

3/23/2015

Ms. Murray,

Please find attached recommendations and comments from the Town of Bridgewater, NH relative to the Rules proposed on subject docket. We feel that these changes are needed to adequately address the concerns of our residents and taxpayers.

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## Decommissioning Recommended Rule(s):

*(Replace current language with language below)*

Site Rule 301.08 (a) (7) Include a decommissioning plan prepared by an independent, qualified engineer familiar with wind energy system decommissioning. The plan will provide for removal of all structures and restoration of the facility site with a description of sufficient and secure funding to implement the plan, which shall not account for the anticipated salvage value of facility components or materials, including the provision of financial assurance in the form of an irrevocable standby letter of credit, performance bond, or surety bond. Decommissioning would consist of the following:

- a. All turbines, including the blades, nacelles and towers, would be disassembled and transported off-site for reclamation and sale;
- b. All of the transformers would also be transported off-site for reuse or reclamation;
- c. The overhead power collection conductors and the power poles would be removed from the site;
- d. All underground infrastructure at depths less than four feet below grade would be removed from the site; and
- e. All underground infrastructure at depths greater than four feet below finished grade would be abandoned in place. Areas where subsurface components are removed would be filled, graded to match adjacent contours, and reseeded, stabilized with an appropriate seed and allowed to re-vegetate naturally.
- f. The decommissioning fund will be reviewed every five years to validate adequate funding. The fund will increase over time to account for inflation.
- g. The fund should be bankruptcy-remote to protect it against creditor claims in the event the Project encounters financial difficulty.
- h. If the Project fails to produce at least 65% of the output projected by the Applicant during any consecutive 12-month period, then a decommissioning review may be instituted at the discretion of the Committee.

### STATEMENT OF REASON:

These rules are consistent with the State of Vermont Public Service Board Wind Energy certificates, which have been approved. The orders are as follows: [Iberdrola's Deerfield Wind](#) (Page 91), [Sheffield Wind](#), [Kingdom Community Wind](#), [Georgia Mountain Wind](#) and Searsburg Wind projects. In particular, note the language, "**shall not account for the anticipated salvage value**" is consistent with the VT Orders for industrial wind plants.

The NH Legislature was very clear that decommissioning plans are very important to protect the State, aesthetically and financially, at the end of useful life of industrial wind plants, thus the reference in HB1602 and SB245. Per HB1602: II. For the adoption of rules, pursuant to RSA 541-A, relative to the siting of wind energy systems, the committee shall address the following: (7) Site decommissioning, including **sufficient and secure** funding, removal of structures, and site restoration.

## **Municipal Ordinances Recommended Rule(s):**

Site 301.09 Effects on Orderly Development of Region. Each application shall include information regarding the effects of the proposed facility on the orderly development of the region, including the views of municipal and regional planning commissions and municipal governing bodies regarding the proposed facility, **if such views have been expressed in writing' (including but not limited to Master Plans and Zoning Ordinances of host and abutting municipalities)** and the applicant's estimate of the effects of the construction and operation of the facility on:

### Supporting **STATEMENT OF REASON:**

NH RSA 162-H:16.IV(e) states: "Issuance of a certificate will serve the public interest.

NH RSA 162-H:16.IV(b) states, "The site and facility will not unduly interfere with the orderly development of the region with due consideration having been given to the views of municipal and regional planning commissions and municipal governing bodies."

The Site Evaluation Committee's draft rules dated January 30, 2015 has neglected to adequately address municipal input. Local governing bodies must be given "due consideration" in the SEC hearing process for siting an energy facility. Planning Boards across the state have assembled area specific Master Plans. NH RSA 674:2 "The purpose of the master plan is to set down as clearly and practically as possible the best and most appropriate future development of the area under the jurisdiction of the planning board, to aid the board in designing ordinances that result in preserving and enhancing the unique quality of life and culture of New Hampshire". The SEC's omission of any reference to Master Plans is a direct attempt to circumvent local input and is direct violation of serving the public interest.

Town zoning ordinances must also be adhered to while siting an energy facility. If a town has ordinances that identify specific siting guidelines, the SEC should in the public interest honor the intent of the ordinance. The currently proposed SEC rules do not cover all possible siting guidelines. Guidelines that are not covered by SEC rules, but have been enacted by a municipality should be given "due consideration" by the SEC to assure the public interest is being served. To name just a few town specific siting guidelines:

- 01) Steep slopes
- 02) Environmental hazards
- 03) Impacts on public services
- 04) Communication interference
- 05) Administration and associated costs

# IMPACT EASEMENT AGREEMENT Rules Recommendation

## PART Site 102 DEFINITIONS

Site 102.47 "Impact Easement" commonly referred to as a "Good Neighbor Agreement" means an agreement between a property owner (typically abutter) and wind turbine developer providing financial compensation in return for silence of complaints regarding items such as but not limited to: noise, low-frequency vibrations, visual pollution, shadow flicker, nighttime lighting (red strobe lights), TV interference, property devaluation.

Site 301.08 Effects on Public Health and Safety.

(a) For proposed wind energy systems:

(9) Identify any Impact Easement entered into with participating landowners, abutters or other persons to include name and address, tax map lot #. Applicant shall notify the SEC of additional Impact Easements entered into after the certificate has been granted. Such notifications shall be made part of the SEC public record.

Site 301.14 Criteria Relative to Findings of Unreasonable Adverse Effects.

(f) In determining whether a proposed energy facility will have an unreasonable adverse effect on public health and safety, the committee shall:

(2) For wind energy systems, apply the following standards:

d. Participating Landowners: The applicant's energy facility may exceed the sound, shadow flicker, and setback requirements set forth in a., b., and c. above with respect to any residence, occupied building, or other property if the owner thereof has agreed in writing to waive those requirements. The waiver of these requirements (Impact Easement) by participating landowners will be provided to the SEC for posting on the SEC website.

Site 301.17 Criteria Relative to Findings of Serving the Public Interest. In determining whether a proposed energy facility will serve the public interest, the committee shall consider:

(a) the impact of the Impact Easement on host town, abutting towns, impacted towns and the county with consideration for local ordinances and zoning, property tax abatements and orderly development.

### **Additional Considerations:**

Note that in employment law the government has put into place very specific actions that must be followed regarding the signing away of one's rights in the case of relinquishing age discrimination protection. The same should be true in this situation.

a) Any person who is requested to sign such an agreement must receive a 21-day signing decision period followed by a 7-day change of mind period during which time the person may fully rescind the agreement.

b) The agreement must encourage the person in writing to seek legal assistance prior to signing any such agreement.

c) In no case is an agreement to be established which violates in any manner the requirements of the New Hampshire Code of Administrative Rules.

**Statement of Reason:**

The signing away of one's rights is a significant decision. Laws are put into place for good reason and the act of a corporation buying away these rights is counter to their purposes. Putting people in the position of having no solution or alternatives when wind turbine developers violate rules or interfere with individual property rights and/or health is likely to result in unintended consequences, with a few recent examples identified below. **At a minimum, disclosure of these agreements should be required.**

Recent situations where Impact Easements have exacerbated financial and/or health issues:

- Glenmore (Brown County), Wisconsin - Duke Energy's Shirley Wind Farm signed many Good Neighbor Agreements with surrounding landowners. When the residents began to have health problems such as ear pain, ear pressure, headaches, nausea and sleep deprivation these agreements prevented those affected from having any outlet to resolve their issues. In October 2014 the Brown County Board of Health declared the Shirley Wind Farm a "human health hazard". The situation is still not resolved.
- The fiasco that occurred in 2014 with the Granite Reliable Wind Project where the impacted owners had signed a Good Neighbor Agreement and yet the NH Governor signed a relieving property owners of a portion of their tax burden, not knowing these property owners had already signed off on their rights by accepting a cash settlement protecting them from tax increases prior to the project application. The agreement called for "the strictest confidence". The mess left a multitude of hard feelings and consequences for the state and local governments. It got so out-of-hand the Coos County Delegation Chairman accused the landowners of being "bold enough to lie to our faces".

Additionally, it appears that the energy developments in question typically take place in rural environments where the local citizens may be of limited financial means. These agreements may take advantage of local residents by offering what may be perceived as large monetary amounts by the recipient but a mere pittance to the developer. By throwing around money to appease "the folks" the developer can save big money by avoiding true corrective measures thus working around the NH Code of Administrative Rules.

Other unintended consequences to consider, which may result from these agreements:

- Abatements – there is nothing to preclude a property owner that has signed an Impact Agreement to request an abatement on their property taxes, as is the case with a landowner in Lempster, due to noise, shadow flicker or property value impact. Unless disclosed, the town officials are unaware of this Impact Easement.
- Building Permits – if the towns zoning ordinance conflicts with the State's setback requirements, property owners may be denied a permit to build a structure on their property, as the Town would be unaware they have an Impact Easement agreement.

## Shadow Flicker Recommended Rule(s):

### PART Site 102 DEFINITIONS

Site 102.39 “Shadow flicker” means the alternating changes in light intensity that can occur when the rotating blades of a wind turbine are back-lit by the sun **or moon** and cast moving shadows on the ground or on structures.

Site 301.08 Effects on Public Health and Safety.

(a) For proposed wind energy systems:

(2): Include a shadow flicker assessment that identifies the astronomical maximum (worst case) as well as the anticipated hours per year of shadow flicker expected to be perceived at schools, day-care centers, health care facilities, residences, residential neighborhoods, places of worship, elderly care facilities, public gathering areas (outdoor and indoor), and roadways that fall within 1.5 miles of any turbine. Shadow flicker modeling will assume an impact distance of 1.5 miles from each of the turbines.

Site 301.14 Criteria Relative to Findings of Unreasonable Adverse Effects.

(f) In determining whether a proposed energy facility will have an unreasonable adverse effect on public health and safety, the committee shall:

(2) For wind energy systems, apply the following standards:

(b) Shadow Flicker Standard: Shadow flicker created by the applicant’s energy facility during operations shall not occur more than 30-hours astronomical maximum per year with an actual number of 8 hours per year and a limit of 30-minutes per day at schools, day-care centers, health care facilities, residences, residential neighborhoods, places of worship, elderly care facilities, public gathering areas (outdoor and indoor), and roadways that fall within 2 miles of any turbine. If Shadow Flicker limits cannot be met via project layout and setback distances, curtailment technology or other mitigation tools may be considered.

### STATEMENT OF REASONS:

- Shadow flicker can be completely eliminated by project layout, setback distances and curtailment technology. Shadow flicker is a health and safety concern that must be eliminated. To assume the relaxed standard of 30-hours per year of shadow flicker would be contrary to the public interest and the Committee would potentially expose New Hampshire residents to impacts with no good justification.

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- “Germany’s shadow flicker limits are referred to in a large number of government and wind energy association documents worldwide. However, few of these documents refer back to the original limits; they instead simply refer to other countries or associations who refer to the original German regulation. For this reason, **there is much confusion about what Germany’s shadow flicker regulations are**, with the regulations being portrayed as case law, federal law, state or local law, or simply a recommendation at the federal or state level. The maximum 30 minutes/day or 30 hours/year for worst case scenario, and the **8 hours/year actual amounts of shadow flicker are a nationwide requirement in Germany** as they are now part of the “Federal Emission Control Act (BLmSchG),” but have been used in case law and state and federal standards as well.” – from page 6 of German standard link below.

- German Standard: See page 6 of [International Review of Policies and Recommendations for Wind Turbine Setbacks from Residences: Setbacks, Noise, Shadow Flicker, and Other Concerns - Minnesota Department of Commerce: Energy Facility Permitting by Kathryn M. B. Haugen, dated October 19, 2011](#) from this document, “The maximum 30 minutes/day or 30 hours/year for worst case scenario, and the 8 hours/year actual amounts of shadow flicker are a nationwide requirement

in Germany as they are now part of the “Federal Emission Control Act (BLmSchG),” but have been used in case law and state and federal standards as well.”

- Danish Standard: See page 18 of [International Review of Policies and Recommendations for Wind Turbine Setbacks from Residences: Setbacks, Noise, Shadow Flicker, and Other Concerns - Minnesota Department of Commerce: Energy Facility Permitting by Kathryn M. B. Haugen, dated October 19, 2011](#) from this document, “the Danish Energy Agency recommends that no house be exposed to shadow flicker more than 10 hours per year.” “If the amount of shadow flicker exceeds the maximum recommended amount, the wind turbine owner may be required to place a timer on the turbines to shut them off during the times of the day subject to shadow flicker.”

## IMPACTED COMMUNITY Recommended Rule(s):

### PART Site 102 DEFINITIONS

**Site 102.48 “Impacted Community” means a municipality that is neither the host nor abutting town although will potentially be impacted by aesthetics, financially or due to health/safety concerns.**

Site 301.09 Effects on Orderly Development of Region. Each application shall include information regarding the effects of the proposed facility on the orderly development of the region, including the views of municipal and regional planning commissions and municipal governing bodies regarding the proposed facility, if such views have been expressed in writing, **(including but not limited to Master Plans and Zoning Ordinances of host, abutting or impacted municipalities)** and the applicant’s estimate of the effects of the construction and operation of the facility on:

- (a) Land use in the region, including the following:
  - (1) A description of the prevailing land uses in the host communities and communities abutting **and impacted by** the proposed facility; and
  - (2) A description of how the proposed facility is consistent with such land uses and identification of how the proposed facility is inconsistent with such land uses;
- (b) The economy of the region, including an assessment of:
  - (1) The economic effect of the facility on the host communities and communities abutting **and impacted** by the proposed facility;
  - (3) The effect of the proposed facility on State, **host, abutting and impacted community’s** tax revenues;
  - (4) The effect of the proposed facility on **host, abutting, and impacted communities** and regional real estate values;
  - (5) The effect of the proposed facility on tourism and recreation in the host communities, communities abutting the facility and other **impacted** communities in the vicinity of the facility; and

Site 301.15 Criteria Relative to a Finding of Undue Interference. In determining whether a proposed energy facility will unduly interfere with the orderly development of the region, the committee shall consider:

- (a) The extent to which the siting, construction, and operation of the proposed facility will affect land use, employment, and the economy of the **host town, abutting and impacted towns**, county or counties in which the facility is proposed to be located;

### STATEMENT OF REASON:

The scope of municipal consideration should NOT be limited to the host and abutting towns given the wide range of impact industrial wind facilities have due to their height and visibility for long distances. Any town that will incur impact, whether it be financial due to reduced property values or health if in close proximity for noise and/or infrasound, should be allowed to fully participate and have all impacts considered.

Cell tower permitting, with heights less than 200’, requires notification of all towns within a 20 mile radius of a tower. That alone should set precedent for providing all impacted towns to participate and be



considered during the evaluation process. Per document, "[Planning for Wireless Telecommunications – NH Office of Energy and Planning](#)"

"Part of this law requires regional notification of a proposed PWSF to every municipality within a 20-mile radius and the opportunity to comment at a public hearing. The applicant should be responsible for providing the list of municipal boards within the 20-mile radius of the proposed facility and the regional notification process should occur at the applicant's expense."

As an example, the previously proposed Wild Meadows wind project was slated to be sited in the towns of Alexandria, Danbury and Grafton. These towns would have been informed, allowed to fully participate and require all impacts to have been considered. Bridgewater would not have been a host town or an abutter, although it would likely have been financially impacted due to the aesthetic impacts of the turbines sitting atop very prominent ridgelines across the lake. Given the potential impact the project would have on the town, Bridgewater should have been invited to fully participate in the same manner as an abutting town.