# The Renewable Energy Advisory Committee

### **November 5, 2019**

The Town Board of the Town of Enfield 168 Enfield Main Road Ithaca, NY 14850

Re: Review Pursuant to §239 -1, -m and -n of the New York State General Municipal Law

**Action: Town of Enfield Site Plan Amendments for Wind Facilities** 

#### Dear Town Board Members:

This letter sets forth the comments and recommendations of the Renewable Energy Advisory Committee of the Town of Enfield in response to the November 1, 2019 letter from the Tompkins County Department of Planning and Sustainability regarding the draft of the Amended and Restated Town of Enfield Wind Energy Facilities Local Law. We offer the following comments and recommendations:

### 1. Tompkins County recommendation:

**ARTICLE I I - PERMITS** 

1) Page 9, Section 2B, Agricultural Use Exemption. We recommend that the setback from property lines for wind facilities of a scale suited to support agricultural operations on a single farm be reduced from 2 times the total height of the installation to 1.5 times the total height of the installation. We recommend that setbacks from existing RESIDENCES (as defined in the proposed law) be 2 times the total height of the installation unless the affected adjoining property owner agrees otherwise in writing.

REAC response: We recommend no change. The County has failed to provide any support for this recommendation. The Committee and the Town Board, on the other hand, have debated at some length regarding the use of setbacks to protect Town residents' health and safety. Given concerns regarding ice throw, blade throw, component separation and/or disintegration, turbine collapse, fires and other potential adverse events, the Committee believes that setbacks from property lines that are 2 times the total height of the installation for wind facilities of a scale suited to support agricultural operations on a single farm constitute reasonable provisions to protect neighboring properties and any persons on those properties. Defining setbacks in relation to residences instead of in relation to property lines may result in uncompensated easements by non-participating landowners who may be deprived of the free use of their property due to safety and health concerns. Use of property lines for setbacks mitigates this concern.

### 2. Tompkins County recommendation:

ARTICLE III - PERMITS AND PERMITTING PROCESS

2) Page 13, Section 1A14, Environmental Monitoring Plan. We recommend that all bird and bat studies be performed in accordance with NYSDEC quidelines: Guidelines for

<u>Conducting Bird and Bat Studies at Commercial Wind Energy Projects</u> (June 2016), and that the geographic extent of those studies comply with the recommendations in those guidelines.

**REAC response:** We recommend no change. The draft law already addresses this concern. The last sentence of Article III, Section 1.A.14. states that "All studies will conform to applicable state and federal agency guidelines." This language is broad enough to address the County's recommendation and is generic enough to accommodate changing state and federal agency guidelines in the future.

### 3. Tompkins County recommendation:

ARTICLE III - PERMITS AND PERMITTING PROCESS

3) Page 15, Section 1C, WEF Economic Impact Study. We recommend deleting this requirement as a prerequisite for submitting an application. If the Town, in conducting the environmental review of a proposed WEF under SEQRA, identifies the need to address potential economic impacts as part of the scope of its environmental review, that would be the appropriate time for the applicant to submit an Economic Impact Study.

**REAC response:** We recommend no change. This provision is not intended to address environmental issues; it is intended to address economic issues. The purpose of a SEQRA review is only to identify and explore environmental issues but there are many other impacts of a wind energy facility beyond those that a SEQRA review is intended to address. While consideration of environmental issues are critical when reviewing a wind energy facility project, it is equally important to weigh any adverse economic impacts on the Town and/or its residents against the economic benefits of the project to the Town and/or its residents as part of any decision to approve a project. This cost/benefit analysis is particularly important since most of Enfield has wind resource ratings of Class 1 or 2, with a small area rated as Class 3.<sup>1</sup> Generally, wind resources below Class 4 are considered not economical to develop.<sup>2</sup>

# 4. Tompkins County recommendation:

ARTICLE III - PERMITS AND PERMITTING PROCESS

4) Page 17, Section 1E, Environmental Studies. We recommend deleting this section, as the appropriate studies would be identified as part of any Environmental Impact Statement scoping process. We believe that is the appropriate forum to identify a need for such studies.

**REAC response:** We recommend no change. While we agree that these provisions will be addressed as part of the scoping process, we believe it is important for the Town's law to require certain minimum provisions be addressed as part of that scoping document. The Town has a very limited window to produce a scoping document which then becomes the controlling document for any environmental analysis of the project under the SEQRA process. We want to

<sup>&</sup>lt;sup>1</sup> These ratings are generated by the National Renewable Energy Laboratory, the principal research laboratory for the U.S. Department of Defense's Office of Energy Efficiency and Renewable Energy.

<sup>&</sup>lt;sup>2</sup> This is likely why the Black Oak Wind Farm project had such difficulty attracting funding.

be sure that in that very limited window, the Town Board has clear minimum guidelines for what *must* be included in the scoping document.

### 5. Tompkins County recommendation:

ARTICLE IV - STANDARDS FOR WIND ENERGY FACILITIES

5) Page 26, Section 5, Visual Impact Mitigation. We recommend modifying item (iv) to state that Large WTGs shall be subject to a preliminary (and, if indicated, a more comprehensive) shadow flicker analysis and that, if shadow flicker will occur for more than 30 hours per year on any one nearby residence or facility, mitigation steps will be required.

REAC response: We recommend no change. First of all, there is no scientific basis for the 30 hour per year standard that is recommended by the County although it is commonly recommended in many wind laws today.<sup>3</sup> Furthermore, available technology makes it feasible to automatically stop turbine operation for the minutes at sunrise and sunset where exposure is calculated to occur with very limited economic impact to the operator. And, with this provision, Article VI.C.1 (complaints and enforcement) then has a legal basis for enforcing complaints about shadow flicker. Zero exposure is simpler and easier to enforce; the Town can allow reasonable compromise to occur in a dialogue among the violator, the code enforcement officer and the complainant during the complaint resolution process.

The U.S. Department of Interior - Bureau of Land Management notes that flickering effect may be considered an annoyance. The World Health Organization defines annoyance as a feeling of discomfort which is related to adverse influencing of an individual or a group by any substances or circumstances. Annoyance expresses itself by malaise, fear, threat, trouble, uncertainty restricted liberty experience, excitability or defenselessness. Given that current technology will allow a complete mitigation of flicker, we see no reason not to require it in our Town's law.

## 6. Tompkins County recommendation:

ARTICLE IV - STANDARDS FOR WIND ENERGY FACILITIES

- 6) Page 29, Section 17A, Sound Levels. We recommend adopting noise standards that do not vary between night and day as wind movement is outside the control of the applicant and it is more difficult for the Town to enforce standards that vary based on time of day. We recommend either of two options: a) establishing a setback of 1,150 feet from residences, schools, churches and libraries to account for potential noise impacts and to make enforcement and administration of the local law more manageable, or b) adopting the following noise standards and clarify that measurements be taken at RESIDENCES, not property lines:
  - a design goal of 40 dBA;
  - a long-term average sound limit of 45 dBA; and
  - a short-term (10-20 minute) maximum sound limit of 50 dBA;

**REAC response:** We recommend no change. The noise levels chosen were based upon a careful evaluation of noise guidelines from the World Health Organization ("WHO"), the U.S Environmental Protection Agency ("EPA") and the New York State Department of Environmental

<sup>&</sup>lt;sup>3</sup> Many laws measure the impact by limiting the maximum amount of flicker per day rather than per year.

Conservation ("NYDEC") as well as data from noise studies done in Enfield, NY and Chautauqua County, NY and a review of the available literature in this area.

The WHO recently published its "Environmental Noise Guidelines for the European Region (2018)." For average noise exposure, the report conditionally recommends reducing noise levels produced by wind turbines below 45 dB Lden, as wind turbine noise above this level is associated with adverse health effects. No recommendation is made for average night noise exposure of wind turbines because the quality of evidence of night-time exposure to wind turbine noise is too low to allow a recommendation. Furthermore, the report stressed that there might be an increased risk for annoyance below this noise exposure level, but it could not state whether there was an increased risk for the other health outcomes below this level owing to a lack of evidence. The report also specifically identifies infrasound as an area of concern and recommends further studies to determine the impacts of wind turbines on the health of residents in the area given the paucity of available studies.

Next, we turned to NYDEC's Program Policy: "Assessing and Mitigating Noise Impacts" which provides that an increase in sound pressure (dB) above the local ambient noise level of 5-10 dB is intrusive; of 10-15 dB is very noticeable; of 15-20 dB is objectionable; and above 20 dB is intolerable. That policy also states: "Most objective attempts to assess nuisance noise adopt the technique of comparing the noise with actual ambient sound levels or with some derived criterion." It also states: "The property line should be the point of reference when adjacent land use is proximal to the property line." A noise study conducted by the Noise Pollution Clearinghouse, Montpelier, VT in April 2016 in the vicinity of the Connecticut Hill area of Enfield resulted in daytime ambient noise measurements between 30.1 and 35.9 dBA and nighttime ambient noise measurements between 25.2 and 37.3 dBA. A noise study conducted by Cassadaga Wind LLC in April 2016 in the vicinity of the company's wind project in Chautauqua County, New York resulted in daytime ambient noise measurements between 21 and 32 dBA and nighttime ambient noise measurements between 19 and 32 dBA, and found the area measured "is typical of rural use."

We note that the EPA's recommendation of 55 dBA which is found in the NYSDEC criterion of significance, is a recommendation for *urban* residential neighborhoods. For Enfield, New York, one would subtract 10 dBA from 55 because it is a quiet rural area, 5 dBA because it has no prior experience with wind turbine noise, and 5 dBA because of the character of turbine noise. Thus, under EPA guidelines, a noise level of 35 dBA is necessary to protect the rural area.

But the more important criterion of significance in the NYSDEC document is the 6 dBA increase criterion. The EPA noted that, "[its] data... indicates that widespread complaints may be expected when the normalized value of the outdoor day-night sound level of the intruding noise exceeds that existing without the intruding noise by approximately 5 dB, and vigorous community reaction may be expected when the excess approaches 20 dB. The standard deviation of these data is 3.3 dB about their means and an envelope of +5 dB encloses approximately 90 percent of the cases. Hence, this relationship between the normalized outdoor day-night sound level and community reaction appears to be a reasonably accurate and useful tool in assessing the probable reaction of a community to an intruding noise and in obtaining one type of measure of the impact of an intruding noise on a community." (EPA, 1974, D-20.)

When we put all this together along with the precautionary approach in assessing risk management, we concluded:

- Noise measurements should be made at the property line not the residence, especially since many Enfield residents use large portions of their property for various recreational purposes;
- Noise limits should be differentiated between night-time and day-time because the ambient sound levels vary significantly between night and day;
- Noise measurements should include limitations on infrasound as well as audible sound;
   and
- Using the NYDEC guidelines, noise limits should not exceed measurements above the local ambient noise level of 5-10 dB for audible sound.

# 7. Tompkins County recommendation:

ARTICLE IV - STANDARDS FOR WIND ENERGY FACILITIES

- .7) Page 29, Section 17B, Paragraphs 1 and 2, Setbacks. The setbacks included in this section would effectively ban large WTG in the Town, contrary to the stated intent of the law.

  Namely:
- There is no property within the Town of Enfield that would be allowed to be developed for Large WTG under the current setback proposal, as it is not possible to site a tower within the proposed setbacks from public, seasonal and limited use roadways in Enfield.
- There is no individual property within the Town of Enfield that would be allowed to be developed under the current setback proposal of 2,640 feet from property lines without the developer establishing agreements with all property owners within a given "block" in the Town.
  - We recommend that the following standards replace the requirements listed above.
- Large WTG Towers should be set back from lot lines 1.5 times the total height of the tower.
  - Towers should be set back from neighboring RESIDENCES 2 times the total height of the tower, unless the affected adjoining property owner agrees otherwise in writing.

In addition, establishing a standard setback from all Unique Natural Areas (UNAs) does not make sense as the distinctive characteristics of each UNA vary greatly, with some not being affected if located immediately adjacent to a wind turbine and others possibly requiring greater distances. The potential impact on nearby UNAs should be evaluated on a case by case basis as part of the SEQRA review process to determine appropriate setback requirements.

**REAC response:** We recommend a limited change to address the County's comments regarding setbacks from public, seasonal and limited use roadways.

To address the County's comment regarding the proposed setbacks from public, seasonal and limited use roadways, we recommend a minimum setback for Large WTG's from public, seasonal and limited use roadways of 2 times the Total Height of the WTG.

With respect to the County's comment that "there is no individual property within the Town of Enfield that would be allowed to be developed under the current setback proposal of 2,640 feet from property lines without the developer establishing agreements with all property owners within a given 'block' in the Town," we acknowledge that this is true. But we dispute that this equates to an effective ban on Large-Scale WEF's within Enfield. As the County points out, the developer will need to establish agreements with all property owners within a given "block" to meet the setback requirements which means that a developer will have to offer compensation that makes it worthwhile for those landowners to enter into agreement if the developer wants to piece together the property they need for the project. This may make the project more expensive but does not constitute a ban. This provision will require the developer to engage with non-participating landowners to make sure they are adequately compensated.

There are a number of justifications for the setback distance of 2,640 feet. First and foremost, setbacks are designed to provide safety zones for landowners (and others) to protect against bodily harm and property damage in the event something goes wrong with a WTG. The types of events that could occur include ice throw, blade throw, component separation and/or disintegration, turbine collapse, and fires.

Peer reviewed studies have shown that the potential safety zone for ice throw and blade throw could be quite large (i.e., up to 1,950 feet in the case of the GE 2.3MW-107 turbines proposed by the Black Oak Wind Farm). The German turbine manufacturer, Vestas, advices its workers to stay back at least 400 meters (~1,300 feet) from an operating turbine in its safety regulations. And, while GE's literature recommends much shorter setbacks from property lines (i.e., 1.1 times the blade length), it is specifically limited to vacant areas of land "where there is a remote chance of any future development or inhabitance during the life of the wind farm." Residents in Enfield use their property extensively for hiking, camping, hunting, and other recreational uses. They also frequently build secondary housing on their lands for family members and hunting lodges. Short setbacks such as the County is proposing effectively deprive non-participating landowners of the use of portions of their property with no compensation as a result of the risk of bodily harm and property damage.<sup>4</sup>

In addition to protecting residents from bodily harm and property damage, the setbacks serve as a backstop measure for enforcing the noise limitations under the law. Noise limits can be expensive and difficult to enforce, with complaints oftentimes dragging on for months and even years with unsatisfactory resolutions. Setbacks, on the other hand, are straightforward and simple to enforce as part of the project approval process. Based upon

<sup>&</sup>lt;sup>4</sup> Note that when Enfield adopted its 2009 Wind Law, the Tompkins County Department of Planning recommended that the setbacks be, among other things, *no less than about 725 feet from property lines.* 

work done in Enfield by a noise expert during the Black Oak Wind Farm project, a half-mile setback from property lines roughly equates to a noise measurement of 35 dBA at the property line which is in line with the noise limitations proposed in this law.

With respect to UNA's, we note that there are relatively few UNA's in the Town of which only Robert Treman Park and the Connecticut Hill Wildlife Management Area are material and the waiver provisions under the law can be used to modify or waive provisions with respect to the other UNA's, if necessary.

### 8. Tompkins County recommendation:

ARTICLE IV - STANDARDS FOR WIND ENERGY FACILITIES

8) Page 29, Section 17B. Setbacks. We note that the ordinance is silent on placement of Large-Scale Wind Energy Systems near streams. We recommend that individual Wind Turbine Generators be prohibited within 100 feet from the edge of perennial streams and 50 feet from the centerline of intermittent streams.

**REAC response:** We agree with this comment and recommend incorporating it into the setback requirements.

# 9. Tompkins County recommendation:

ARTICLE VIII - SMALL WTG

- 9) Page 51, Section 4A, Setbacks. We recommend that Setbacks from lot lines for Small WTG systems should be the total height of the installation plus 10 feet, unless the affected adjoining property owner agrees otherwise in writing.
- 10) Page 51, Section 4B, Noise. We recommend deleting this section, as we do not recommend establishing noise standards for Small WTG systems.

**REAC response:** For all the reasons outlined above regarding setbacks, we recommend no change. We point out that ice throw and blade throw distances are, in fact, an even larger concern with respect to smaller turbines because the controlling factor is tip speed and the tip speed of smaller turbines is faster than that of larger commercial turbines.<sup>5</sup> Therefore, we believe that 2 times the height of the turbine is a minimum distance for setbacks for Small WTG's.

With respect to the issue of noise standards, we acknowledge the County's concern regarding the application of these standards to Small WTG's but we are concerned about how to protect neighboring residents from the adverse impacts of noise. We are going to consult with a noise expert to see if there is a better way to address the noise issues with respect to Small WTG's that is less burdensome while still addressing health and safety issues. We will supplement our response shortly.

<sup>&</sup>lt;sup>5</sup> J. Rogers, N. Slegers, and M. Costello, "A method for defining wind turbine setback standards," Wind Energy, vol. 15, no. 2, pp. 289–303, Apr. 2011, and S. Evans, D. Bradney, and P. Clausen, "Unsteady structural behaviour of small wind turbine blades," The University of Newcastle, NSW, Australia, North American Wind Energy Academy 2015 Symposium.

The REAC offers the following responses to the County's comments regarding the proposed law, which are not formal recommendations under General Municipal Law 5239 -I, -m and -n:

## **Tompkins County Comment:**

#### ARTICLE I - GENERAL STATEMENT AND DEFINITIONS

A) Page 6, Definitions, LARGE WIND GENERATOR TURBINE or LARGE WTG. If the intent is to classify all of these types of projects as Type I Actions under SEQRA, we suggest that the Town clearly indicate in this section that it has complied with the requirements of SEQRA Regulations and has amended its Type I list. Section 617.14(f) of the SEQRA Regulations states, in part, "Every agency that adopts, has adopted or amends SEQRA procedures must, after public hearing, file them with the commissioner, who will maintain them to serve as a resource for agencies and interested persons."

**REAC response:** We agree with this comment from the County.

#### **Tompkins County Comment:**

#### ARTICLE I - GENERAL STATEMENT AND DEFINITIONS

B) Page 6, Definitions, RESIDENCE. This section states that a hunting camp is considered a RESIDENCE. Hunting camps are often temporary and easy to move among locations. We suggest that hunting camps either be deleted from this definition or that the definition clarify that residences should only include buildings that have received a building permit from the Town of Enfield.

**REAC response:** The Committee's recommendation is to revise the language to delete the phrase "...including, but not limited to, hunting camps, correctional institutions, hotels, hospitals, motels, dormitories, sanitariums, and nursing homes."

## **Tompkins County Comment:**

#### ARTICLE I - GENERAL STATEMENT AND DEFINITIONS

C) Page 6, Definitions, SENSITIVE RECEPTORS. We suggest clarifying the term "authorized" since we assume the town means either existing uses or uses for which a building permit has been issued by the Town of Enfield. The current definition could be interpreted as any location where a use may be permitted in the future.

**REAC response:** We recommend clarifying the definition by changing it to read "Locations at which residential, public and private recreational, educational or religious use of land or property is permitted under any law or laws (see below under Visual Impact Mitigation)." While we understand the County's concern, the use of this definition is limited to a requirement that curtailment technology be installed in any turbine to allow the developer to avoid shadow flicker at a Sensitive Receptor. This should include any future change in the use of property to prevent the imposition of an uncompensated easement on a non-participating landowner. Otherwise, a landowner may not be able to develop a portion of his or her property for future use due to unacceptable levels of shadow flicker. By installing the technology at the front end of the project, the developer/operator should be able to adjust the turbines to avoid shadow flicker at any point during the project life.

### **Tompkins County Comment:**

#### ARTICLE I - GENERAL STATEMENT AND DEFINITIONS

D) Page 7, Definitions, SITE. We do not understand the meaning of this definition and suggest the language be modified to clarify the intent. Specifically, some wording seems to be missing in the last sentence. "Any lot or parcel subject to a lease, easement, or other agreement relating to the siting or impacts of a WTG or a Wind Energy Facility shall not be considered, to the extent so applicable, based upon the terms of such lease, easement, or other agreement, for purposes of impact and permit analyses under this 2019 Local Law."

**REAC response:** To address the County's comment, we recommend deleting this sentence from the definition of SITE as the purpose of this language is unclear. It was carried over from the existing 2009 Wind Law.

#### **Tompkins County Comment:**

### ARTICLE I - GENERAL STATEMENT AND DEFINITIONS

E) The proposed local law does not state whether applicants would need to separately receive site plan approval from the Planning Board. Given the extent of the proposed WEF permitting process, we assume the Town's intent is that WEFs would not need to additionally comply with the town's Site Plan Review Law. We suggest this be clearly stated in the proposed local law.

**REAC response**: We generally agree with the County's comments. (But see the response to comment R below.)

#### **Tompkins County Comment:**

#### ARTICLE III - PERMITS AND PERMITTING PROCESS

F) Page 12, Section 1A12. Fire Protection Plan. The Tompkins County All-Hazards Mitigation Plan does not require any fire protection, emergency response, or similar type of plan for any proposed building or structure in Tompkins County. We suggest removing reference to that plan to avoid confusion.

**REAC response**: We agree with the County's comments.

# **Tompkins County Comment:**

#### ARTICLE III - PERMITS AND PERMITTING PROCESS

G) Page 14, Section 1B. In the sentence "Positive Declaration. If the Town Board determines in writing that the proposed Wind Energy Facility or any WTG therein may have a significant adverse impact on the environment the Town Board may issue a positive declaration of environmental significance." We suggest changing the second "may" to "shall" since, if the Town Board determines that the proposal may have a significant adverse impact on the environment, the Town is required to issue a positive declaration under SEQRA.

**REAC response**: We agree with the County's comments.

### **Tompkins County Comment:**

#### ARTICLE III - PERMITS AND PERMITTING PROCESS

H) Page 15, Section 1D, Road Use and Property Damage Agreement. We suggest deleting the words "personal" and "private" as the agreement would be between the Town and the developer, so privately-owned property would not be impacted.

**REAC response**: We agree with the County's comments.

### **Tompkins County Comment:**

#### ARTICLE III - PERMITS AND PERMITTING PROCESS

I) Page 22, Section 2, Paragraph E. The proposed law requires notification of all property owners within two miles of the boundary of each parcel of property on which each proposed WTG or Wind Energy Facility is located. We believe this is excessive, as it would mean notifying owners of property equivalent to over one-third the size of the entire town. We suggest notifying property owners within 600 feet of the proposal as currently provided for in the Town's Site Plan Review Law, supplemented by appropriate advertising in the Town's newspaper of record.

**REAC response**: We recommend no change. As the Black Oak Wind Farm project demonstrated, a proposed wind energy facility project can have a significant impact on the Town's finances as well as the potential to create community dissension and the potential to change the rural character of the Town of Enfield. Furthermore, there is some credible evidence that the impact of infrasound can be experienced over long distances. So it is important to cast a wide net in notifying Town residents. Given the potential impacts, the small added cost of notifying owners in a two mile radius is not unreasonable.

### **Tompkins County Comment:**

#### ARTICLE III - PERMITS AND PERMITTING PROCESS

J) Page 23, Section 2, Paragraph F, County Planning Board Notice. We suggest that text be amended as follows to clarify that notifying the County is the responsibility of the Town, not the applicant. "The Town shall give notice of the WEF project to the Tompkins County Planning Board when required by General Municipal Law 239-1, 239-m, and 239-n."

**REAC response**: We agree with the County's comment.

### **Tompkins County Comment:**

### ARTICLE III - PERMITS AND PERMITTING PROCESS

K) Page 23, Section 2, Paragraph G, SEQRA Review. As stated above, if the intent is to classify all of these. types of projects as Type I Actions under SEQRA, we suggest that the town clearly indicate in this section that it has complied with the requirements of SEQRA Regulations and has amended its Type I list.

Additionally, we suggest moving the reference to temporary Wind Measurement Towers to Article VII (Wind Measurement Towers), as this section deals with Large WTG.

Also, the subsection numbers (15, 18, 21) used are from the former version of the SEQRA regulations. The comparable numbers, which became effective on January 1, 2019, are (21), (24), and (27).

**REAC response**: We agree with the County's comments in the first and third paragraphs. While we appreciate the County's point in the 2<sup>nd</sup> paragraph, the Committee believes this clarification needs to remain in Article III, Section 2.G. since the first sentence refers to WEF permit applications which includes permit applications for temporary Wind Measurement Towers.

# **Tompkins County Comment:**

ARTICLE IV - STANDARDS FOR WIND ENERGY FACILITIES

L) Page 31, Section 19, Property Value Guarantee. This requirement to provide a guarantee of property value seems difficult to enforce and overly burdensome. We suggest removing this section.

**REAC response**: We recommend no change. The wind industry almost universally asserts that the construction of a wind energy facility will have little or no impact on the value of the adjoining lands. On the other hand, there are some studies that indicate that such a project could negatively impact the value of a landowner's property by as much as 25 - 40% (including a study of 11,369 property transactions over nine years in northern New York using a repeat-sales framework to control for omitted variables and endogeneity biases that shows that properties that are within ½ mile of a turbine results in price declines of approximately 11-18%). Given this uncertainty and the wind energy industry's assertion that any project will have little or no impact on property values, the Committee believes the burden of potential loss should rest with the developer and not with non-participating landowners with no control over the situation.

### **Tompkins County Comment:**

ARTICLE V - WAIVERS, VARIANCES, AND APPEALS

M) Page 33, Section 1D, Waivers. It is unusual for the Enforcement Officer to have the authority to revoke a waiver which was granted by the Town Board, and as such, we suggest that this section be changed to allow only the Town Board to revoke any waiver for reasonable cause.

**REAC response**: The Committee agrees with County's comment.

# **Tompkins County Comment:**

ARTICLE V - WAIVERS, VARIANCES, AND APPEALS

N) Page 33, Section 2C, Variances. It is unusual for the Enforcement Officer to have the authority to revoke a variance which was granted by the Town Board, and as such, we suggest that this section be changed to allow only the Town Board to revoke any variance for reasonable cause.

<sup>&</sup>lt;sup>6</sup> Values in the Wind: A Hedonic Analysis of Wind Power Facilities, by Martin D. Heintzelman and Carrie M. Tuttle, School of Business, Clarkson University, March 3, 2011.

**REAC response**: The Committee agrees with County's comment.

# **Tompkins County Comment:**

ARTICLE V - WAIVERS, VARIANCES, AND APPEALS

O) Page 33, Section 3, Appeals. There is no role for the Planning Board identified in the ordinance, so we suggest removal of the Planning Board from the list of decisionmakers in this section whose decisions can be appealed.

**REAC response**: The Committee agrees with County's comment.

### **Tompkins County Comment:**

ARTICLE VI - OPERATION, PERMIT REVOCATION, ABATEMENT, VIOLATIONS

P) Page 40, Article VI, Section 2B, Abandonment. This paragraph uses the term "site plan approval." We suggest this be changed to "WEF Permit issuance."

**REAC response**: The Committee agrees with County's comment.

### **Tompkins County Comment:**

ARTICLE VIII - SMALL WTG

Q) Page 50, Section 3B, Number. It is not clear what the words "and/or" refers to in this section. Is the limit one per acre, one per lot, or the greater or lesser of those two numbers? We suggest that this be clarified.

**REAC response**: To address the County's concern, we recommend changing the language to read "Only one Small WTG per lot shall be allowed."

#### **Tompkins County Comment:**

ARTICLE VIII - SMALL WTG

R) Page 52, Section 5D, Permit Review and Process. We are concerned with the approach to have permits for small-scale WTG be the sole responsibility of the Enforcement Officer given the standards in the ordinance. In particular, requiring the Enforcement Officer to judge the visual impact of proposed Small WTGs could be a problem.

In addition, the construction of a small WTG could trigger the need for a review under SEQRA. In fact, many such proposals would likely be considered Unlisted Actions under SEQRA. While that review can be conducted by the Code Enforcement Officer, the lack of procedures and policies in this section of the local law compared with the discussion of SEQRA in other sections could cause confusion among the applicant, the public, and future members of the Town's boards and staff. Also, requiring that the application be acted upon within 30 days may not be possible if a review under SEQRA is required.

We are also concerned that individual nearby property owners can request a meeting with the Enforcement Officer without any requirements for recording of any concerns that are raised and collection of appropriate evidence, as would be required in a public hearing setting. Such reviews are more properly conducted in a public setting. The Town may want to consider requiring the Enforcement Officer to hold public meetings to allow for such input where the applicant and any member of the public can be present.

**REAC response**: To address the County's comments, we recommend revising this section to require review of any Small WTG by the Planning Board pursuant to the Town's Site Plan Law, as modified by the wind law requirements.

# **Tompkins County Comment:**

APPENDIX B

S) Paragraph 2D in Appendix B refers to the Town Assessor. In Tompkins County, there are no Town Assessors, only a County Assessor. We suggest this paragraph be amended to replace references to "Town Assessor" with "County Assessor."

**REAC response**: The Committee agrees with County's comment.

Sincerely,

Michael F. Carpenter

Chair, Renewable Energy Advisory Committee