September 17, 2015

David K. Wiesner, Staff Attorney N.H. Public Utilities Commission 21 South Fruit Street, Suite 10 Concord, NH 03301

Re: Docket 2014-04 – Site Evaluation Committee Draft Final Rules

Dear Mr. Wiesner:

Thank you for the opportunity to provide comments on the Draft Final Proposed Rules ("proposed rules"). The comments included below specifically relate to the impact the proposed rules will have on the wind energy industry. The legislative history and intent of RSA 162-H reflect support for renewable energy production, including wind. Some of the comments below seek further clarification. Others suggest revisions to conform with best practices in the wind industry to ensure public health and safety, and to mirror the intent of the legislature in promoting renewable energy production.

CONTENTS OF APPLICATION

The proposed rules, under Site 301.03(h), require that an application include information regarding the potential impacts of combined observation, successive observation, and sequential observation of energy facilities, in addition to providing information regarding cumulative impacts. However, this does not reflect what is required by statute. RSA 162-H:10-a provides that the committee must address "cumulative impacts to natural, scenic, recreational, and cultural resources from multiple towers or projects, or both." The additional requirement that an applicant must include information regarding combined observation, successive observation, and sequential observation of energy facilities, is overly burdensome, vague and would not provide any additional benefit in terms of making a compliance determination and goes beyond what the committee was charged with by statute.

AESTHETICS

The proposed rules require at least one set of photosimulations that represent winter season conditions. We propose that proposed Site 301.05(b)(7) be revised to require either winter photosimulations or, in the alternative, testimony from a visual and aesthetic expert discussing the differences in visibility and/or potential visual impact during different seasons.

To require that photosimulations be taken during the winter has the potential to significantly delay an applicant during the Site Evaluation Committee process, which is contrary to the intent of the legislature in developing this process. The Rule should provide an alternative in order to ensure that no additional delay will result. Proposed Site 301.05(b)(7) also requires that photosimulations be provided from a sample of private property observation points to the extent feasible. This requirement is not consistent with professional standards in the practice of producing visual impact assessments, and will not provide information that is helpful to the Committee in reaching a finding on the reasonableness of aesthetic impacts. We propose that this language be eliminated in order to ensure that professional standards used while performing visual impact assessments are upheld and disputes over whether using such private locations is feasible are eliminated.

The proposed addition to Site 301.05(b)(9) requiring an applicant to discuss "any alternative measures considered but rejected by the applicant" with respect to measures taken by the applicant to avoid, minimize and mitigate potential adverse effects of a proposed facility is unnecessary and will not lead to useful new information being provided to the Committee. The statute already provides clearly articulated guidance on what is required for an alternatives analysis. This addition to the rule goes beyond the scope of the Committee's authority and what is required under the statute.

DECOMMISSIONING FINANCIAL ASSURANCES

In the proposed rule, Site 301.08 (a)(7), the Committee sets forth a limited list of financial instruments that would be acceptable forms of assurance that an applicant will decommission a facility. The list provided is too restrictive as there are other forms of financial assurance that the Committee should consider, and may find acceptable in certain circumstances. We propose that Site 301.08 be modified to give the Committee the flexibility to consider alternative decommissioning assurances that achieve the same goal.

In addition, the proposed rule, Site 301.08, further imposes additional obligations solely on wind facilities that do not seem to relate directly to any distinction between wind facilities and other electric generating facilities. For example, under the proposed rule, wind facilities are required to include in their decommissioning plan information regarding the transport of all transformers off-site and the removal of overhead power collection conductors and power poles. However, these types of structures are not specific to wind facilities. Similarly, requiring only wind energy facilities to provide for the removal of all underground infrastructure at depths less than four feet below grade is an onerous requirement, is likely to cause more impacts and is not consistent with industry standards. Removal of underground facilities up to 2 feet below grade is more common, unless a component has the potential to cause contamination of some kind, which inert concrete, steel or buried electrical lines do not. The rule should be clarified to explain either why only wind facilities are required to provide this information, or alternatively, all electric generating facilities should be held to the same standard.

ORDERLY DEVELOPMENT OF THE REGION

Proposed Site 301.09 requires an applicant to provide master plans and zoning ordinances of the host community, abutting communities and any municipality or unincorporated place that is the subject of or covered by studies included with or referenced in the application. This requirement is overly burdensome and exceedingly difficult to ensure compliance with. Given the length of the typical application and the amount of studies included with the application, many of which may reference locations that are very distant from the proposed project and will have no impacts from the proposed project, this requirement is impractical and will lead to the generation of significant amounts of information that are not useful to the Committee. For example, if an economic impacts study is submitted by an applicant that references other towns or unincorporated places in New Hampshire in its analysis, it would not be useful to the Committee to have information on the zoning ordinances or master plans from such locations. There is ample opportunity during the proceedings for the Committee to request additional information from the applicant or the parties if it determines such information will assist in its evaluation of the proposal.

PUBLIC HEALTH AND SAFETY

The Committee has imposed a number of new requirements on wind energy systems with regard to sound monitoring and sound standards. While some of the additional requirements imposed on wind energy facilities may provide additional benefits, many do not conform with industry best practices to ensure public health and safety, or the statutory obligations. These deviations will not provide any additional benefit to the Committee, but will greatly increase the expense to the applicant.

Proposed rule Site 301.14(f)(2) should be clarified to explain that the use of microphone placement at least 7.5 meters is intended to refer to placement near occupied structures and not anywhere on the property. The latter would impose far too great a burden on an applicant without providing a measurable benefit to the Committee or the public. In addition, we would recommend revising the requirement that such measurements be required for property that is used "in whole or in part for permanent or temporary residential purposes." This requirement is overly broad and it is unclear what a property used "in part" for "temporary residential purposes" would include. In general, the inclusion of temporary residences or partial permanent residences is overly burdensome and goes beyond the scope of the Committee's obligation to determine compliance - we would recommend amending this requirement to apply to permanent residential structures and citing the applicable standard for such measurements which is ANSI S12.9-Part 3.

Under proposed rule Site 301.18(a)(2), it appears that there is a typographical error. Long-term unattended monitoring should be conducted in compliance with ANSI S12.9-1992/Part 2, rather than 992. In addition, the requirement that audio recording be performed while studying pre-construction conditions in order to remove transient sounds over a long term measurement period would add a significant expense without any corresponding benefit to the Committee. This type of data collection and manipulation is not required under S12.9 – Part 2 and likewise should not be included in the rules. The Committee is charged with ensuring that a new wind facility will not exceed 45 dBA during the day or 40 dBA at night. Audio recordings

during preconstruction background sound studies will not help the Committee determine compliance with this standard. It would be more appropriate if audio recording to remove transients were required during short-term (1-2 hours) post construction compliance monitoring, when it would be useful to determine if a transient loud noise was emanating from the facility or some other source. There is no similarly useful application in preconstruction sound studies and we recommend that Site 301.18 (a)(2) be amended to read "Long-term unattended monitoring shall be conducted in accordance with the ANSI S12.9- 1992/Part 2 standard."

The proposed rules further provide in Site 301.18(a)(4) that "sound measurements shall be omitted when the wind velocity is greater than 4 meters per second." However, Section 6.3(b) of S12.9-2013/Part 3 provides that up to 5 meters per second is acceptable. The standard applied in the rules should be consistent with Section 6.3(b) of S12.9-2013/Part 3. If the Committee feels a different standard should apply, then the Committee should articulate a reason for the deviation from the existing standard. In addition, the proposed rule further provides that a microphone will be placed at least 15 feet from any reflective surface. Again, S12.9-2013/Part 3 provides for placement at 7.5 meters, which is approximately 25 feet. The rules should be consistent with the required standard and, again, if the Committee has a reason for deviation, it should be clearly articulated.

The proposed rule, Site 301.18, requires A-weighted as well as C-weighted sound levels. The requirement to provide C-weighted sound levels should be removed. The sound standard that an applicant for a new wind facility is required to achieve is an A-weighted standard. C-weighted sound levels are not used in determining compliance with this standard and will not provide additional benefit to the Committee in determining whether an applicant will meet the standard. In addition, the cost associated with measuring C-weighted sound levels is significantly greater than the cost associated with measuring A-weighted sound levels, as more expensive monitors are required. This additional expense does not bring commensurate benefits to the Committee or the public, and will only create a more cumbersome review process.

Clarification is required for proposed rule Site 301.18(c). It is unclear what the intent is of asserting that the rule anticipates that any analysis shall include tonality of a batch of wind turbines and not just a single machine. If the intent is to require that a batch of turbines be considered, this should be more clearly articulated in the final rule. It is the role of the wind turbine manufacturers to provide sound power level data in accordance with the International Electrotechnical Commission (IEC) rules of testing. These rules include testing "batches" of wind turbines as per IEC 61400-14 to quantify the uncertainty in the sound level of that type of wind turbine. Further, in the section on sound modeling, the proposed rules provide that the sound modeling will include predictions at "all properties within 2 miles from the project wind turbines." Rather than set a specific distance in the rules, we would propose that the limit of evaluation should be tied to a sound level limit. For example, since the lowest applicable limit is 40 dBA, evaluations should be done only out to 40 dBA or some smaller increment slightly below 40 dBA. Performing additional analysis and presenting results well beyond what is required to clearly demonstrate compliance will not lead to new information that is useful to the Committee in performing its review.

The proposed rules, Site 301.18 (a)(4) and Site 301.18(e)(3) require that an anemometer shall be located within close proximity to <u>each</u> microphone. This is not currently the industry standard applied by acoustical engineers and is not required under current applicable standards. Imposing this additional requirement is unnecessarily burdensome on an applicant and does not provide a significant benefit to the Committee.

The proposed rule also provides that post-construction monitoring will involve measurements with the turbines in both operating and non-operating modes. The requirement that measurements be taken in non-operating modes in all cases is unnecessarily onerous. We would recommend that this requirement be revised to allow for elimination of measurements for the non-operating mode if the total measured sound levels are below the standard. For purposes of compliance, demonstration that the total sound level is below the standard should be sufficient and shutting down a facility should not be required.

The proposed Site 301.18(e)(7) requires post-construction monitoring surveys to be conducted within 3 months of commissioning and once during each season thereafter for the first year. This requirement is excessive and is unlikely to produce additional value or assistance to the Committee in making a compliance determination. Given this lack of benefit, the cost that would be incurred by the applicant is overly burdensome. We recommend that post construction monitoring be completed within one year of the commencement of commercial operations and that it include day-time and night-time measurements as well as measurements during the winter and summer. This captures all relevant periods to ensure compliance and additional studies should not be required.

In proposed Site 301.18(f)(5), we propose adding a definition of "tone." The provision should simply be revised to include that "tone" shall be defined in accordance with Appendix C of ANSI/ASA S12.9-2012/Part 3.

The final requirement in proposed Site 301.18(f)(6) that all complaints shall require field sound surveys is readily subject to abuse with no bounds or limitations on expenses that could be imposed on the applicant. We would recommend that this be revised to place some limit on the number of complaints for which an applicant will be required to perform field sound surveys.

We appreciate your work and the work of the Committee in the rulemaking process and also appreciate the opportunity to make these comments. Please do not hesitate to contact us if you have any questions regarding these comments.

Respectfully submitted,

Eolian Renewable Energy LLC 155 Fleet Street Portsmouth, NH 03801 Jack Kenworthy Chief Executive Officer