with this approach. Counsel for Dr. Michaud undertook to provide a letter from Health Canada regarding the expected date for release of the study and the expected publications that would result.

[10] The Tribunal accepted the Appellants' proposal, as Dr. Michaud's evidence is relevant to the issues in this proceeding and the responding parties consent to the admission of this evidence, without requiring that Dr. Michaud attend to give oral evidence at the hearing. The Director pointed out that in *Dixon*, Dr. Michaud testified as a fact witness, not as an expert. Therefore, it is unnecessary to address his qualification to give opinion evidence. The transcript of Dr. Michaud's evidence in *Dixon* and the letter from Health Canada have been admitted as evidence in the main hearing.

Dr. Lynn

Overview

[11] Prior to the commencement of the main hearing, the Appellants requested that the Tribunal issue a summons to Dr. Lynn. The summons requires that Dr. Lynn appear to testify and produce the following three documents:

- Arra, I., et al. (2014), "Systematic Review 2013: Association Between Wind Turbines and Human Distress," Cureus 6(5): e183 (the "Arra Article");
- Dr. Hazel Lynn, "Industrial Wind Turbines," Report to the Board of the Grey Bruce Health Unit, dated January 21, 2011 (the "Lynn Report"); and
- Chief Medical Officer of Health, "The Potential Health Impact of Wind Turbines", May 2010 (the "CMOH Report").

[12] The responding parties opposed the issuance of the summons. The Tribunal orally decided to issue the summons, with written reasons to follow. The Tribunal's reasons are provided below.

[13] At the main hearing, the Approval Holder brought a motion requesting that the Tribunal exclude Dr. Lynn's evidence. In support of this request, the Approval Holder asserts that the Appellants did not file an adequate witness statement for Dr. Lynn on a timely basis. After hearing oral submissions from the parties, the Tribunal dismissed this motion, with written reasons to follow. The Tribunal's reasons are provided below.

Request for Summons to Dr. Lynn

[14] On August 21, 2014, by way of TCC, the parties and counsel for Dr. Lynn made submissions regarding whether the Tribunal should issue the summons. The parties agreed that the applicable Tribunal rule is Rule 192, which states:

> 192. The Party shall request a summons as early as possible before the Hearing so that it can be served on the witness in time to allow him or her to arrange to attend the Hearing, and shall include in their written request the following information:
>
> a) the name of the witness and his or her address for service;
> b) a brief summary of the evidence to be given by the witness;
> c) an explanation of why the evidence of the witness would be relevant and necessary;
> d) details of any documents or things which the witness should be required to bring to the Hearing; and
> e) why the summons is required.

Submissions

[15] The Appellants emphasized that they included Dr. Lynn in their initial witness list and that they wished to have her qualified by the Tribunal as an expert to give opinion evidence respecting the three reports described above. The Appellants submitted that these reports are relevant to the subject matter of the hearing, as each of them addresses the question of the impact of industrial wind turbines on human health. The

Appellants noted that the Tribunal, in other cases, has required expert opinion evidence to establish that harm to human health will occur. They emphasized that they are calling no other expert witness, and, therefore, Dr. Lynn's evidence is essential to their case. As counsel for the Appellants pointed out, without the evidence of Dr. Lynn, they will have no ability to establish that the Health Test has been met.

[16] The Director argued that the Appellants did not comply with Rule 192 in that they did not provide an explanation of why Dr. Lynn's evidence is necessary or why the summons is required, maintaining that the Appellants provided no evidence of attempts to retain another expert witness who could provide the evidence the Appellants are seeking to obtain from Dr. Lynn. In addition, the Director noted that the reports, which the Appellants' have asked Dr. Lynn to produce, are already publicly available.

[17] The Director also emphasized that Rule 192 requires that a request for a summons should be made as early as possible before the Hearing. The Director submitted that, bearing in mind the accelerated timeline for hearing renewable energy approval appeals, the Appellants have not done so. In support of this submission, the Director pointed out that, the Appellants included Dr. Lynn in the list of witnesses they intended to call, which was served on August 6, 2014, but did not file the request for the summons until August 15th. The Director also maintained that, if the summons is issued, there would likely be delay in proceeding with the main hearing.

[18] The Approval Holder adopted the submissions of the Director. Dr. Lynn's counsel submitted that Dr. Lynn herself does not believe she has the expertise to give opinion evidence in this proceeding and, as a result, her evidence would be of no benefit to the Tribunal, and, therefore, is unnecessary.

Findings

[19] As noted above, the Tribunal issued the summons to Dr. Lynn as requested by the Appellants. Neither the Director nor the Approval Holder argued that Dr. Lynn's evidence does not meet the relevance requirement under Rule 192. The Tribunal finds that the subject matter of the evidence referenced in the request for the summons is clearly relevant to the issues to be addressed at the hearing. However, in making this finding, the Tribunal notes that it made no determination regarding Dr. Lynn's expertise or the relevance of any specific aspect of her evidence, as these are matters to be addressed at the main hearing. The Tribunal accepts that Dr. Lynn's evidence is necessary, as she is the author or co-author of two of the reports on which the Appellants rely, and acted as a peer reviewer respecting the CMOH Report. Regarding the CMOH Report, the Tribunal notes that the Appellants have indicated that they intend to question Dr. Lynn respecting her involvement in reviewing the report. The Tribunal finds that Dr. Lynn, as opposed to another expert, is in the best position to provide the evidence which the Appellants seek to adduce, and, therefore, accepts that her evidence is necessary. For these reasons, the Tribunal decided to issue the summons.

[20] Having made this decision, the Tribunal then directed that if the parties intended to put any other documents to Dr. Lynn during the hearing, such documents should be provided to her and the other parties in advance of her testimony. The Appellants agreed to provide, by August 26, 2014, a summary witness statement for Dr. Lynn and a statement of her proposed qualification to give expert opinion evidence.

Approval Holder's Motion

[21] As noted above, the Approval Holder brought a motion at the commencement of the hearing requesting that Dr. Lynn not be permitted to give evidence in this proceeding because her witness statement is incomplete and was not served in time, as is required under Rule 170, which states:

> 170. If the Tribunal requires the production of witness statements, the Parties and Participants shall serve those statements on each other and file them with the Tribunal within the time directed by the Tribunal, which is usually no later than 15 days before the commencement of the Hearing. Each witness statement shall include, where applicable:
>
> (a) the name, address and telephone number of the witness;
> (b) whether the evidence will be factual evidence or, if the witness is qualified, opinion evidence;
> (c) a resume of the witness' qualifications, where the witness is to give opinion evidence;
> (d) a signed form in accordance with Form 5 in Appendix F, where the witness is to give opinion evidence;
> (e) whether or not the witness has an interest in the application or appeal and, if so, the nature of the interest;
> (f) a summary of the opinions, conclusions and recommendations of the witness;
> (g) reference to those portions of other documents which form an important part of the opinions, conclusions and recommendations of the witness;
> (h) a summary of answers to any interrogatories to or from other Parties that will be relied upon at the Hearing;
> (i) where applicable, a discussion of proposed conditions of approval that are in controversy among the Parties or agreed upon conditions that may be related to issues in dispute;
> (j) the date of the statement; and
> (k) the signature of the witness.

[22] It is not disputed that the Appellants only provided a very brief witness statement on the day before the commencement of the hearing, which was past the due date specified in the Schedule of Events.

Submissions

[23] The Approval Holder noted that Rule 170 provides that, where required, witness statements are to be filed at least 15 days before the commencement of a hearing and are to contain certain information. The Approval Holder acknowledged that Dr. Lynn is not a voluntary witness. The Approval Holder also indicated that it did not object to receiving her witness statement as of September 5, 2014, as promised by the Appellants' counsel. However, the Approval Holder emphasized that it only received a

curriculum vitae on September 8, 2014 and a cursory witness statement immediately before the start of the hearing. The Approval Holder argued that compliance with the Tribunal's Rule respecting witness statements is important for a fair hearing in that it allows all parties to know the case that they have to meet in a timely way. The Director concurred with this submission.

[24] In response, the Appellants pointed out that they included Dr. Lynn on the witness list they provided to the other parties earlier in the proceeding. The Appellants also indicated that they intended to question Dr. Lynn only regarding the three reports referenced in the summons (described above). They emphasized that the other parties had earlier received the copies of these reports, and, therefore, they maintained that the other parties are fully aware of the subject matter of Dr. Lynn's proposed evidence. As Eric Gillespie, counsel for the Appellants, pointed out, Dr. Lynn is represented by counsel, and he could not seek to communicate directly with Dr. Lynn without the concurrence of her counsel, which he did not obtain until the week prior to the commencement of the hearing. The Appellants noted that it is not disputed that their counsel only obtained permission to speak with Dr. Lynn regarding her testimony approximately one week prior to the hearing. The Appellants argued, therefore, that they provided Dr. Lynn's witness statement as soon as it became feasible to do so. They further submitted that the other parties provided no evidence of any prejudice to them if Dr. Lynn is allowed to testify. The Appellants also argued that the Rule 170 does not apply to a witness who is summoned to testify.

Findings

[25] The Tribunal notes that, where a witness voluntarily agrees to testify on behalf of the party, then the requirements of Rule 170 must be met. However, it is not disputed that Dr. Lynn has not voluntarily agreed to testify and has not cooperated with the Appellants' counsel in drafting a witness statement that complies with Rule 170. Pursuant to Rule 195, a witness is entitled to object to the summons. Consequently, the

central issue raised by the Approval's Holder's motion in this proceeding is whether the requirements of Rule 170 apply in circumstances where a witness has been summoned and is not appearing voluntarily. For the following reasons, the Tribunal concludes that it does not.

[26] The Tribunal's jurisdiction to issue a summons is found in s. 12 of the *Statutory Powers Procedure Act*, R.S.O 1990, c. S. 22 ("*SPPA*") which states:

> 12. (1) A tribunal may require any person, including a party, by summons,
>
> (a) to give evidence on oath or affirmation at an oral or electronic hearing; and
> (b) to produce in evidence at an oral or electronic hearing documents and things specified by the tribunal, relevant to the subject-matter of the proceeding and admissible at a hearing.

[27] Under the Tribunal's Rules, the contents of the Summons to Witness Form reflect this jurisdiction. The Tribunal finds the wording and intent of s. 12 is clear. A summons to witness only compels the person to whom a summons is issued to (i) attend the hearing to give evidence; and (ii) produce, *at a hearing*, relevant documents or things in the person's possession. There is nothing in the wording of s. 12 to indicate that a person who has been summoned must disclose evidence prior to testifying, or proactively create documents or evidence to meet the pre-hearing procedural requirements of the Tribunal. Consequently, a party who has summoned a witness cannot compel the witness to produce a witness statement that complies with Rule 170.

[28] The Tribunal notes that Rule 170 does not indicate, one way or the other, whether it applies to a witness who has been summoned. The Tribunal finds that it would be incorrect to find that it does, because this would place an obligation on a party to produce a witness statement in circumstances where the party may be unable to do so.

[29] For the above reasons, the Tribunal finds that a party should not be precluded from calling a witness who has been summoned where a witness statement that meets the requirements of Rule 170 has not been produced prior to the commencement of the hearing.

[30] In reaching this conclusion, the Tribunal has considered the Approval Holder's assertion that pre-hearing disclosure of a witness statement is important for a fair hearing in that it allows all parties to know the case that they have to meet in a timely way. It is important to emphasize that the Tribunal's finding applies only where a witness is not voluntarily appearing on behalf of a party, and is not cooperative. While the Tribunal accepts the Approval Holder's assertion regarding timely disclosure, where an involuntary witness has been summoned, the Tribunal must be pragmatic in considering whether a complete witness statement could be obtained in such circumstances. Not all persons wish to give evidence in a hearing. Absent the authority to compel a person to produce a witness statement, the parties may be left without a witness statement, hearing the witness' evidence for the first time as the witness testifies. While this is not ideal, the Tribunal notes that any prejudice which may arise can be addressed by alternate measures, such as granting brief adjournments to allow a party to prepare for cross-examination, or granting the parties leave to file supplementary witness statements to respond to the witness' evidence. The Tribunal notes that both were done in this case.

[31] Nonetheless, the party who has summoned a witness should make reasonable efforts to secure the witness's co-operation in voluntarily providing a complete witness statement. Where there is no cooperation, the party summonsing the witness should do all it can to describe to the other parties what the anticipated evidence will be. A party who fails to do so may still face an application to have the witness' evidence excluded on this ground. Each case must be determined based on its own circumstances. In this case, the circumstances described by the Appellants in their submissions are not disputed by the other parties. Bearing in mind that Dr. Lynn was opposed to giving

evidence and retained counsel to represent her in opposing the summons, the Tribunal finds that counsel for the Appellants made reasonable efforts to obtain a witness statement from Dr. Lynn and to provide the parties with as much information regarding her proposed testimony as he could reasonably be expected to obtain prior to the commencement of the hearing.

Mr. March

Overview

[32] The Appellants sought to call Mr. March to give evidence, and provided a brief witness statement which indicated that Mr. March intended to address three documents, which were also filed with his witness statement. These documents are: (i) a news clipping from the London Free Press dated July 31, 2014 entitled “Wind turbines could be blocking field of vision for weather radar in Southwestern Ontario”; (ii) an excerpt from Environment Canada’s website entitled “Wind Turbine Interference with Weather Radar”; and (iii) a news clipping from the Michigan Capitol Confidential dated June 28, 2014 entitled “Court Backs Finding Of Wind Turbine Noise Problem”. In overview, the subject matter of his evidence relates to potential harm to human health resulting from the Project’s interference with weather forecasting. The Approval Holder, supported by the Director, objected to Mr. March testifying. After hearing oral submissions, the Tribunal ruled that Mr. March could not testify, with written reasons to follow. The Tribunal’s reasons are provided below.

Submissions

[33] The Approval Holder argued that Mr. March’s evidence should be excluded on three grounds: his witness statement was filed late, is inadequate, and does not fall within the issues raised in the Appellants’ notice of appeal. Regarding the timing issue, the Approval Holder submitted that, unlike Dr. Lynn, Mr. March is a willing witness being called by the Appellants. The Approval Holder further submitted that no explanation

was offered as to why a witness statement could not have been provided by the due date in the Schedule of Events. Regarding the adequacy of the witness statement, the Approval Holder pointed out that the statement indicates only that Mr. March intends to "address" the three documents but does not indicate what his evidence will be or what parts of those documents will form the basis of his evidence. Regarding the scope of his evidence, the Approval Holder argued that Mr. March intended to testify about turbine interference with weather radar, which the Approval Holder submitted is not an issue mentioned in the notice of appeal. The Approval Holder further submitted that the witness statement also does not indicate the relevance of this evidence to the Tribunal's jurisdiction under s. 145.2.1 of the *EPA*.

[34] The Director supported the Approval Holder's submissions.

[35] The Appellants acknowledged that the witness statement was not filed in time, but argued that the subject matter of Mr. March's testimony was known to the other parties well in advance of the hearing so that there is no actual prejudice to them. The Appellants also argued that the documents referenced in Mr. March's witness statement are quite short and he would speak to each document as a whole. They noted that the initial list of witnesses and intended evidence did give an indication of his concerns about the negative impacts of turbines on the weather radar located at Exeter. The Appellants argued further that the Tribunal should take a broad view of the notice of appeal and allow evidence respecting effects that might be indirectly caused by the Project. In addition, the Appellants noted that the issue respecting interference with weather radar was argued before the Tribunal in a previous renewable energy approval appeal hearing, *Fata v. Director, Ministry of the Environment*, [2014] O.E.R.T.D. No. 42 ("*Fata*"). They maintain, therefore, that the Tribunal is aware of the relationship between radar interference and harm to health and safety, and submit that the notice of appeal should be interpreted in this context.

Findings

[36] The Tribunal has held in other renewable energy approval appeal proceedings, such as *Middlesex Lambton Wind Action Group v. Director, Ministry of the Environment*, [2013] O.E.R.T.D. No. 55 *("MLWAG")*, that evidence related to issues which have not been raised in a notice requiring a hearing (also commonly referred to as a notice of appeal) should be excluded. In *MLWAG*, at para. 54, the Tribunal stated that the issue is important "because the notice of appeal determines the jurisdiction of a tribunal." At para. 71, the Tribunal stated:

> The finding by the Tribunal that the issues are not "relevant" is a legal finding made in the context of the specific issues raised by the Appellant in this appeal. It does not mean that the issues may not be important. … The significance of the Tribunal's finding is rooted in the legal principle that an appeal of a decision is framed by the grounds articulated by the Appellant in the notice of appeal. According to s. 15(1) of the [*SPPA*], the Tribunal may admit as evidence at a hearing any testimony or document that is "relevant to the subject matter of the proceeding…" Subject to any subsequent rulings on the scope of an appeal, the grounds that are put forward at the outset by an appellant and that are within the scope of the applicable appeal provisions define the scope of what is relevant in an appeal, and therefore what is admissible as evidence. The grounds provide fair notice of the nature and scope of the case to the parties that seek to defend the decision of the Director.

[37] The Tribunal accepts and adopts this finding in this proceeding.

[38] In applying this ruling, the Tribunal finds that the issue of turbine interference with weather radar was not raised in the notice of appeal. In this regard, the Tribunal notes that this proceeding can be distinguished from *Fata*, where the notice of appeal expressly referred to interference with weather radar.

[39] The notice of appeal in this proceeding describes a range of serious health effects that the Appellants assert are known to be caused by industrial wind turbines. It then states, at paras. 5 and 6:

> 5. These health effects are more likely than not caused by exposure to infrasound, low frequency noise, audible noise, visual impact, shadow flicker, stray voltage and/or electromagnetic fields. The tonality, impulsive nature and lack of nighttime abatement are factors which also contribute to negative health impacts.
>
> 6. The precise mechanism(s) that cause these health effects have not been determined. However, these mechanisms either individually or in combination cause these health effects. These effects are produced by exposure to IWTs [Industrial Wind Turbines] and will be produced by exposure to the IWTs in the Project.

[40] Therefore, although the notice of appeal does indicate that the precise causal mechanisms have not been determined, these undetermined mechanisms nonetheless refer to the alleged causes listed in paragraph 5. Hence the scope of the Appellants' appeal relates only to health effects allegedly caused by exposure to infrasound, low frequency noise, audible noise, visual impact, shadow flicker, stray voltage and/or electromagnetic fields. While the Tribunal accepts that it should not interpret the scope and meaning of these causes in an overly restrictive manner, the Tribunal finds that, on a plain reading of each of the alleged causes listed, none can be reasonably interpreted to include a reference to radar generally, or, more specifically, to interference with weather radar.

[41] In making this finding, the Tribunal has considered the Appellants' submission that the decision in *Fata* establishes that the Tribunal should be generally aware of the issue of interference with weather radar. Implicit in this submission is the Appellants' view that the causes listed in a notice of appeal should be interpreted in the context of previous Tribunal decisions, and, therefore, it should be inferred that the issue of interference with weather radar is an issue in this proceeding. The Tribunal does not accept this submission. Section 142.2(1) of the *EPA* expressly requires that appellants state in their notice requiring the hearing a description of how engaging in the renewable energy project in accordance with the renewable energy approval will cause serious harm to human health. Issues raised by appellants will vary from one renewable energy appeal to another. Both the Tribunal and the other parties in this

proceeding cannot be expected to infer that an issue is included in a notice requiring a hearing, simply because the issue has been previously raised in another proceeding.

[42] Regarding the other arguments raised by the Approval Holder, the Tribunal has concerns regarding the adequacy of the witness statement, in that it does not provide the substantive evidence Mr. March would give respecting the three documents he has referenced. The Tribunal is also concerned that it did not receive an adequate explanation of why the witness statement was not served and filed by the applicable due date as set out in the Schedule of Events. However, as the Tribunal has determined that the evidence does not fall within the scope of the Appellants' appeal, it is unnecessary for the Tribunal to make findings respecting these arguments.

Mr. Locking

Overview

[43] The Appellants sought to call Mr. Locking to give evidence, and provided a copy of Mr. Locking's written submission on behalf of the Bluewater Shoreline Residents' Association in support of the Association's request for presenter status in this proceeding. Mr. Locking did not proceed with this request for status, but instead chose to testify as a witness on behalf of the Appellants. In overview, Mr. Locking's written submission is directed to the impact of the Project on the devaluation of real estate property values in the area. He attempts to link this evidence to the Health Test, asserting:

> As President of Bluewaters Shoreline Resident's association I am about to present information that causes stress to myself and the more than 2500 residents of the Municipality of Bluewater located along the shoreline in wards of Hay West and Stanley West, and therefore meets the criteria of "cause's serious harm to human health".

[44] The Tribunal granted the Director's motion to exclude Mr. Locking as a witness, with written reasons to follow. The Tribunal's reasons are provided below.

Submissions

[45] With respect to the Appellants' witness Mr. Locking, the Director objected to his evidence on the grounds that the issue he sought to address is not raised in the notice of appeal and falls outside the scope of grounds set out in s. 142.1of the *EPA*. The Director submitted that Mr. Locking's witness statement relates almost entirely to the impact of the Project on real property values, which is not raised in the notice of appeal, and only provides a cursory statement that declining property values will cause stress for residents. The Director argued that in previous REA appeals the Tribunal excluded evidence on issues that were not raised in the notice of appeal (e.g., in *MLWAG*) and excluded evidence of economic impacts, on the basis that such evidence is outside its jurisdiction (see *Wrightman v. Director, Ministry of Environment,* [2013] O.E.R.T.D. No. 83 ("*Wrightman*") and *Fata*).

[46] The Approval Holder supported the Director's submissions.

[47] The Appellants argued that, unlike in *MLWAG*, the notice of appeal here includes reference to "increased mental/psychological and spiritual stress" and that Mr. Locking in his witness statement refers to the stress that property devaluation causes. They submitted that the notice of appeal does state that health effects "are more likely than not" caused by exposure to noise, visual impact, and so on, but noted that it also states that the "precise mechanism(s) that cause health effects have not been determined," leaving it open to the Tribunal to take a broad view of the causes of stress. They argued further that the economic issues raised in *Fata* were determined to be too remote, whereas here the impact is indirect, but not remote.

Findings

[48] In *Wrightman*, the Tribunal found, at para. 15:

> However, the issue of real property valuation by itself does not fall within the grounds of either serious harm to human health or serious and irreversible harm to plant life, animal life or the natural environment. It is an economic indicator of the changes in the market value of land over time and is based on a range of factors.

[49] The Tribunal accepts and applies this interpretation in this case. Even if proved, such economic consequences are not synonymous with harm to human health. Consequently, assuming Mr. Locking's evidence could establish that there is a devaluation *and* that it is caused by the Project, this evidence, in and of itself, is not relevant. The Tribunal notes, however, that this evidence may be relevant if it could be demonstrated that real property devaluation arising from the operation of the Project in accordance with the REA will indirectly cause serious harm to human health. However, Mr. Locking's witness statement provides nothing but a cursory assertion that it does. The Appellants did not seek to have the Tribunal qualify Mr. Locking to give expert opinion evidence on stress and its impact on human health. As a fact witness, Mr. Locking can testify as to his own feelings of stress, but he is not qualified to express an opinion regarding the stress of others. Similarly, he is not qualified to give expert opinion evidence of the impact of such stress (either his own or the stress of others) on human health. The only health expert the Appellants called in this proceeding is Dr. Lynn, who did not provide an opinion that stress caused by devaluation of property values causes serious harm to human health.

[50] In summary, the Tribunal has found that the evidence respecting market devaluation of real property, in and of itself, is not relevant to the grounds of appeal, and that the Appellants did not seek to call any expert opinion evidence from a qualified health practitioner which could make this evidence relevant. Consequently, the Tribunal concludes that Mr. Locking's evidence would be of no assistance to the Tribunal.

Ms. Drake

Overview

[51] When the Tribunal granted Ms. Drake presenter status in this proceeding, she was reminded that the subject matter of her presentation is restricted to the issues raised in the Appellants' notice of appeal. In accordance with the Tribunal's procedural directions, Ms. Drake filed a written witness statement setting out the evidence she would present, which provided a list of the subject areas she wished to address. The Director opposes inclusion of the following concerns as stated by Ms. Drake:

> Health hazards are known to be caused by:
> …
> - Chemicals used to cool transformers which can leach into the surrounding soil and water supply
> - Hydraulic fluid and other hazardous materials used in the wind turbines which will be projected onto the crops and soil around the turbine, and leach into the surrounding soil and water supply.
>
> …
> - Oxidation by-products from the transmission line towers leaching into the surrounding soil and water supply
> - Microscopic particles of plastics and acrylic coatings degrading and falling off the turbines and accumulating in the surrounding soil
> - Changing airflow patterns while vineyard workers are applying fertilizers
> - Risk of explosive reactions between vineyard fertilizers or other treatments and stray voltage
> - Unreliable communications in emergency situations from high voltage interference with telecommunication equipment located on the property.

[52] The Tribunal observes that the first six of these concerns can generally be described as relating to pollution emissions ("pollution concerns").

Submissions

[53] The submissions of the parties are straightforward. The Director, supported by the Approval Holder, maintains that none of these concerns fall within any of the issues raised in the Appellants' notice of appeal. The Appellants maintain that their appeal

encompasses a sufficiently broad spectrum of issues, and the issues fall within the realm of public safety, which has been addressed by the Tribunal in other proceedings, and should be considered by the Tribunal in this proceeding.

Findings

[54] The Tribunal has already reviewed the scope of the Appellants' notice of appeal in its findings above in respect of Mr. March. The Tribunal applies an analysis similar to the analysis it applied respecting Mr. March's evidence. The Tribunal concludes, therefore, that the causes of harm to human health listed in the Appellants' notice of appeal cannot be reasonably interpreted to include a reference to the pollution concerns raised by Ms. Drake.

[55] The Tribunal finds that her other concern regarding interference with telecommunication equipment is similar to Mr. March's concern respecting interference with weather radar. Again, the Tribunal applies an analysis similar to the analysis it applied respecting Mr. March's evidence, and concludes that the alleged causes listed in the Appellants' appeal cannot be reasonably interpreted to include a reference to the concern Ms. Drake has raised. The Tribunal also applies a similar analysis in rejecting the Appellants' argument that Ms. Drake's concerns fall within the realm of public safety which has been addressed by the Tribunal in other proceedings.

<u>Dr. Mundt</u>

Overview

[56] With respect to the evidence of the Approval Holder's witness Dr. Mundt, the Appellants requested that he be excluded from giving evidence because he was a new witness who had not prepared a witness statement within the time allotted in the Schedule of Events.

[57] The Tribunal refused the Appellants' request, with written reasons to follow. The Tribunal's reasons are provided below.

Submissions

[58] The Appellants submitted that they had prepared their case believing that Dr. Christopher Ollson would be the Approval Holder's witness regarding health effects and that substituting Dr. Mundt for Dr. Ollson so late in the proceeding causes them prejudice.

[59] The Approval Holder argued that it did not know what the Appellants' health evidence would be until Dr. Lynn testified because she did not file a witness statement prior to the commencement of the hearing, and that the witness statement which was produced did not adequately describe her evidence. The Approval Holder maintained that once Dr. Lynn testified, it determined that Dr. Mundt, as an epidemiologist, would provide more appropriate responding evidence than Dr. Ollson, and Dr. Mundt then immediately prepared a witness statement. The Approval Holder noted that Dr. Mundt was on its original witness list and that its counsel had indicated at several points in the proceeding that he might be called, depending on the nature of the evidence given by Dr. Lynn.

Findings

[60] There were unique circumstances associated with the evidence of Dr. Lynn, namely, that she appeared only in response to a summons and she did not provide a complete witness statement, as discussed above. Dr. Lynn was the only medical expert called by the Appellants and the Approval Holder and the Director did not have her evidence in advance of her appearance at the hearing. They only knew that she would "address" three documents. Once she testified, the Approval Holder acted in a timely way, determining to call Dr. Mundt in lieu of Dr. Ollson and providing a witness

statement for Dr. Mundt. The Appellants received this witness statement before they closed their case and had an opportunity to introduce reply evidence. There is no indication of any prejudice to them due to the Approval Holder's actions in calling Dr. Mundt. For these reasons the Tribunal allowed Dr. Mundt to give evidence in the hearing.

Issue 1: Whether engaging in the Project in accordance with the REA will cause serious harm to human health

Evidence Adduced by the Appellants

Patricia Kellar

[61] Ms. Kellar gave evidence in support of the Appellants with respect to the Health Test. Her home in Bluewater will be within 2 kilometres ("km") of seven turbines from the Project. Ms. Kellar is a Registered Social Worker who works across the region in the area of mental health and addictions. She testified that she became aware of health concerns with industrial wind turbines when an earlier project was proposed for her community. She testified about the research she has done since 2010 to familiarize herself with these concerns. As a result of this effort and her discussions with residents living near existing projects, she came to believe that vulnerable populations, including children, especially those with sensory sensitivities, the elderly with chronic and complicated medical conditions, and people suffering from mental health disorders and addictions, are at risk of adverse health effects and have been under-represented in REA hearings and decisions. She believes that the Project will seriously affect her health and decrease the value of her property, causing her significant stress.

[62] Ms. Kellar referred to the World Health Organisation's ("WHO") recommendation that "where there is a reasonable possibility that public health will be damaged, action should be taken to protect public health without awaiting full scientific proof." While she accepts that more scientific research is necessary, she believes there is sufficient

scientific evidence for the Tribunal to conclude that wind projects cause harm to human health.

[63] Ms. Kellar stated that there will be 2,500 homes within 1.5 km of the Project, which she believes to be the only one in the world to expose so many people to wind turbines in such close proximity. She identified three local schools and several seniors' homes that will be close to the Project and predicted there will be 250 to 1,500 people in the community who will need health support services as a result of this Project.

[64] Ms. Kellar testified about her community activities relating to wind turbines, stating that she has been active at open houses and at municipal council meetings in seeking information and voicing her opposition to wind energy projects. She noted that she provides updates through the internet to other Bluewater residents on different studies she finds. She is deeply frustrated by the approval process and troubled by the divisions within her community between those in favour of wind energy development and those opposed.

[65] Ms. Kellar also gave evidence about symptoms she began to experience this summer, which she associates with the start of operations at the Varna Wind Project on July 20, 2014. She noted that the nearest turbine in that project is located about 5 km from her home. She has kept a journal of these symptoms, which include head pressure, headache, nausea, intestinal distress, tinnitus, tingling in her teeth, blurry vision and sore throat.

Shelley Fleming

[66] Ms. Fleming resides in Bluewater and is the mother of five children, three of whom live at home. Her youngest, a son who is 11 years old, has Autism Spectrum Disorder. She has taken many parent training courses to be able to assist her son and is active in the local chapter of Autism Ontario. Ms. Fleming testified that a couple of

turbines from an existing project are visible from her kitchen and that there will be turbines in the Project located behind her home, but she was not aware of their number or their distance from her home.

[67] Ms. Fleming expressed concern about the potential impact of the Project on her son. She explained that he has a lot of anxiety and cannot self-regulate, so that when he is overstimulated, he behaves in ways that can cause him to harm himself, others or physical objects. She stated that when he loses control, now that he is older, her safety and that of other family members and caregivers is threatened. Ms. Fleming stated that her son is very sensitive and can become overstimulated by noises, visual distractions, changes in air pressure, smells, or other sensory stimuli within his environment. She testified that she has worked hard to establish a home and school environment that is supportive of his needs and does not add to his stress. She stated that he is often able to relieve his anxiety by going outside their home.

[68] Ms. Fleming testified that she is concerned that her son will not be able to manage if the Project causes him stress. She said that their home is the only one he has ever known and that she would not be in a position to move if her fears are realized.

Rose Vlemmix

[69] Ms. Vlemmix lives in the Project area and will have four turbines located near her home, with the closest being 550 metres (“m”) away, as well as an access road constructed within 25 feet of her bedroom. She has lupus, an autoimmune disorder, first diagnosed more than 30 years ago. She stated that her health is compromised when she does not get sufficient sleep or is too stressed. She is concerned that the noise from the Project will cause her to be unable to sleep and will contribute significant stress, exacerbating her condition.

[70] Ms. Vlemmix testified further that she is a foster parent, that one of the children she now cares for has high needs, being diagnosed with Attention Deficit Disorder and Oppositional Defiant Disorder, and that she believes the Project will negatively affect him. She stated that the children she has fostered with high needs are difficult to care for and doing so creates significant stress for her.

[71] Ms. Vlemmix stated that she has attended municipal council meetings, including one attended by representatives of the Approval Holder, who, she believed, had no good reason to be there other than to “cause trouble”. She testified that the meeting became very heated and resulted in threats being made to the Approval Holder’s representatives and one person being charged. It was her view that members of the community do not want the Project and they are angry because they consider their lives to be at stake. She noted that an offer by the Approval Holder to plant trees on her property to screen her view of the turbines was not sufficient to meet her concerns.

Dr. Lynn

[72] Dr. Lynn is the Medical Officer of Health for Grey Bruce. She has a M.D. and also holds a Masters of Health Science in Epidemiology and Community Health. She was qualified by the Tribunal to give opinion evidence as an expert in public health with specializations in community health and epidemiology and knowledge of industrial wind turbines. She stated that she does not know if anyone can be an expert on the effects of wind turbines and human health, and that she does not think she is. Rather, she describes herself as an observer.

[73] Dr. Lynn testified with respect to Arra Article, the Lynn Report and the CMOH Report, which have been identified earlier in this decision.

[74] Regarding the Lynn Report, she indicated that she wrote it at the request of the local Board of Health after they received lots of complaints respecting wind turbines. She noted that this Report includes a primer on proof of causation. She noted (at page 40 of the transcript of her testimony):

> A. It was simply an explanation for my Board of Health why you can't do one study and prove everything. And also this is going to take 15, 20 years to show. If there's causation, it will take that long. So if you really wanted to know that cigarette smoking causes heart disease and lung disease, it took 40 years. It is going to take at least that long for wind turbines.
>
> Q In your view?
>
> A. Yes. Historically as well. But there's areas of research directed here in those ancient environmental causative effect criteria that we need to work on, to do studies and to actually look at the biological plausibility of the coherence. Do we see it in other things? What specificities? All of those things have to be satisfied before you can start getting a causation.

[75] In this report, Dr. Lynn also stated that there is a significant debate whether wind turbine projects are a health hazard or a private nuisance. She notes that her conclusion is that more study is required regarding serious health effects, noting, however, that it is hard to define “serious”. She described long-term sleeplessness as a serious problem. In her testimony, Dr. Lynn indicated that she still agrees with the conclusions set out in her report, which include:

> It is clear that many people, in many different parts of Grey Bruce and Southwestern Ontario have been dramatically impacted by the noise and proximity of wind farms. To dismiss all these people as eccentric, unusual, or as hyper-sensitive social outliers, does a disservice to constructive public discourse and short circuits our opportunities to learn and benefit from their experience as we continue to develop new wind farms.
>
> It is also clear that wind farm noise is really not that bothersome to most people who hear it or live near it. Worldwide, the majority of wind developments do not generate substantial ongoing noise issues. Concerns that dominate public discourse and active web sites tend towards issues that are hard to quantify such as direct health effects, especially of low frequency noise, and often the attempt to inflate the extent of problems. In particular, communities that may be considering new wind developments are targets for this discussion.

> The nature of the sounds made by wind turbines make it especially difficult to rely on reassuring 'noise limits'. Noise propagation varies greatly with changing wind and atmospheric conditions. Average noise recordings are not consistently measured or reported. The pulsing nature of turbine noise is inherently more forceful and more disruptive than traffic or industrial noises. More research is needed to learn about the factors that create the most troublesome turbine noises such as pulses and low frequency sound.

[76] Regarding the Arra Article, Dr. Lynn indicated that this was peer-reviewed and published in an on-line journal. She explained that she and Dr. Arra reviewed the best papers they could find on the issue of human distress associated with wind turbines. She confirmed that they did not conduct their own empirical research. She notes that they found an association between wind-turbine induced noise and human distress. Dr. Lynn indicated that she still agrees with the following conclusion as stated in the Arra Article:

> It is worth pointing out that no causality has been established. The distress could be due to factors other than actual noise exposure. For example, the distress experienced by participants in the original studies may have been generated or exaggerated by exposure to negative opinions on wind turbines.

[77] Dr. Lynn stated that she prefers to use the term “distress”, because a lay person’s understanding of the term “annoyance” may be perceived as understating the seriousness of people’s complaints. She indicated that she considered annoyance, in relation to wind turbine noise, to be whether a person could hear and notice the noise. She acknowledges that “distress” is a human term, not a research term. In conducting their review in respect of distress, she explained that they considered papers which examined measured outcomes for a variety of factors which included annoyance, sleep disturbance, attitude to wind turbines, visual impact, quality of life and economic impact. She noted that some of the papers reviewed mentioned distress and some of them did not.

[78] In response to questions regarding the CMOH Report, Dr. Lynn observed that, generally, introducing new technology without proper preparation of a community precipitates 10 to 15 years of volatility and upset. She expressed her view that a wind

turbine project disturbs the community, in that the more wealthy people with more land get wealthier, while the people who have little or no land get poorer. She stated that when the community is disturbed, residents fight with each other and are unhappy. She indicated that she is the most concerned about this community distress.

[79] Dr. Lynn also stated that people who live with very low ambient noise are more susceptible to reacting to new sources of noise because they are not used to it. She expressed her view that it is the change in noise that is disturbing a lot of the rural communities.

Dr. Michaud

[80] The Appellants requested the Tribunal to issue a summons to Dr. Michaud, the principal investigator on a study of wind turbine noise being conducted by Health Canada. Before this issue could be argued, however, the parties reached an agreement that a transcript of the evidence given by Dr. Michaud in *Dixon* would be entered as an exhibit, along with a letter from Health Canada providing information about the current status of the study.

[81] Dr. Michaud testified in *Dixon* on October 4, 2013. In that proceeding, he was not qualified by the Tribunal as an expert to give opinion evidence, but he stated that he has a Ph.D. in Psychology and is employed with Health Canada as a Research Scientist, doing research on the human response to environmental noise. Part of his work requires him to review environmental assessments for projects requiring federal government approval and make recommendations to federal decision makers about noise mitigation measures for those projects.

[82] Dr. Michaud described the origins of the research proposal, which he and a number of colleagues developed and which then was approved by Health Canada. Dr. Michaud described the study, formally known as the “Community Noise and Health

Study" (the "Health Canada Study" or "Study"), as "a cross-sectional epidemiology study that aims to assess the community response to wind turbine sound in a targeted sample of 2,000 dwellings in multiple provinces looking at various endpoints from sleep disturbance to quality of life to self-reported annoyance and self-reported health endpoints." He indicated that determining "community annoyance" relies on a questionnaire to see what proportion of respondents indicate a high degree of annoyance and noted that selecting residents in rural areas reflects a concern that rural areas tend to have low background sound levels, so introducing a new source of sound may make it more noticeable, and more annoying. He stated that, in addition to self-reporting of endpoints, the Health Canada Study researchers are measuring specific ones, including sleep disturbance, cortisol in hair, blood pressure, and heart rate, in the study participants. He identified the major purpose of the Health Canada Study as trying to assess the dose-response relationship between measured sound levels and these various endpoints.

[83] Dr. Michaud testified that the Health Canada Study will, in part, also assess the "knowledge gap" regarding low-frequency sound and infrasound from wind turbines by measuring these on a continuous basis for 12 months at four distances from operating wind turbines. He noted that the researchers were undertaking this aspect of the Study because there are limited data, and no internationally accepted standard, for low-frequency sound and infrasound.

[84] Dr. Michaud testified that the Study is looking to see if there is a statistical association between sound levels from wind turbines and specific subjective and measured endpoints, but it is not intended to establish causation. He discussed how, if showing causation had been the goal of a study, it would require several years of research that would include laboratory-type research. He also stated that causation cannot be established in any single study.

[85] In a letter dated September 4, 2014, Tara Bower, Director, Office of Science Policy, Liaison and Coordination, Health Canada, stated that the "results of the study will contribute to the existing evidence base but will not provide definitive answers on their own." She indicated that it is anticipated that the public release of key findings will occur in the fall of 2014, through a number of mechanisms. Statistics Canada will publish an announcement and then make data available to researchers. In addition, Health Canada will publish summary documents of key findings and interpretation of the Study's results for the public. She stated that analysis of the data will continue into 2015, that further results will be released when available, and that technical findings will be released primarily through publication in peer-reviewed scientific journals.

Evidence Adduced by the Presenter Ms. Drake

[86] Ms. Drake presented evidence on behalf of herself and Thomas, David and Elizabeth Drake, the Directors of 569834 Ontario Limited. The company owns land at the intersection of Bronson Line and Sararas Road near the location of two turbines, the proposed transformer station and the high voltage transmission line for the Project. This property is being developed into a vineyard and a winery that will serve as a venue for special events. She is concerned that the location of the Project equipment will cause adverse health effects for workers, residents and visitors to the vineyard and winery and for consumers of the products grown there.

[87] Ms. Drake sought to raise several health-related issues, but her right to do so was challenged by the Director. Earlier in this decision, the Tribunal confirmed its ruling that she could not address the issue of chemical contamination. Consequently, her evidence was limited to the issues of electromagnetic fields and stray voltage.

[88] Ms. Drake testified as to her belief that her company's property will be subject to the electromagnetic field created by the transformer station and the transmission line. She stated that exposure to electromagnetic fields is "known to be carcinogenic." She

believes that the setback distances from this equipment to her company's property are inadequate.

[89] Ms. Drake also stated that the transmission line and the transformer station will generate stray voltage that will escape onto her company's property, where it will be conducted by the metal supports used for the grapevines. She testified that this will create a hazard for workers tending the vines and for visitors walking in the vineyard and will be a source of ignition for fires. She urged the Tribunal to use "caution and restraint before permitting the installation of unsafe and unhealthy equipment in the midst of this unique and valuable part of Huron County."

Evidence Adduced by the Approval Holder

Dr. Mundt

[90] Dr. Mundt gave evidence on behalf of the Approval Holder. On consent, the Tribunal qualified him to give expert opinion evidence as an epidemiologist. Dr. Mundt has been qualified in four other proceedings before the Tribunal. For this proceeding, he conducted a review and synthesis of the published peer-reviewed epidemiological literature addressing the potential health impacts of industrial wind turbine noise emissions. He concluded that this literature "fails to demonstrate that wind turbine noise causes any disease." He stated that his conclusion has not changed from that provided in previous Tribunal cases.

[91] Specifically, Dr. Mundt identified and reviewed 22 studies, of which 16 were cross-sectional studies or surveys of residents living near wind turbines in Europe, New Zealand and the United States and six were laboratory studies of volunteers exposed to recordings of wind turbine noise. He stated that the literature at most "reports an association (or correlation) between sound pressure levels and self-reported or perceived annoyance; however, these findings may well reflect attitudes toward wind turbines, or fears or perceptions of economic loss or aesthetic degradation." According

to Dr. Mundt, the literature does not indicate a correlation between annoyance from wind turbine noise and adverse health effects.

[92] Dr. Mundt also reviewed the three reports discussed by Dr. Lynn in her evidence and provided detailed comments on each. With respect to the Arra Article, Dr. Mundt indicated that in his view it "deviates considerably from critical reviews and syntheses of the epidemiological literature published in quality medical and health journals." He described several methodological errors that, collectively, he considers to "fatally compromise the scientific quality of the report." He pointed to the lack of transparency in how the authors critically evaluated each of the studies under review. He stated that one of the most serious errors made by the authors was to manipulate the results of the studies by combining a variety of self-reported symptoms into a new category that they term "distress", which, he asserts, is not a scientifically meaningful term, and obscures the findings in some of the studies. By doing this, according to Dr. Mundt, the authors guarantee that every study will find distress even when no association or causal relationship between self-reported symptoms and exposure to wind turbines is demonstrated. In addition, Dr. Mundt pointed out that studies relying on self-reporting of health complaints suffer from reporting bias and "inevitably" report associations even when no underlying causal relationship exists, which was not explained clearly in the Arra Report. He also stated that the ultimate conclusion of that report, that there is an "association" between wind turbines and annoyance, adds nothing new and the authors' "failure to critically evaluate and synthesize the available evidence to better understand these associations as potentially causal represents a lost opportunity and a distraction from the actual evidence presented in the primary studies reviewed."

[93] Dr. Mundt also referred to Dr. Lynn's comment in her testimony that proving causation between an exposure and a disease takes 40 years, as happened with the proof that smoking causes lung cancer. He stated that such a long time may be necessary to prove causation for health effects with a long latency period such as cancer, but is often much shorter for other diseases. In cross-examination, he stated

that better studies, such as longitudinal studies, of those exposed to wind turbine noise could be conducted in the same time frame as the cross-sectional studies that have been done, that is, perhaps one to two years.

[94] Dr. Mundt also stated that he was not clear what Dr. Lynn meant when she said in her testimony that she found the “consistency of symptoms” for those exposed to wind turbine noise “convincing”. To Dr. Mundt, the consistency of self-reported common symptoms that are experienced by nearly everyone at some time is not convincing and may mean there is nothing going on at all. In his view, the Health Canada Study discussed in Dr. Michaud’s evidence may add better evidence because it will include objective measurements of health indicators and noise levels as well as a survey of self-reported symptoms. He added that if the sample size for the survey portion of the study were large enough, it would reduce the selection bias, and result in more accurate findings.

[95] Under cross-examination, Dr. Mundt stated that annoyance is not a medical condition but is experienced by everyone, and agreed that it is viewed negatively; however, he noted that there is no common or precise understanding of what annoyance is. Dr. Mundt also testified that stress can be either positive or negative and accepted that, if negative, stress can have an adverse effect on health. He agreed that chronic sleep disruption can lead to negative health effects. He commented that the studies demonstrate that attitudes and perceptions toward wind turbines, both positive and negative, can influence the reporting of symptoms.

Evidence Adduced by the Director

[96] The Director did not adduce any evidence at this hearing.

Submissions of the Appellants

[97] The Appellants assert that the Project will cause serious harm to human health. They submit that the scientific evidence shows that there is an association between exposure to industrial wind turbines and "significant adverse health effects" for individuals. They point to Dr. Lynn's evidence regarding "distress" and the fact that all of the studies she and Dr. Arra reviewed found an association between turbines and distress. They also refer to Dr. Lynn's testimony about the convincing nature of the consistency of symptoms of those exposed to wind turbines. They rely on the evidence of Dr. Geoff Leventhall who testified in *Erickson v. Ontario (Director, Ministry of Environment)* (2011), 61 C.E.L.R. (3d) 1 ("*Erickson*"), which indicated that annoyance is a psychological effect that can induce physical problems due to high levels of stress and that sleep disturbance is an adverse health effect. They also rely on the Tribunal's findings in *Erickson* that wind turbines can cause harm to human health.

[98] The Appellants submit that the Health Canada Study findings support Dr. Lynn's evidence regarding distress. They argue that the Study found a statistically significant relationship between increasing levels of wind turbine noise and "annoyance" and between annoyance and both self-reported adverse health effects, and measured bodily changes. It is their position that the exposures to wind turbines contemplated by the Project, taking into account the approved setbacks and the number of residences in the area, will cause serious harm to human health.

[99] The Appellants submit that the evidence of Ms. Kellar, Ms. Vlemmix and Ms. Fleming shows that specific individuals living near the Project will suffer serious harm to their health. In addition, they submit that other residents with similar sensitivities will also suffer, requiring the entire Project to be revoked.

[100] In addition to the effect of the Project on individuals, the Appellants argue that this and other wind energy developments in the area have already caused harm to the

health of the community as a whole. They submit that the divisive nature of these developments has caused significant stress in the community, sufficient to constitute "serious harm to human health." They also refer to Dr. Michaud's evidence about the association between turbines and "community annoyance."

[101] The Appellants submit that the Tribunal's interpretation of the Health Test in previous renewable energy proceedings makes meeting the Health Test a legal impossibility, given the current state of scientific knowledge. They maintain that to continue to interpret the test in the same manner is to invalidate the Health Test. In support of this position, they refer to the evidence of Dr. Lynn, noting that she pointed out that the current level of scientific knowledge of the causal links between health effects on humans and the proximity of industrial wind turbines is inadequate and that a causal connection cannot currently be made. They further note that Dr. Lynn stated that, instead, it will take as long as 40 years to accumulate enough data to accurately show causation between adverse health effects and the proximity of industrial wind turbines.

[102] The Appellants submit that there is not enough evidence to support a finding that the Project will not cause serious harm to the health of those living in their vicinity. They refer to the Bradford Hill criteria, which are standard epidemiological criteria used to determine the scientific certainty of causation. They argue that it is not necessary nor is it required for this Tribunal to find scientific certainty in order to rule that serious harm to human health will occur. They assert that the evidence establishes that there is a strong association between wind turbines and one or more types of human distress. They maintain that this association is sufficient to meet the onus on the Appellants to prove, on a balance of probabilities, that harm is occurring elsewhere and will be caused this Project.

Submissions of the Director

[103] The Director submits that the Appellants have failed to establish that engaging in the Project in accordance with the REA will cause serious harm to human health. The Director asks the Tribunal to dismiss the appeal.

[104] The Director submits that the Appellants must prove on the balance of probabilities that serious harm to human health will be caused by the Project operating in accordance with the REA, and that it is not enough for them to raise the potential for harm. The Director disagrees with the Appellants' contention that the current lack of scientific evidence establishing a causal connection between wind turbines and health effects requires the Tribunal to modify its interpretation of the Health Test. According to the Director, if there were credible evidence establishing that connection, the Health Test as the Tribunal currently interprets it could be met.

[105] The Director submits that the fact witnesses called by the Appellants and the presenter, Ms. Drake, were sincere in raising concerns about the impact of the Project on their own and their families' health, their property, and their community, but their evidence was anecdotal and not supported by any medical evidence to confirm existing medical conditions or to demonstrate that their health would be harmed or that pre-existing conditions would be exacerbated by exposure to the Project. The Director argues that Ms. Kellar's testimony about symptoms she has experienced living 5 km from an operating wind project is merely a self-assessment of symptoms and not evidence of a causal link between those symptoms and exposure to wind turbines.

[106] The Director contends that the Appellants have misstated Dr. Lynn's opinion evidence, by suggesting in their submissions that Dr. Lynn concluded that there is an association between exposure to wind turbines and "significant adverse health effects". The Director states that Dr. Lynn, in fact, testified that her review of the literature, conducted with Dr. Arra, demonstrated the presence of reasonable evidence of an

association between wind turbines and “distress” in humans, but she conceded that causality has not been established and the distress reported could be due to factors other than exposure to wind turbine noise, such as attitudes to turbines, visual impact, and so on. In addition, the Director points out, Dr. Mundt identified serious methodological problems with the Arra and Lynn study that undermine its quality and reliability and testified that their review overstates the association between turbines and distress.

[107] The Director submits that the transcript of Dr. Michaud’s testimony in *Dixon* regarding the Health Canada Study does not assist the Appellants. The Director indicates that Dr. Michaud stated the Study would in part assess infrasound and low frequency sound from wind turbines because there was a “knowledge gap” related to the lack of an international standard. The Director quotes from the Tribunal’s decision in *Dixon*, where it found that the Health Canada Study would assist in determining whether there is an association between wind turbines and certain health effects but that it alone will be neither “determinative nor conclusive” with respect to determining causation.

[108] The Director submits that, even though the “Summary of Results” from the Health Canada Study was accepted into evidence, it should be given no weight because it has not been explained by an expert and has not been tested through cross-examination. The Director explains that, because the Tribunal does not have the expertise to interpret or assess the merits of an epidemiological study, without an expert opinion, there is a danger that the findings could be misunderstood or given undue weight. Moreover, it is the Director’s position that the Summary of Results identifies its limitations, making it premature for the Tribunal to make any findings with respect to it.

[109] The Director submits that, even if the Tribunal were to give some weight to the Summary of Results, the findings do not support the Appellants’ position. The Director argues that the Summary of Results expressly finds that exposure to wind turbine noise

is not associated with self-reported or measured sleep disturbance, illness or stress, but finds only an association between wind turbines and self-reported annoyance. It is the Director's view that the Summary of Results points to a range of features of wind turbines, including noise, shadow flicker, blinking lights and visual impact, that may contribute to this annoyance, but that in any event there is no finding of causation between wind turbines and annoyance, let alone an association to any adverse health effects.

[110] The Director disagrees with the Appellants that the Tribunal should adopt comments made in its decisions in *Erickson* and *Alliance to Protect Prince Edward County v. Director, Ministry of the Environment* (2013), 76 C.E.L.R. (3d) 171 ("*APPEC*") regarding the evidence of Dr. Leventhall to supplement the evidence adduced in this proceeding. The Director agrees that Tribunal decisions should be consistent, but argues that the Appellants should not be entitled to rely selectively on helpful comments in the *Erickson* decision while ignoring the conflicting evidence and the Tribunal's conclusion that the evidence, including that of Dr. Leventhall, was insufficient to prove that serious harm to human health would result from the wind turbines. The Director notes both that the circumstances in *APPEC* regarding the role of Dr. Leventhall were different from those in this proceeding, and that the Tribunal rejected the same argument regarding his evidence in *Platinum Produce Co. v. Ontario (Ministry of the Environment)* (2014), 84 C.E.L.R. (3d) 106 ("*Platinum Produce*").

[111] The Director submits that the evidence of Dr. Mundt should be given considerable weight by the Tribunal, due to his expertise and the detailed analysis of the scientific literature he undertook. The Director states that Dr. Mundt testified that the published, peer-reviewed epidemiological studies do not establish that exposure to wind turbine noise causes any harm to human health and that some studies find an association between wind turbine noise and self-reported annoyance. The Director also states that Dr. Mundt testified that annoyance is not considered a health outcome and

the studies indicate that individual perceptions and attitudes toward wind turbines influence the self-reporting of annoyance.

Submissions of the Approval Holder

[112] The Approval Holder contends that the Appellants have not adduced sufficient evidence to meet the Health Test under s. 145.2.1 of the *EPA*. The Approval Holder asks the Tribunal to dismiss the appeal.

[113] The Approval Holder submits that the Appellants bear the onus of proving that the Project will cause serious harm to human health. It points out that the Appellants did not provide any evidence on the specific issues set out in their notice of appeal, including infrasound, low frequency sound, audible noise, visual impact, shadow flicker, stray voltage or electromagnetic fields as they relate to human health.

[114] According to the Approval Holder, the lay witnesses, Ms. Kellar, Ms. Vlemmix, and Ms. Fleming, and the presenter, Ms. Drake, provided mostly anecdotal evidence of personal opinions and unique experiences, and identified concerns about potential and perceived “wind turbine effects” which might result from the Project, none of which was confirmed by medical evidence. The Approval Holder submits that this evidence does not satisfy the Health Test.

[115] The Approval Holder argues, in addition, that the evidence of Dr. Lynn does not demonstrate that the Project will cause, either directly or indirectly, serious harm to human health. It states that, although the Tribunal qualified Dr. Lynn to give opinion evidence, she readily admitted that she is not an expert on the health effects of wind turbines and knows nothing about the specific attributes or circumstances of the Project. The Approval Holder asks the Tribunal to give little weight to Dr. Lynn’s evidence and to prefer the evidence of Dr. Mundt, as he is more qualified on this subject. In the Approval Holder’s view, Dr. Mundt refuted several of Dr. Lynn’s comments, for example,

her comments about the consistency of symptoms of those exposed to wind turbines and the length of time required before epidemiological research establishes the cause of disease.

[116] The Approval Holder also submits that Dr. Mundt refuted the reliability of the Arra Article, critiquing the authors' methods, their analysis and their conclusions. In particular, it submits, Dr. Mundt indicated that the authors misstated some of the conclusions of the studies they reviewed and manipulated the findings by grouping all of the endpoints into the category of "distress", which is not scientifically meaningful. The Approval Holder argues that the systematic review of the international epidemiological literature on the impacts of wind turbines on human health, carried out by Dr. Mundt in preparation for the hearing, is more rigorous and his findings and conclusions should be given more weight by the Tribunal.

[117] The Approval Holder asserts that the evidence of Dr. Michaud does not assist the Appellants because Dr. Michaud testified in *Dixon* that, regardless of the findings, the Health Canada Study would not be able to prove a causal relationship between exposure to wind turbines and health effects. Further, the Approval Holder argues that the Appellants mischaracterize the findings in the Study's Summary of Results. It is the Approval Holder's position that the Summary clearly states that wind turbine noise is not associated with health effects such as sleep disorders, illness or stress and does not state that self-reported annoyance will cause serious harm to human health. However, the Approval Holder submits, the Summary of Results is only a preliminary report and the Tribunal should not give it significant weight.

Findings on Issue 1

[118] In this proceeding, the Appellants submit that engaging in the Project in accordance with the REA will cause the Appellant Mr. Gillepsie and others serious physical and psychological harm.

[119] The alleged nature of this harm is one or more complaints, such as sleep disturbance, dizziness, headaches, and tinnitus, and, in addition, the exacerbation of pre-existing conditions for highly sensitive children. The Appellants also allege that the Project has already caused significant divisiveness within the community, which has led to high levels of stress among residents living within the Project area.

[120] In overview, the Tribunal finds that the Appellants have adduced insufficient evidence to establish, on a balance of probabilities, that the alleged impacts will occur as a result of engaging in the Project in accordance with the REA. The witnesses Ms. Kellar, Ms. Fleming and Ms. Vlemmix and the presenter Ms. Drake all expressed concerns about the potential impact of the Project on their health and the health of their families and others using their property. The nature of this evidence does not establish that the harm they allege will occur due to the Project. This evidence is really more of an expression of apprehension or concern that harm may occur, not proof that harm will occur. Ms. Kellar also testified about symptoms she has experienced, which began last summer following the start of operations at a wind farm 5 km from her home. She sincerely believes that the symptoms are caused by the operation of the new wind farm. The limitation on this evidence is that she has self-assessed her condition and its cause and there is no medical evidence before the Tribunal that confirms this. The Tribunal has consistently required confirming medical evidence for what it has, in other renewable energy approval appeals, termed “post-turbine” witnesses, that is, lay witnesses who posit that their health conditions have been caused by exposure to wind turbines (see, for example, *APPEC*, at paras. 54 to 67).

[121] In their submissions, the Appellants emphasized a more generalized claim, rather than the individual claims discussed above. The Appellants submit that their witnesses were intended to be representative of the types of people who would be affected, and the types of harm that would be suffered, in order to demonstrate that the

Project as a whole will cause a certain, but unknown, amount of harm within the community.

[122] It is the Appellants' position that it is impossible, based on current scientific evidence, to prove an individualized claim, i.e., that particular harm will occur for a particular person living at a particular distance from the Project components, for example, an elderly man with high blood pressure living 800 m from a turbine, or a child with Autism Spectrum Disorder living 2 km away. To support this position, the Appellants point to Dr. Lynn's statement that it will take at least 40 years before scientific causation can be proven. It is not clear what findings the Tribunal could make on this point. The Tribunal can only make findings on the evidence before it, but notes that the Appellants' assertion is based on their assumption that serious harm to health is being caused at setback distances beyond the regulated distance of 550 m and that this will eventually, and inevitably, be proved once enough studies are done. The Tribunal notes Dr. Mundt's comments that studies could be designed to demonstrate causation much more quickly and that causation will never be proved if wind turbines do not in fact cause serious harm to human health to those living beyond the regulated setbacks.

[123] The Tribunal does not agree with the Appellants' submission that the Tribunal's interpretation of the Health Test in previous renewable energy approval appeal proceedings makes it a legal impossibility to meet the Health Test. Previous Tribunal decisions do not prescribe, or, more importantly, circumscribe the nature of the evidence which an appellant can adduce to establish that the Health Test has been met. While the Tribunal acknowledges that previous decisions consider evidence regarding proof of causation as applied in the scientific community, it is important to note that these decisions weigh this evidence against the evidence adduced by the appellants and other participants opposing the renewable energy approval when determining whether an appellant has met his/her onus to establish, *on a balance of probabilities*, that serious harm will occur. Admittedly, the "will cause" aspect of the Health Test

appears to set a high standard. Nonetheless, a distinction must be drawn between weighing competing evidence, and setting a legal standard that is impossible to meet.

[124] The Appellants further submit, however, that current scientific evidence *does* support proof of an association between exposure to wind turbines and "distress" or "annoyance" that, in an unpredictable but statistically significant proportion of the population, will lead to stress-related adverse health effects, so that this Project should not be allowed to proceed with the construction and operation of even one turbine. The Appellants rely on the evidence of Dr. Lynn, Dr. Leventhall and Dr. Michaud to prove that this will occur.

[125] Dr. Lynn collaborated with Dr. Arra on a literature review in 2010 that was subsequently peer reviewed and published in 2014. The Arra Article reports that the studies reviewed by the authors all found "an association between wind turbines and one or more types of human distress," but did not "demonstrate a direct causal link between wind turbine noise and adverse health effects." Dr. Lynn explained that a direct causal link would mean that it is predictable that anyone who has been exposed to a specific level of wind turbine noise would have the same outcome. She also testified that indirect effects of environmental exposures on health are very hard to prove.

[126] Dr. Mundt criticized the authors' methodology, in particular their combining of a variety of complaints into a new category of "distress", stating that this approach obscures the results of the individual studies and overstates the association. Dr. Lynn herself acknowledged that the evidence was not strong within the standards of epidemiology, stating the "this is not great evidence, but it's some evidence."

[127] Most of the studies reviewed by Drs. Lynn and Arra were cross-sectional studies, with varying levels of participation. Most of the studies relied on surveys of self-reported levels of "annoyance". Dr. Mundt points out the sources of bias in each of the studies

which affect their reliability. With respect to the findings in the original studies, some found increasing levels of annoyance with increasing modeled levels of wind turbine noise. For participants who noticed the sound, wind turbine noise was perceived as being more annoying than transportation and industrial noise at comparable sound levels. In addition, as summarized in the CMOH report:

> Annoyance was strongly correlated with individual perceptions of wind turbines. Negative attitudes, such as an aversion to the visual impact of wind turbines on the landscape, were associated with increased annoyance, while positive attitudes, such as direct economic benefit from wind turbines, were associated with decreased annoyance.

[128] Drs. Lynn and Arra also recognized the relevance of factors other than noise, observing that the distress experienced by the participants in the original studies may have been generated or exaggerated by exposure to negative opinions on wind turbines.

[129] Dr. Leventhall testified in the *Erickson* case, where he described annoyance as a psychological effect that can, if "extreme", induce adverse health effects if high levels of stress result. Even if not necessarily inconsistent with the other evidence adduced, the Tribunal can give this statement no weight. Dr. Leventhall did not testify and his evidence from *Erickson* was not adopted by, or put to, any qualified expert witness in this proceeding. It was only referenced by the Appellants in their final submissions.

[130] Dr. Michaud's evidence from *Dixon* described the purpose of the Health Canada Study as a study of whether there is a statistical association between sound levels from wind turbines and specific subjective complaints and measured endpoints. He testified that the Study is not intended to prove causation. He also stated that, because of limited data and no internationally accepted standard, the Study will also measure low frequency sound and infrasound emitted by operating wind turbines.

[131] In November 2014, after all the witnesses in the proceeding testified, Health Canada posted a Summary of Results from the Health Canada Study on its website. The Appellants requested that the Tribunal accept this Summary into evidence, without calling Dr. Michaud, or another qualified expert to adduce this evidence as part of expert testimony. All parties consented to this request, subject to the proviso that each party could make submissions regarding the weight to be given to this evidence, and that their consent is given without prejudice to the position they may take respecting the admission of this evidence in any other proceeding. Consequently, this summary has not been tested in cross-examination.

[132] Because the Summary of Results was not interpreted by an expert, the Tribunal must ascribe limited weight to this evidence. Furthermore, as this summary provides only a set of preliminary findings that have yet to be peer reviewed, the Tribunal concludes that it has limited probative value. Even so, the findings expressly state that the investigators found no association between exposure to wind turbine noise and sleep disturbance, illness or stress, but did find an association between annoyance and several features of wind turbines, including noise, shadow flicker, blinking lights, vibrations and visual impacts.

[133] As a whole, this evidence does not show an “association between exposure to wind turbines and significant adverse health effects,” as claimed by the Appellants. At most, the evidence demonstrates that a number of people routinely report that they are annoyed by the presence of wind turbines. For those reporting high levels of annoyance, the preliminary findings of the Health Canada Study suggest there may be some measured physical changes indicating that those highly annoyed individuals experience stress. Whether people report annoyance because of the operation of the wind turbines and the associated noise levels, or, alternatively, because of subjective attitudes, or a combination of factors, is not clear from any of the studies put into evidence. There is little information about the relationship between the degree of reported annoyance and specific distance to a turbine or specific noise levels.

[134] Moreover, none of the studies put into evidence appear to attempt to refine the meaning of the term “annoyance” as it applies to health impacts caused by exposure to industrial wind turbines. While most people would consider annoyance to be a negative feeling, the evidence adduced in this proceeding did not establish that annoyance will result in serious harm to psychological or physical health. In support of this conclusion, the Tribunal notes that, although the witnesses agreed that prolonged sleep disturbance and high levels of stress could result in serious health impacts, the evidence did not establish that such sleep disturbance and stress would necessarily result from annoyance of the type and degree reported in the studies.

[135] Dr. Lynn and some of the Appellants’ witnesses also raised concerns about the effects wind energy developments have on community health. They stated their conclusion that the community near the Project is divided and some residents are unhappy. However, other than the incident referenced by Ms. Vlemmix regarding an altercation at a municipal council meeting, they provided no detailed substantive evidence to support this conclusion. Moreover, assuming that there is some degree of division and unhappiness, they adduced no evidence to indicate that such community disturbance is impacting the health of individuals in the community. Dr. Lynn stated that many people in rural Ontario are disturbed by wind energy projects because some residents benefit financially and others do not, raising issues of equity, and, because residents are not able to control the introduction of new technology, they are not well-prepared for introduction of such projects to their communities. She stated that these feelings in turn influence attitudes toward wind farms and allegations about their health effects. Despite raising these concerns, however, the Appellants’ witnesses did not provide evidence that the described impacts to the community at large will result in serious physical or psychological harm to individuals in the community. As such, the evidence adduced on this ground does not establish that serious harm to human health will occur.

[136] In summary, the Tribunal finds that the Appellants have adduced insufficient evidence to establish that engaging in the Project in accordance with the REA will cause serious harm to human health.

Issue 2: Whether the Appellant Gillespie's right to security of the person has been violated under s. 7 of the *Charter*.

Overview

[137] Although the Appellant Gillespie's notice of constitutional question challenged the validity of both s. 47.5 and s. 142.1 of the *EPA*, he subsequently withdrew his challenge respecting s. 47.5.

[138] The parties did not adduce any additional evidence respecting the Appellant Gillespie's *Charter* challenge. Consequently, the evidence on which they rely is the same evidence adduced in respect of the Health Test as described in the previous section of this decision.

Submissions of the Appellants

[139] The Appellants submit that the Appellant Gillespie's right to security of the person, in s. 7 of the *Charter*, is at risk due to his living in "proximity to the Project". They assert that the Project will interfere with his physical and psychological integrity and that the approval and appeal processes, set out in the *EPA*, do not accord with the principles of fundamental justice. Finally, they assert that this interference cannot be justified under s. 1 of the *Charter*.

[140] The Appellants argue that "security of the person" defies an exhaustive definition and that its meaning is best articulated in the specific factual context of each case. They direct the Tribunal to several decisions of the Supreme Court of Canada for

guidance on the meaning of "security of the person." For example, they submit that s. 7:

- protects against state interference with bodily integrity and serious state-imposed psychological stress (*R. v. Morgentaler,* [1988] 1 S.C.R. 30));
- encompasses the right to make choices concerning one's body and to have control over one's physical and psychological integrity (*Rodriguez v. British Columbia (Attorney General),* [1993] 3 S.C.R. 519); and
- prevents "serious" physical and psychological suffering (*Chaoulli v. Québec (Attorney General)*, [2005] 1 S.C.R. 791 ("*Chaoulli*")).

[141] Further, they argue that s. 7 can be violated through government action that indirectly either deprives a person of needed care (*Canada (Attorney General) v. PHS Community Services Society*, [2011] 3 S.C.R. 134 (S.C.C.)) or makes him or her more vulnerable to physical harm caused by third parties (*Bedford v. Canada (Attorney General)*, 2013 SCC 72).

[142] The Appellants argue that the interference with the Appellant Gillespie's right to security of the person has not been done in accordance with the principles of fundamental justice. They assert that the process established in s. 142.1 and s. 145.2.1 of the *EPA* is arbitrary because it is inconsistent with the legislative objective of the *EPA*, that is, the "protection and conservation of the natural environment". They further submit that these provisions demonstrate an intention to force renewable energy projects through a quick process that is too expensive for individuals whose health may be harmed and that this deprives them of meaningful rights of appeal.

[143] The Appellants argue that the precautionary principle is a principle of fundamental justice which is not reflected in the renewable energy approval process. They submit that principles of fundamental justice are those legal principles on which there is significant societal consensus that they are central to the way in which the legal

system ought fairly to operate, and that the precautionary principle meets that test.

[144] The Appellants argue that the precautionary principle, found in the MOE's Statement of Environmental Values ("SEV"), should have been applied by the Director and that the Director's failure to do so is relevant to the Tribunal because it led to the improper issuance of a permit that poses a serious harm to human health. Ontario Regulation 359/09, according to the Appellants, shows an intention that projects must comply with specific noise standards and setbacks, which puts the onus on the Approval Holder and the Director to demonstrate that the Project will unequivocally comply with the Regulation. They argue that if the Approval Holder and the Director cannot prove that exposures will be within the Regulation, the Tribunal should determine that serious harm to health is more likely than not.

[145] The Appellants go on to argue that the high burden of proof on appellants in s. 145.2.1(3) is not in accordance with the precautionary principle. They submit that the Tribunal's decision should be consistent with its findings in the *Erickson* decision, that is, that wind turbines can cause serious harm to human health, depending on how close turbines are to residents, and that the precise mechanism by which this harm occurs need not be proved by appellants. They also argue that the gaps in scientific knowledge about the health effects of exposure to industrial wind turbine noise, as outlined in the evidence of Drs. Lynn and Michaud, make it impossible at present for any appellants to meet that burden. It is their view that the Legislature cannot have intended to create an appeal right that cannot be met. They state that the process takes away any meaningful right of appeal, which is contrary to principles of fundamental justice. They submit that this deprivation of the Appellant Gillespie's right to security of the person cannot be justified under s. 1 of the *Charter* and ask that the Tribunal declare s. 142.1 and s. 145.2.1 of the *EPA* to be invalid.

Submissions of the Director

[146] The Director submits that the Appellant Gillespie has failed to prove that the legislation deprives him of his rights under s. 7 of the *Charter*. The Director asks the Tribunal to dismiss the Appellant's *Charter* challenge in this proceeding.

[147] It is the Director's position that the analysis of s. 7 involves two steps: first, the claimant must demonstrate that the legislation or state action deprives him or her of life, liberty or security of the person; and second, if the first step is met, the claimant must demonstrate that the deprivation is not in accordance with a principle of fundamental justice. The Director submits that the Appellant Gillespie fails on both steps.

[148] With respect to the first step, the Director argues that the Appellant Gillespie adduced no evidence about himself, where he lives or how his rights have been infringed. To establish a s. 7 claim, the Director asserts, a claimant must demonstrate serious psychological or physical harm; as set out in the case law, the harm must be more than ordinary stresses and anxieties. In addition, the Director asserts that the Appellant Gillespie has failed to show that the alleged harm to him is state-imposed because the impugned provisions of the *EPA* have not only not deprived him of the ability to protect his physical or psychological integrity through legal action, but have in fact enhanced that ability by providing a right to appeal to an independent tribunal. The Director argues that the Appellant is asking for a positive right to a particular regulatory regime but that it is not appropriate to use s. 7 of the *Charter* to achieve that end.

[149] With respect to the second step, the Director submits that, if the Tribunal finds that the Appellant Gillespie has been deprived of his right to security of the person, any deprivation is in accordance with principles of fundamental justice. The Director argues that the onus is on the Appellant Gillespie to prove that the legislation depriving him of his rights was arbitrary, overbroad or grossly disproportionate. According to the Director, the REA provisions of the *EPA* laying out a streamlined process for approvals and appeals are not arbitrary, overbroad or grossly disproportionate, as they are directly connected to achieving the purpose of the act and a legitimate government objective.

[150] The Director disagrees with the Appellants that the precautionary principle is a principle of fundamental justice. The Director submits that a principle of fundamental justice must be a legal principle around which there is a significant societal consensus to the effect that it is fundamental to the way in which the legal system ought fairly to operate and it must be capable of definition with sufficient precision to yield a manageable standard. With the precautionary principle, in the Director's submission, there is no clear consensus on its definition and no significant societal consensus that it is fundamental to fair operation of the legal system.

Submissions of the Approval Holder

[151] The Approval Holder contends that the Appellants have not adduced sufficient evidence to meet the Health Test under s. 145.2.1 of the *EPA* or to demonstrate a breach of security of the person under s. 7 of the *Charter*. The Approval Holder asks the Tribunal to dismiss the appeal.

[152] The Approval Holder also argues that the Appellant Gillespie's *Charter* claim should fail. It submits that the Appellant has, first, failed to demonstrate that state action has deprived him of his right to security of the person and, second, he has failed to demonstrate that any such deprivation was not in accordance with a principle of fundamental justice.

[153] The Approval Holder argues that the Tribunal determined in *Dixon* that it has no jurisdiction to consider a challenge to the Director's decision under s. 47.5 of the *EPA*, yet parts of the Appellants' notice of constitutional question and many of their submissions relate to s. 47.5 and the Director's decision to issue the REA. The Approval Holder asks the Tribunal to follow its decision in *Dixon* and dismiss the Appellant's challenge to s. 47.5.

[154] With respect to the Appellant's challenge to s. 142.1 and s. 145.2.1 of the *EPA*, the Approval Holder asserts that the Appellant Gillespie has not provided any evidence demonstrating a breach of his *Charter* right to security of the person. The Approval Holder argues that the jurisprudence on s. 7 of the *Charter* indicates that in order to trigger s. 7, the Appellant must prove, on the balance of probabilities, that he will suffer serious physical or psychological harm, yet the type of evidence in this proceeding is best classified as "speculation, allegations and mere concerns", which is inadequate to meet the threshold. Further, the Approval Holder argues that the nature of the concerns raised by the witnesses, of being "troubled, annoyed, worried or upset," has been held by the Supreme Court of Canada to be insufficient to be considered "serious" and that Dr. Lynn's evidence does not establish that any serious physical or psychological harm will be caused by the Project.

[155] The Approval Holder disagrees with the submission of the Appellants that the Approval Holder and/or the Director has the onus of demonstrating that the Project will operate in compliance with the REA and if neither can do so, then the onus does not shift to the Appellants. The Approval Holder points out that this argument has been made before to the Tribunal, and the Tribunal has consistently rejected it, for example, in *Platinum Produce*, at paras. 131 and 132. The Approval Holder asserts that there is no legal basis for reversing the onus on the Appellants due to a "knowledge gap", and that there is, in fact, no knowledge gap.

[156] The Approval Holder argues that the evidence presented by the Appellants is similar to, but less extensive than, that adduced in at least five other REA appeals before the Tribunal where a violation of s. 7 was alleged. It notes that all of those *Charter* challenges were dismissed by the Tribunal, and it asks that the Tribunal follow these previous decisions and dismiss the Appellant Gillespie's challenge.

Findings on Issue 2

[157] The Appellant Gillespie challenges the constitutionality of s. 142.1 of the *EPA* on the grounds that the provisions violate his rights under s. 7 of the *Charter*.

[158] Section 7 of the *Charter* states:

> Everyone has the right to life, liberty and security of the person and the right not to be deprived thereof except in accordance with the principles of fundamental justice.

[159] The Appellant Gillespie argues that the provisions of s. 142.1 of the *EPA* deprive him, and others living in the vicinity of the Project, of "security of the person" and that this deprivation is not in accordance with the principles of fundamental justice, nor can it be saved by s. 1 of the *Charter*.

[160] The Appellant's argument seems to be, in essence, that the statutory design of a REA appeal deprives him of a meaningful right of appeal and that this design is inconsistent with the purposes of the *EPA* and with the precautionary principle. The elements of the statutory appeal that are problematic to the Appellant are the combination of the short timeline, the limited grounds of appeal, the "extremely high statutory test to meet", and the placing of the burden of proof on appellants. The Appellant argues both that he has led sufficient evidence to prove that the Project will cause serious harm to his health and that gaps in scientific knowledge make it very difficult, if not impossible, for him to meet the Health Test as it has been interpreted by the Tribunal.

[161] In previous decisions regarding s. 7 of the *Charter*, the Tribunal has addressed similar challenges to s. 142.1 of the *EPA*. In those decisions, the Tribunal set out its approach to analyzing such a challenge. Relying on *Chaoulli*, the Tribunal in *Dixon* stated, at para. 27,

> [I]n order to succeed in a s. 7 Charter claim, the claimants must demonstrate:
> a. Whether the impugned provisions deprive individuals of their life, liberty or security of the person;
> b. If so, whether the deprivation is in accordance with the principles of fundamental justice; and, if so, whether the breach is saved under s. 1 of the *Charter*.

[162] The Tribunal has also followed the guidance of the Supreme Court of Canada in its approach to analyzing a claim (see *Dixon, Bovaird v. Director, Ministry of the Environment*, 2013 CarswellOnt 18046 (Ont. Env. Rev. Trib.), and *Drennan v. Director, Ministry of the Environment* (2014), 85 C.E.L.R. (3d) 57, (Ont. Env. Rev. Trib.)). To summarize, the Tribunal requires the claimant to demonstrate the following, in order to prove a s. 7 claim:

1. a deprivation of security of the person, which requires proof of "serious" physical or psychological harm,
2. the harm is state imposed, and
3. there is a "sufficient causal connection" between the harm and the impugned state action.

[163] In other words, the onus is on the Appellant, Mr. Gillespie, to provide sufficient evidence to prove each element of the claim. The Tribunal rejects the Appellants' argument that the onus is instead on the Director and/or the Approval Holder to demonstrate that the Project will unequivocally comply with the regulated setbacks and noise levels. The Appellants maintain that, if the Director and the Approval Holder cannot meet that onus, then, in the face of such uncertainty, the Tribunal can find, on a balance of probabilities, that, serious harm will occur. In *Platinum Produce*, the Tribunal addressed this issue. After finding that the *Charter* cases have consistently held that a s. 7 *Charter* "security of the person" claimant has the onus of demonstrating an evidentiary base for alleged serious harm, the Tribunal stated, at para. 132:

> In a sense, the Appellant's "onus on the Director" argument in relation to the *Charter* test is based on the alleged fact of "uncertainty" regarding the Project's compliance, under the Amendment, with the safety requirements of the Regulation and the Guidelines. This runs counter to all of the case law on s. 7 of the *Charter* that requires that the claimant prove an evidentiary basis for the *Charter* challenge. The Appellant did not provide any authority for the proposition that the fact of "uncertainty", even if proved, which is not the case here, is a sufficient evidentiary basis.

[164] The Tribunal adopts this analysis. The Tribunal, in this case, received no evidence regarding the Project's anticipated compliance with the regulated setbacks and noise levels; therefore, it has made no finding respecting this matter. Nevertheless, as noted in *Platinum Produce*, the courts and the Tribunal have consistently held that a s. 7 *Charter* "security of the person" claimant has the onus of demonstrating an evidentiary base for alleged serious harm. Consequently, the Tribunal accepts that the onus rests on the Appellant, Mr. Gillespie, to prove an evidentiary basis for the *Charter* challenge, and that any uncertainty, as alleged by the Appellants, is not sufficient to discharge this onus. The Tribunal also notes that, even if such uncertainty would be sufficient to discharge this onus, the Appellants have not adduced any evidence in this proceeding regarding the likelihood that the Project will not comply with the regulated setbacks and noise levels.

[165] The Tribunal now turns to the first requirement, i.e., whether the Appellants have established that s. 142.1 of *EPA* will result in a deprivation of security of the person, which, as noted above requires proof of "serious" physical or psychological harm. The Tribunal has already found, in the respect of the Health Test, that the Appellants have adduced insufficient evidence to establish that serious harm will occur. The question, therefore, is whether the Tribunal should reach a different conclusion in respect of the *Charter* challenge, based on the same evidence.

[166] In *Dixon*, the Tribunal, at para. 170 stated:

> The Tribunal will make no finding as to whether the "serious harm to human health" test set out in s. 145.2.1 of the *EPA* and the threshold of

> "serious physical harm" or "serious and profound psychological harm" required to establish a deprivation as required in a s. 7 *Charter* claim, are the same or similar. Further, the Tribunal will not make any specific finding as to whether the test in s. 145.2.1 of the *EPA* requiring the Appellants to establish that the Project "will cause" serious harm to human health is the same as the need to establish a "sufficient connection" as required in a s. 7 *Charter* claim. However, it is abundantly apparent from the jurisprudence pertaining to both the *EPA* test and s. 7 *Charter* test, that a solid evidentiary foundation is required for both tests.

[167] The Tribunal adopts this approach. In summary, in respect of the evidence, the Tribunal has already made several findings which include:

- The Appellants have adduced insufficient evidence to establish, on a balance of probabilities, that the alleged impacts will occur as a result of engaging in the Project in accordance with the REA.
- As a whole, this evidence does not show an "association between exposure to wind turbines and significant adverse health effects," as claimed by the Appellants.
- The Appellants' witnesses did not provide evidence that the described impacts to the community at large will result in serious physical or psychological harm to individuals in the community. As such, the evidence adduced on this ground does not establish that serious harm to human health will occur.

[168] The Tribunal observes that its analysis in reaching these findings applies to its evaluation of whether the Appellant Gillespie has established serious physical harm or serious and profound psychological harm to establish a deprivation under s. 7 of the *Charter*. Consequently, based on an evaluation of the evidence adduced in this proceeding, and considering the above findings, the Tribunal finds that the Appellant Gillespie has not established a solid evidentiary foundation to support a conclusion that s. 142.1 of the *EPA* deprives of him of security of the person under s. 7 of the *Charter*.

[169] In light of this finding, it is unnecessary to determine whether there is a sufficient causal connection between the harm and the impugned state action, or whether this deprivation is in accordance with the principles of fundamental justice; and if so, whether it is saved under s. 1 of the *Charter*.

[170] The Tribunal now turns to the Director's argument that the Appellant Gillespie, as the *Charter* claimant, adduced absolutely no evidence of how his rights have been infringed. In support of this position, the Director emphasizes that there is no evidence regarding who Mr. Gillespie is, where he lives, or even if he lives in the vicinity of the Project. The Director submits that for this reason alone, his *Charter* claim must fail. The Tribunal infers from this submission that the Director maintains that the Appellant Gillespie cannot rely on evidence which does not directly relate to himself, because he does not have standing to assert a s. 7 right on behalf of other residents. Because the Tribunal has already found, based on the evidence adduced in this proceeding, that the Appellant Gillespie has not established a deprivation, the Tribunal finds that it is not necessary to address this issue.

Overall Conclusions

[171] The Tribunal finds that the Appellants have not established that engaging in the Project as approved will cause serious harm to human health under the *EPA*.

[172] The Tribunal finds that the Appellants have not established, on the facts of this case, that the impugned renewable energy approval appeal provisions violated the Appellants' right to security of the person under s. 7 of the *Charter*.

DECISION

[173] The appeals by John Gillespie and the Municipality of Bluewater are dismissed.

Appeals Dismissed

"Marcia Valiante"

MARCIA VALIANTE
MEMBER

"Dirk VanderBent"

DIRK VANDERBENT
VICE-CHAIR