
February 23, 2015

**BY ELECTRONIC MAIL** (David.Wiesner@puc.nh.gov)

New Hampshire Site Evaluation Committee
c/o David K. Wiesner, Staff Attorney
N.H. Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, NH 03301

**Re: New Hampshire Site Evaluation Committee Rulemaking, Docket No. 2014-04**

Dear Mr. Wiesner:

The Appalachian Mountain Club submits the following comments on the proposed Site Evaluation Committee (SEC) rules governing the siting of energy facilities as set forth in the Initial Proposal of January 30, 2015. Our organization appreciates the work that you and the SEC have put forth in preparing these draft rules. However, it is our opinion that considerable changes are needed in order to make the proposed rules compliant with the intent of SB99, SB245, and HB1602.

The AMC has been an active participant in efforts to enact clearer criteria for the siting of energy projects for many years. We led the effort that in 2007 prepared the *Proposed Wind Power Siting Guidelines* currently posted on the SEC web site. We participated in and supported the legislative efforts that led to the enabling legislation for the current process noted above. We participated in last year's public stakeholder outreach process and the pre-rulemaking process earlier this year. As part of the former process, a senior AMC staff member was a member of the advisory group providing oversight to the consultants conducting the public outreach process. As part of the latter process, another senior AMC staff member served as co-leader of the aesthetics criteria workgroup. We thus have a very strong interest in the outcome of this rulemaking process and see it as critical to strengthening the state's ability to properly evaluate both the benefits and the impacts of energy generation and transmission projects.

We offer the following comments on specific aspects of the proposed rules.

## I. Comments on Criteria Relative to Findings of Unreasonable Adverse Effects

Our most significant concerns relate to section 301.14 of the proposed rules ("Criteria Relative to Findings of Unreasonable Adverse Effects"). SB99 requires that the SEC "*adopt rules, pursuant*

*to RSA 541-A, relative to criteria for the siting of energy facilities, including* ***specific criteria*** *to be applied in determining if the requirements of RSA 162-H:16, IV(b) and (c) have been met by the applicant for a certificate of site and facility*." The common use definition of criterion is "a standard, rule, or test on which a judgment or decision can be based." In many areas (particularly the sections on aesthetics and the natural environment) the proposed criteria fail, in part or whole, to meet this definition. For a number of review parameters, this draft merely lists the information that the SEC should consider, but provides no standard, rule or test as to how this information is to be assessed. Simply listing required application information does not constitute a standard against which an application may be judged in a reasonably transparent way, and does not meet the legislative intent of SB99.

<u>*A. Sections with draft language that meets the intent of SB99*</u>: Section 301.14(f)(2) (addressing sound, shadow flicker and setbacks for wind energy systems) sets clear standards that a facility must meet in order to receive a certificate and is consistent with the intent of SB99[1]. We recognize that not all issues are amenable to objectively defined standards, such as those for noise or shadow flicker, and those cases may require more subjective judgment of available evidence to determine whether or not the standard has been met. However, this does not eliminate the need to use an appropriate formulation for all criteria, so that the SEC can clearly articulate the basis for its decisions, and applicants and the public can understand the criteria on which the SEC will base its decisions.

<u>*B. Sections where the draft language needs refinement to meet the intent of SB99*</u>: In other sections the rules contain the concept of a criterion but must be stated in a different way to actually constitute a criterion. This is the case for all of the proposed criteria in Section 301.13 (governing financial, technical and managerial capacity) and some in Section 301.14. For example:

i. Section 301.13(a)(1) states, "*In determining whether an applicant has the financial capability to construct and operate the proposed facility, the committee shall consider: (1) the applicant's experience in securing funding to construct and operate energy facilities similar to the proposed facility*." However, formulated in this way it sets no standard that the applicant must meet. It would be more appropriate to state it as follows: "*For the committee to find that the applicant has the financial capability to construct and operate the proposed facility, the applicant must: (1) Demonstrate experience in securing funding to construct and operate energy facilities similar to the proposed facility*." Stated this way it sets a standard that the applicant must meet, and provides a clear basis for the decision that the committee must reach.

ii. Similarly, Section 301.14(b) (criteria relative to unreasonable adverse effect on historic sites) states: "*In determining whether a proposed energy facility will have an unreasonable adverse effect on historic sites, the committee shall: (1) Consider the nature and significance of the historic and archaeological resources identified by the*

[1] Our comments on Sections 301.14(f)(2) (sound, shadow flicker and setbacks) and 301.13 (financial, technical and managerial capacity) are intended solely to address how the criteria are structured in the proposed rules. We were not engaged in the prerulemaking discussions on these issues and our comments are not intended to convey any position on the substance of these criteria.

*applicant; (2) Consider the effectiveness of the measures proposed by the applicant to avoid, minimize, or mitigate unreasonable adverse effects on historic and archaeological resources; and (3) Consider the status of the applicant's consultations with the New Hampshire Division of Historical Resources and, if applicable, the federal lead agency."* It would be more appropriate to state it as follows:

"*For the committee to find that the proposed facility will not have an unreasonable adverse effect on historic sites, the record must demonstrate that the proposed facility (1) would not be a prominent and inharmonious intrusion on the nature and significance of the historic and archaeological resources identified by the applicant, and (2) utilizes the best practical measures to avoid, minimize, or mitigate unreasonable adverse effects on historic and archaeological resources as determined in consultation with the New Hampshire Division of Historical Resources and, if applicable, the federal lead agency*.

iii. Likewise, Section 301.14(c) (criteria relative to unreasonable adverse effect on air quality) states: "*In determining whether a proposed energy facility will have an unreasonable adverse effect on air quality, the committee shall consider the determinations of the New Hampshire Department of Environmental Services with respect to applications or permits identified in Site 301.03(d) and other relevant evidence submitted pursuant to Site 202.24."* This could be more appropriately stated as follows:

"*For the committee to find that the proposed facility will not have an unreasonable adverse effect on air quality, the record must demonstrate that the proposed facility has met determinations of the New Hampshire Department of Environmental Services with respect to applications or permits identified in Site 301.03 and other relevant evidence submitted pursuant to Site 202.24*."

iv. Finally, Section 301.14 (d) (criteria relative to unreasonable adverse effect on water quality) states: "*In determining whether a proposed energy facility will have an unreasonable adverse effect on water quality, the committee shall consider the determinations of the New Hampshire Department of Environmental Services, the United States Army Corps of Engineers, and other state or federal agencies having permitting or other regulatory authority, under state or federal law, to regulate any aspect of the construction or operation of the proposed facility, a copy of the application for the agency's review as described with respect to applications and permits identified in RSA 162-H:7, IV Site 301.03(d), and other relevant evidence submitted pursuant to Site 202.24*." It would be more appropriate to state it as follows:

"*For the committee to find that the proposed facility will not have an unreasonable adverse effect on water quality, the record must demonstrate that the proposed facility has met the determinations of the New Hampshire Department of Environmental Services, the United States Army Corps of Engineers, and other state or federal agencies having permitting or other regulatory authority, under state or*

*federal law, to regulate any aspect of the construction or operation of the proposed facility, as described with respect to applications and permits identified in RSA 162-H:7, IV Site 301.03(d), and any other relevant evidence submitted pursuant to Site 202.24*."

*C. Sections where the draft language fails to meet the intent of SB 99*: All criteria should be formulated in a similar fashion. They should clearly state a standard that the applicant must meet, recognizing that some standards will not be objectively or quantitatively defined and will require the committee to exercise a degree of qualitative judgment as to whether the record demonstrates that the standard has been met. Only if stated in this way will the criteria meet the intent of SB99, which was to provide greater guidance as to what level of impacts are and are not acceptable in the siting and development of energy facilities. As currently stated, sections 301.08(a) and (e) (governing aesthetics and the natural environment) do not constitute criteria as that term is generally understood and require full reconsideration.

i. Section 301.14(a) (criteria relative to unreasonable adverse effect on aesthetics)

Items (1) through (5) in this section merely set forth factors the committee should consider. While these are important factors to consider, they provide no standards for judging the acceptability of a proposed project. Items (6) through (8) contain the concepts of criteria, but do not articulate a clear standard that must be met.

We propose the following minimum criteria for this section[2]:

Site 301.14

(a) For the committee to find that the proposed facility will not have an unreasonable adverse effect on aesthetics, the record must demonstrate that the proposed facility:

(1) would not be a prominent and inharmonious feature of a landscape in which existing human development is not already a prominent feature as viewed from affected scenic resources of high importance or sensitivity;
(2) would not offend the sensibilities of a reasonable person during daytime or nighttime periods; and
(3) utilizes the best practical measures to avoid, minimize, or mitigate unreasonable adverse effects on aesthetics.
(4) In making its finding, the committee shall consider:
   i. The existing character of the area of potential effect in the host community and communities abutting or in the vicinity of the proposed facility;
   ii. The significance of affected scenic resources and their distance from the proposed facility;

[2] Please note that the criteria proposed for sections 301.14(a), 301.14(e) and the public interest finding (later in this letter) are not intended as the sole factors that should be considered, but represent the minimum criteria that we believe should be met by a proposed facility. It may be appropriate to include other criteria in the rules, and the rules should make clear that the committee has the authority to consider other factors not specifically listed.

iii. The extent, nature, and duration of public uses of affected scenic resources;
iv. The scope and scale of the change in the landscape visible from affected scenic resources; and
v. The evaluation of the overall visual impacts of the facility as described in the visual impact assessment submitted by the applicant and other relevant evidence submitted pursuant to Site 202.24.

ii. Section 301.14(e) (criteria relative to unreasonable adverse effect on the natural environment)

This section contains no criteria as the term is commonly understood, and consists primarily of a list of information that the committee shall consider. It contains no standards that a proposed facility must meet or on which the committee can base a decision.

We propose the following minimum criteria for this section:

Site 301.14
(e) For the committee to find that the proposed facility will not have an unreasonable adverse effect on the natural environment, the record must demonstrate that the proposed facility:

(1) would not reduce the likelihood of persistence of a rare plant species within the ecological subsection in which the proposed facility is located;
(2) would not disturb a rare or exemplary natural community;
(3) would not eliminate, fragment or degrade critical wildlife habitat or a significant habitat resource utilized by a significant wildlife species;
(4) would not create a high risk of mortality to migrating or resident terrestrial or aquatic wildlife species that cannot be acceptably limited through the application of best practical measures;
(5) if a wind energy facility, is not located within 0.5 miles of a peregrine falcon or golden eagle aerie or active bald eagle nest, within 1.5 miles of a known bat maternity/nursery colony or hibernaculum, or within 0.25 miles of a known common nighthawk nest site;
(6) utilizes the best practical measures to avoid, minimize, or mitigate unreasonable adverse effects on aesthetics; and
(7) provides for post-construction monitoring, reporting and adaptive management as necessary to address potential adverse effects that cannot reliably be predicted at the time of the application.

**II. Comments on other sections of the proposed rules**

A. Site 102 (Definitions)

- The phrase "subject to limitations in Site 301.05" should be removed from the definition of "Area of potential visible effect". While the distance limits in Site 301.05 may be

appropriate as guidelines for conducting the visual impact assessment, the rules must not establish a firm limit beyond which aesthetic impacts are not to be considered. See our comments on Site 301.05 below for additional discussion.

- The definition of "best practical measures" should be strengthened by 1) making clear that these measures can include off-site measures (such as land conservation) to compensate for impacts, 2) making clear that these measures include not only technology but also operational procedures, and 3) making clear that these measures apply to all aspects of the proposed facility from siting to operation. We propose the following definition:

  "Best practical measures" means available, effective and economically feasible on-site or off-site methods or technologies used during siting, design, construction and operation of an energy facility that control or reduce to the lowest practical level known or anticipated adverse impacts of the facility."

- The definition of "Key observation point" needs to be revised. As written the three factors must coincide at a single point for that point to be considered a "key observation point". This will not always be the case. A viewpoint from which a project is prominently visible may be readily accessible and receive a high level of public use, but it may not be the point that receives the highest level of public use or the point from which the facility would be most visible. There may also be viewpoints (such as mountain summits) that may not be considered to be easily accessible, but which are nonetheless critical observation points. We propose the following:

  "Key observation point" means a viewpoint that receives regular public use and from which the facility would be prominently visible.

- We have two concerns about the definition of "scenic resources":

  – The only consideration given to lakes, ponds and rivers is in the phrase "*lakes, ponds, rivers, parks, and other tourism destinations recognized by the New Hampshire Division of Travel and Tourism as having scenic quality and to which the public has a legal right of access*". We are not clear what constitutes "recognition" by the NHDTT. While the department web site (www.visitnh.gov) has a section devoted to "Lakes, Beaches & Water Fun", there is no specific mention of scenic values and no listing of lakes, ponds and rivers noted for scenic quality. We propose that "lakes, ponds and rivers that possess a scenic quality" should be listed as a separate category.

    We also feel strongly that the reference to the NHDTT should be deleted from the rules. NHDTT is not a regulatory or resource management agency, and the department web site does not provide a complete or consistent assessment of scenic values. Resources listed on the web site that are clearly valued for their scenic quality (such as "scenic drives and rides") should be specifically included in the definition.

- The definition should include "properties listed on the state or national register of historic places for which the scenic character of the surrounding landscape is an important component of the historic value of the property."

- We also suggest that the phrase "to which the public has a legal right of access" be included at the beginning of the definition in a way that makes clear that it applies to all scenic resources, thus avoiding the need to repeat it multiple times in the definition.

B. Site 301.03 (Contents of Application)

- 301.03(c)(6) (legal access and control). The phrase "or the ability to acquire control of" should be deleted. ("*Evidence that the applicant has a current right of legal access to and control of ~~or the ability to acquire control of~~ the site, in the form of ownership, ground lease, easement, option, or other contractual rights or interests*.") It is not clear what is intended by this phrase. In theory any party has the ability to acquire control of any site, but whether that control is obtained should not be left undetermined. The legal (not the potential) right to use the proposed site should be clearly established in the application.

- 301.05 (visual impact assessment).

  Section 301.03(i)(1)(d) sets forth the distance to which the visual impact assessment shall extend for wind energy facilities and transmission lines. We believe that these should be specified as the minimum distance to which the VIA should extend, not the maximum, by using language such as "shall extend to *a minimum of* a 10-mile radius" or "*at least* a 10-mile radius". There are situations in which the VIA should extend beyond the specified distances due to the size of the facility, the sensitivity of the viewpoint or the character of the landscape. The rules should be clear that analysis of these particularly sensitive situations should be included in the VIA. (For example, one view of the proposed Northern Pass transmission line in the White Mountain National Forest from the Appalachian National Scenic Trail on South Kinsman Mountain would be from a distance of 3 to 5 miles to further than 10 miles. In such cases the full impact of a project on the view should be evaluated and the evaluation should not be truncated by an arbitrary distance.)

  In its 2007 report *Environmental Impacts of Wind-Energy Projects* the National Academy of Sciences set forth guidance for assessing the aesthetic impact of such projects (Box 4-1, page 147):

  > The size of the area for analysis may vary from location to location depending on the particular geography of the area and on the size of the project being proposed. Modern wind turbines of 1.5-3 MW can be seen in the landscape from 20 miles away or more (barring topographic or vegetative screening), but as one moves away from the project itself, the turbines appear smaller and smaller, and occupy an increasingly small part of the overall view. The most significant impacts are likely to occur within 3 miles of the project, with impacts possible from sensitive viewing areas up to 8 miles from the project. At 10 miles away the project is less likely to result in significant impacts unless it is located in or can be seen from a particularly sensitive site or the project is in an area that might be considered a regional focal point. Thus, a 10-mile radius provides a good basis for analysis including viewshed mapping and field assessment for current turbines. *In some landscapes a 15-mile radius may be*

*preferred if highly sensitive viewpoints occur at these distances, the overall scale of the project warrants a broader assessment, or if more than one project is proposed in an area.* [italics added]

The report notes that the assessment was based on turbines commonly used at the time (generally under 400 feet tall), yet even then the report noted that an assessment radius of greater than 10 miles may be warranted. However, since the time of the NAS report wind turbines have continued to increase in size. The installed turbines at the Lempster, Granite Reliable and Groton projects are between 395 and 425 feet tall with rotor diameters under 300 feet. In contrast, the turbines proposed for use in the Antrim and Wild Meadows projects were/are almost 500 feet tall with rotor diameters of around 375 feet. The Maine Department of Environmental Protection is currently considering an application for the use of turbines that would be 591 feet tall, and turbines over 700 feet tall are currently available or in development.

The distance limits in this section are appropriate as a starting point for conducting visual impact analyses. However, larger turbines will be visible at greater distances. Given the ever-increasing size of wind turbines, the cultural and economic significance of the state's scenic landscape, and the high importance and sensitivity of some viewpoints, there is a clear need for the SEC to retain the ability to require an assessment of visual impacts beyond these limits if circumstances warrant. It would also be extremely detrimental to the committee's ability to adequately evaluate the aesthetic impacts of proposed projects for the rules to specifically limit consideration of visual impact to these distances, as is done by the current definition of "area of potential visual effect."

- The revised purpose section of NH RSA 162-H includes "private property" as being potentially affected by energy facility development. However the proposed requirements for the VIA give no consideration to assessing aesthetic impacts on private property (primarily residential areas), though information on potential impacts to private property is required for noise and shadow flicker. While this is not an issue that we have raised in the past, it was a major topic of discussion for the aesthetics workgroup during OEP's pre-rulemaking public stakeholder process. This omission is likely to be of high concern for many citizens who actively participated in this process.

- Site 301.16(a) requires the committee to consider cumulative impacts, yet there are no requirements that the application include an assessment of cumulative impacts. It is thus not clear on what information the committee would base its decision. Cumulative effects result from spatial (geographic) and temporal (time) crowding of environmental perturbations. The rules should include a requirement that the application include a cumulative impacts assessment. Guidance on conducting cumulative impacts in federal environmental analysis processes already exist (e.g. Considering Cumulative Effects Under the National Environmental Policy Act, Council on Environmental Quality, January 1997 (http://energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-CEQ-ConsidCumulEffects.pdf ) and would be applicable for these rules as well.

- 301.08(a)(7) (decommissioning plan). We support this section, particularly the requirement that salvage value not be included in determining the size of the decommissioning fund.

C. Public Interest

- NH RSA 162-H:16.IV(e) requires the committee to make a finding relative to the public interest, and section 301.03(h)(6) of the proposed rules includes a requirement that the application include "information describing how the proposed facility will be consistent with the public interest." Though stipulated by Senate Bill 245, the proposed rules do not include criteria relative to this finding, an omission that should be addressed. We propose the following be included as criteria for the public interest finding:

    (1) Whether the net environmental effects of the facility, considering both beneficial and adverse effects, serve the public interest.
    (2) Whether the net economic effects of the facility, including but not limited to costs and benefits to energy consumers, property owners, state and local tax revenues, employment opportunities, and local and regional economies, serve the public interest.
    (3) Whether construction and operation of the facility will be consistent with federal, regional, state, and local policies.
    (4) Whether the facility as proposed is consistent with municipal master plans and land use regulations pertaining to (i) natural, historic, scenic, cultural resources and (ii) public health and safety, air quality, economic development, and energy resources.
    (5) Such additional public interest criteria as may be deemed pertinent by the committee.

We appreciate your consideration of our comments.

Sincerely,

Susan Arnold

Susan Arnold
Vice-President of Conservation