

THE STATE OF NEW HAMPSHIRE
SITE EVALUATION COMMITTEE

Docket No. 2015-02

APPLICATION OF ANTRIM WIND ENERGY, LLC
FOR A CERTIFICATE OF SITE AND FACILITY

POST HEARING MEMORANDUM OF COUNSEL FOR THE PUBLIC

Counsel for the Public, Mary E. Maloney, by her attorneys, the Office of the Attorney General, hereby submits this Post-Hearing Memorandum.

I. Background

In January 2012, the Petitioner, Antrim Wind Energy, LLC (“AWE”) first applied for a certificate of site and facility for a wind energy project in Antrim. (“Antrim I”).¹ In that docket, the Committee issued a decision after holding eleven days of evidentiary hearings, hearing from 39 witnesses, considering more than 260 exhibits, along with oral and written statements from interested members of the public.² After three days of deliberations, the Committee denied AWE’s request for a certificate of site and facility on the basis that the project was deemed to have an unreasonable adverse impact on the scenic quality and resources of the surrounding area.³

A little over a year after the Committee issued its final ruling denying the 2012 Project, AWE petitioned the Committee to take jurisdiction of the current project that was reconfigured to eliminate turbine #10 and its associated infrastructure, reduce the height of turbine #9 from

¹ See, 1/31/12, *Application of Antrim Wind Energy, LLC for a Certificate of Site and Facility*, Site Eval. Comm., No. 2012-01.

² *Id.*, 9/10/13, Order on Pending Motions.

³ 5/12/13 *Decision and Order Denying Application for Certificate of Site and Facility*, Site Eval. Comm. No. 2012-01, pp. 50-51.

492 feet to 446.2 feet and reduce the height of turbines 1 – 8 from 492 feet to 488.8 feet.⁴ In addition, the Acciona turbines were being replaced with Siemens SWT 3.2/113 direct drive turbines with a nameplate capacity of 3.2 MW, giving the Project a total nameplate capacity of 28.8 MW. *Id.* In the jurisdictional docket, the Committee noted that Mr. Kenworthy, on behalf of AWE, testified that the reduction in height of Turbines 1 – 8 did not materially change the Facility’s effects on aesthetics, but Kenworthy argued that all of the impacts of the previously proposed facility would be reduced as a result. *Id.* In addition the Committee found the new project would include mitigation measures that increased the conservation land from 808 acres to 908 acres including the area surrounding turbines 5 – 8, a one-time payment of \$40,000 to the town of Antrim providing for revenue to the Town of Antrim for the enhancement of recreational activities and aesthetic experience at Gregg Lake, and a Land Conservation Funding Agreement with the New England Forestry Foundation (“NEFF”) that grants \$100,000 to NEFF to acquire new permanent conservation lands in the general region of the Project. *Id.*⁵

While the Committee entertained evidence as to whether the changes to the current project were material or substantial enough to change their determination that the project posed an unreasonable adverse impact to the aesthetics of the region, ultimately it determined that the question of whether the differences were “material enough to require a different result or even to survive claims of issue preclusion or *res judicata* cannot be determined on this record because [the Committee] does not have a complete application before [it].”⁶

⁴ See, 9/29/15 Jurisdictional Decision and Order, *Petition for Jurisdiction*, Dkt. #2014-05, p. 7.

⁵ The Committee also found that AWE included a Payment in Lieu of Taxes (PILOT) agreement with the Town of Antrim providing for revenue for the town for the first 20 years of the project. *Id.* However, the PILOT agreement was part of the 2012 proposal and it was not offered in mitigation of aesthetic impacts. See, 4/25/13, Decision and Order Denying Application for Certificate of Site and Facility, Site Eval. Comm., No. 2012-01, p.16.

⁶ See, 9/29/15 Jurisdictional Decision and Order, *Petition for Jurisdiction*, Dkt. #2014-05, p. 38.

II. Summary of Argument

Counsel for the Public is required to represent the public in seeking to protect the quality of the environment and in seeking to assure an adequate supply of energy. Given this statutory mandate, Counsel for the Public's role is to examine whether a project strikes an appropriate balance of environmental impacts versus the energy it will produce. Counsel for the Public retained two independent visual impact experts to evaluate the visual effects of the project. In addition, other parties retained experts to examine visual effects and noise effects. The Committee in this docket held 13 days of hearings, heard from 45 witnesses, and reviewed several hundred exhibits. In addition the Committee heard from and received public comments from over 100 citizens.

Even though AWE has made some changes to the turbine configuration, it still proposes to construct nine of the highest self-supporting structures in the State. The Sieman's turbines that AWE proposes to use have been installed elsewhere⁷ but the energy that they will produce is uncertain and in any case a modest amount, even under AWE best estimates. When looking at the project's cost versus benefits one has to consider that AWE has entered into conservation agreement guaranteeing the Project will be dismantled in 50 years. AWE would suggest that some of the harms caused by the project will be temporary in nature. Counsel for the Public recommends that the Committee not entertain such arguments regarding the temporary nature of unreasonable adverse impacts. If the Committee were to so conclude it could be creating a slippery slope for future projects that may result into the inquiry into adverse impacts being rendered meaningless. Moreover, if the adverse impacts caused by the project are to be considered temporary, then, so too, are the energy and/or environmental benefits of the project.

⁷ Tr. Day 2 PM, 9/15/16, p. 28.

Given the uncertain and modest amount of energy the project may produce these temporary benefits do not outweigh the serious and permanent harms caused by the project.

There are several areas where it does not appear that AWE has met its burden. These areas will be addressed within with appropriate record cites. As it concerns visual impacts, the evidence in the record demonstrates that the current project has not substantially changed such that a different outcome is warranted from the 2012 Docket. Recent changes to the Committees governing statutes⁸ do not serve to abrogate the doctrines of claim *res judicata* (claim preclusion) or *collateral estoppel* (issue preclusion) and the Committee must consider its prior rulings in the context of this case. The purpose of these doctrines is to support, ensure and preserve judicial economy and integrity, that purpose is applicable to administrative adjudicatory hearings as well.

However, independent of the doctrine of *res judicata*, or *collateral estoppel*, the evidence presented to the Committee requires that the same determination be made: to wit, that the AWE has not met its burden that the project will not have an unreasonable adverse impact on the aesthetics that cannot be mitigated.

AWE has made some progress regarding Financial, Managerial and Technical Ability, from the Antrim I docket; however, certain questions remain about the untested safety equipment proprietary to Sieman's, and service of those systems potentially by some unknown entity once the initial two year Service and Maintenance Agreement expires. There are also a number of outstanding issues with regard to the Decommissioning Plan. Regarding the Orderly Development of the Region, the evidence demonstrates an incomplete real estate analysis by AWE's expert, and other deficiencies that call into question whether AWE has met its burden

⁸ Under RSA 162-H:10, III The committee shall consider, as appropriate, prior committee findings and rulings on the same or similar subject matters, but shall not be bound thereby.

in this regard as well. This memorandum also address proposed conditions that AWE has submitted to address noise and shadow flicker at future structures.

III. Argument

- A. AWE Has Not Met Its Burden to Show That The Project Will Not Have An Unreasonable Adverse Impact On Aesthetics
 - a. The Current Project is not Substantially or Materially Different from the Project Proposed in Antrim I; As Such the Doctrine of Res Judicata Bars Re-litigation of this Matter

Under RSA 162-H:16, AWE must establish that the site and facility will not have an unreasonable adverse effect on aesthetics, historic sites, air and water quality, the natural environment, and public health and safety. RSA 162-H:16, IV (c). See also, Site 202:19.

(b). As it concerns aesthetic, the Committee is required to consider the following criteria in making a determination as to whether the project will have an unreasonable adverse effect on aesthetics: (1) the existing character of the area of potential visual impact; (2) the significance of the scenic resources and their distance from the proposed facility; (3) the extent, nature and duration of public uses of affected scenic resources; the scope and scale of the change in the landscape visible from affected scenic resources; (5) the evaluation of overall daytime and nighttime visual impacts of the facility as described in the visual impact statement submitted by the applicant and other relevant evidence submitted pursuant to Site 202:24; (6) the extent to which the proposed facility would be a dominant and prominent feature within a natural or cultural landscape of high scenic quality or as viewed from scenic resources of high value and sensitivity; and (7) the effectiveness of measures proposed by the applicant to avoid, minimize or mitigate unreasonable adverse effects on aesthetics and the extent to which such measure represent best practical measures. Site

301.14.

As noted, Counsel for the Public retained two independent visual impact experts, each of whom analyzed the visual impacts of the projects. Jean Vissering, a well-qualified landscape architect has over thirty years of experience in practicing and teaching landscape architecture.⁹ Her experience includes many different wind projects around New England and New York.¹⁰ She has prepared and published methodologies for review and planning of wind energy projects for the National Academies of Science, the U.S. Department of Energy, and the Vermont Public Service Board.¹¹

Ms. Vissering testified in Antrim I that the 10 turbine project would have an unreasonable adverse effect on aesthetics, and the Committee relied on her report and testimony in making its decision to deny AWE a certificate for site and facility.¹² In the 2014 jurisdictional docket, Ms. Vissering analyzed the reconfigured turbine array and found that the:

[T]he primary difference between the two projects is that Turbine # 10 would be removed and Turbine # 9 would be slightly less visible but its height would be still 50 feet taller than the Lempster turbines. While the lower height obscures the nacelle from some vantage points, it will still be quite intrusive when observed from others. Turbines # 9 and #10 were particularly egregious due to their proximity and #10's location from a very prominent peak, but the impacts to the Sanctuary were also due to the impacts resulting from very large turbines visible from all three of the Sanctuary's prime destinations ... The 328 foot met tower is also likely to be visible. ... Views of the roads and clearings would be visible along the project ridge and visible from off-site viewpoints including those within the Sanctuary. They exacerbate aesthetic impacts by interrupting the continuous forest cover. The removal of turbine #10 would not change the resulting aesthetic impacts. As noted by the SEC, added land protection would not materially contribute to the mitigation of aesthetic impacts.

⁹ See *Application of Antrim Wind Energy, LLC for a Certificate of Site and Facility*, Site Eval. Comm., No. 2012-01, Exhibit PC-1, Appx. B; Tr. Day 7, AM at 18-20.

¹⁰ *Id.*, Exhibit PC-1, Appx. B (resume listing over two full pages of work experience, including wind project such as Lowell Wind, Kibby, Georgia, Deerfield, Granite Reliable, & Reddington/Black Nubble); Tr. Day 7, AM at 19.

¹¹ *Id.*, Exhibit PC-1, at 1 and Appx. B; Tr. Day 7, AM at 145-46; Exhibit AWE-34.

¹² *5/12/13 Decision and Order Denying Application for Certificate of Site and Facility*, Site Eval. Comm. No. 2012-01, pp. 50-51.

The changes would result in only minimal differences from other viewing point in the region. From Gregg Lake and Meadow Marsh it appears that one less turbine would be visible. Even with the minimal reduction in turbine height (3.2 feet) proposed by the petitioner, the turbines would still be over 100 feet taller than those used in the Lempster Wind Project. From sensitive viewpoints in the surrounding area, the scale, appearance and impacts of the project would remain virtually identical to the previously proposed project.¹³

Ms. Vissering summarized her findings regarding the differences between Antrim I and the current project in the following chart:

Comparison of Project Features¹⁴

Project Characteristic	SEC2012-01 Project	SEC2015-02 Petition
Number of Turbines	10	9
Turbine Heights	All turbines: 492'	Turbine 9 = 446.2' (45-foot reduction) Turbines 1-8= 488.8' (3.2-foot reduction)
Visibility of Project from Significant Resources	Willard Pond Bald Mountain Goodhue Hill Gregg Lake Meadow Marsh Pitcher Mountain Franklin Pierce Reservoir (Jackman) Robb Reservoir Island Pond Highland Lake Nubanusit Pond Black Pond	No Views from Nubanusit Pond
Visibility of Road and Clearing at Turbine 9 and between Turbines 5 and 6	Yes	Yes

¹³ 4/14/15 Pre-filed Testimony of Jean Vissering *Petition for Jurisdiction*, Dkt. #2014-05, p. 8 - 10

¹⁴ *Id.* at pp. 9- 10.

Off Site Visibility and Impacts of Roads and Clearing Generally	Not Assessed	Not Assessed
Land Protection	808 Acres	908 Acres
Miles of Roadway	4 miles (new access road) ¹⁵	3.55 miles (new access road) ¹⁶
Total Cleared Acres for Roads and Turbine Pads	Not found in Documents	55.3 acres
Permanently Disturbed (retained as open or grassland)	unclear	unclear
Lighting of Turbines	Not Discussed	Promised but No FAA Approvals to Date for any Ridgeline Wind Projects

Ms. Vissering also testified that:

[T]he removal of one turbine and slight lowering of a second turbine would not materially change the proposed project's impact especially given the substantial aesthetic impacts noted by the SEC in its previous decision. The turbines will remain visually dominant from the three major focal points within the Sanctuary, and from other sensitive vantage points throughout the region. "Visual dominance" results when the visible portions of a project are of a scale, proximity, and color and/or contrast that they become the most notable element in the landscape, thus overwhelming the resource itself (e.g. pond, surrounding forestland, natural landforms) as the primary focal point. The dePierrefue Sanctuary is particularly sensitive to this because its purpose is to serve as a natural refuge and because no other development exists within views.¹⁷

As noted, *supra.*, the Committee did not consider that evidence in the jurisdiction phase because it did not have the complete application before it. However, Ms. Vissering opined that both the 10 turbine proposal in Antrim I and current 9 turbine proposal will have an unreasonable impact on the aesthetics of the surrounding area.¹⁸

Counsel for Public retained Kellie A. Connelly, a second independent visual impact

¹⁵ From Prefiled Direct Testimony of Jack Kenworthy, *App. Of AWE, LLC for Cert. of Site and Facility*, Dkt. 2012-01, p. 7, January 31, 2012.

¹⁶ From Public Information Session PowerPoint, March 26, 2015

¹⁷ *Id.* at 10.

¹⁸ *Id.*

expert¹⁹ to assess the visual impacts of the current Project on the study area, and she arrived at the same conclusion as Ms. Vissering – that the current project has an unreasonable adverse impact on the scenic quality and resources of the surrounding area.²⁰ This conclusion supports Ms. Vissering’s opinion that the project has not changed to such an extent that a different conclusion is warranted.

AWE’s expert, Mr. Raphael was also retained to perform a visual impact analysis for the current project. He also provided testimony in the jurisdictional docket, that the current project was substantially different than the project that was proposed in Antrim I and the current project did not pose an unreasonable adverse impact on aesthetics.²¹ He was also of the opinion that he did not believe that the original turbine configuration proposed in Antrim I caused an unreasonable adverse impact on aesthetics.²² The two opinions are difficult to reconcile because apart from the obvious – that turbine #10 has been removed, and turbine #9 is slightly lowered he failed to address all the impacts found by the Committee at the various resources identified by the Committee as sensitive resources. He did not testify that the changes made in the turbine configuration negated the unreasonable impacts from each resource because he did not believe that those impacts were unreasonable in the first place. Instead as was evident when Landworks Visual Impact Assessment was analyzed, the overwhelming majority of resources found by the Committee in Antrim I to be sensitive resources simply were not analyzed by Landworks for impact or effects.²³

Because Mr. Raphael conducted his analysis based on nearly an entirely different list of

¹⁹ Counsel for the Public retained Kellie Connelly as a visual impact expert, in the current docket because Ms. Vissering retired from providing expert services and was not available to assist Counsel for the Public. See Motion for Leave to Retain Kellie Connelly, 2/4/16.

²⁰ See also CP-Ex. 1, Pre-filed Testimony of Kellie A. Connelly *Application of Antrim Wind Energy, LLC for a Certificate of Site and Facility*, Site Eval. Comm., No. 2015-02, p. 6-7.

²¹ Pre-filed Testimony of David Raphael, *Petition for Jurisdiction*, Dkt. #2014-05, page 4, line 3.

²² Tr. Day 1, AM, *Petition for Jurisdiction*, Dkt. #2014-05, pp. 78-81.

²³ App. Ex. 33, Appendices 9a, VIA pp. 82-90.

sensitive resources, it was not possible for his opinion to be relevant to the inquiry of whether the current project substantially or materially changed from the Antrim I docket as it concerns aesthetic impacts.

The Committee should be mindful of its decision in Antrim I, and under the doctrines of *res judicata* and *collateral estoppel* to reach the same result as it did in Antrim I. Generally under the doctrine of *res judicata* (or “claim preclusion”) a judgment on the merits in a prior suit bars a second suit involving the same parties or privies based upon the same cause of action. *Parklane Hosiery Co. v. Shore*, 439 U.S. 322, 326 n. 5 (1979). Under the doctrine of *collateral estoppel* (or “issue preclusion”) the second action under a different cause of action and the judgment in the prior suit precludes re-litigation of issues actually litigated and necessary to the outcome in the first suit. *Id.*

The rationale behind these doctrines is to attempt to avoid repetitive litigation and to promote judicial economy and a policy of finality and certainty in our legal system so that at some point litigation over a particular matter comes to end. *Brzica v. Trustees of Dartmouth College*, 147 N.H. 443, 454 (2002); *Eastern Marine Const. Corp. v. First Southern Leasing*, 129 N.H. 270, 273 (1987). Thus, “[a] valid judgment finally negatives every defense that was or might have been raised” *Boucher v. Bailey*, 117 N.H. 590, 591 (1977) (quotation omitted).

Three conditions must be met *for res judicata* to apply: (1) the parties must be the same or in privity with one another; (2) the same cause of action must be before the court in both instances; and (3) a final judgment on the merits must have been rendered on the first action. *Brzica*, 147 N.H. at 454. Those three conditions have been met in this case. The parties in the instant docket are the same as in the prior docket.²⁴ AWE did not appeal the decision of the

²⁴ Tr. Day 7 AM, 9/29/16, p. 127

Committee to the New Hampshire Supreme Court.²⁵ Therefore the decision of the Committee is a final decision on the merits. Finally, the same cause of action is before the Committee because AWE is seeking a Certificate for Site and Facility as it was in Antrim I. The original denial of certificate of site and facility was based upon the unreasonable adverse impact that the project will have on aesthetics.²⁶ Therefore this is the issue that the doctrine of *res judicata* prohibits being re-litigated.

The reasoning underlying the doctrine of *res judicata* is fully applicable to administrative proceedings. *Meserve v. State*, 119 N.H. 149, 154 (1979). *Res judicata* has been applied to a decision of an administrative agency, such as the labor commissioner or his deputy, when it was rendered in a judicial capacity, resolved disputed issues properly before it, and which the parties had an opportunity to litigate. *Morin v. J.H. Valliere Co.*, 113N.H. 431, 434 (1973). In order for *res judicata* to apply to an administrative decision, the officer or board must have been acting in a judicial capacity. See 46 Am. Jur. 2d Judgments § 580 (1994); see also Restatement (Second) of Judgments § 83 (1982) (decision of administrative tribunal is conclusive under *res judicata* so long as proceeding resulting in determination entailed essential elements of adjudication). In the instant matter, clearly the Committee was clearly acting in a judicial capacity when it ruled on Petitioner's application for certification in 2013. Site 202 *et seq.* Further as noted *supra.*, the parties in Antrim I, had a full opportunity to litigate and the matter was resolved by issuance of the denial of certificate to site and facility.

The evidence presented does not support a finding that the current project represents a material (or substantial) change to the 2012 project as it effects the aesthetic impacts of the

²⁵ Id. at pp. 128-129.

²⁶ 5/12/13 *Decision and Order Denying Application for Certificate of Site and Facility*, Site Eval. Comm. No. 2012-01, pp. 50-51.

project on sensitive resources in the surrounding area. As noted, Landworks failed to conduct a full assessment of the impact of the project on the sensitive resources identified by the Committee. Further evidence presented by Counsel for the Public, by way of the testimony of Jean Vissering and Kellie Connelly (discussed more fully, *infra.*) demonstrates that the current project has an unreasonable adverse impact on the aesthetics of the surrounding area that cannot be mitigated. As such the Certificate of Site and Facility should be denied upon the grounds of *res judicata*. *Brzica, supra*.

Under the doctrine of *collateral estoppel* (issue preclusion), “the issue subject to estoppel must be identical in each action, the first action must have resolved the issue finally on the merits, and the party to be estopped must have appeared as a party in the first action, or have been in privity with someone who did so.” *Daigle v. City of Portsmouth*, 129 N.H. 561, 570 (1987). “These conditions must be understood, in turn, as particular elements of the more general requirement, that a party against whom estoppel is pleaded must have had a full and fair prior opportunity to litigate the issue or fact in question.” *Id.* As with *res judicata*, *collateral estoppel* has been recognized as applying to cases based upon administrative proceedings. *In re Breau*, 132 N.H. 351 (1989).

There are two subject areas to which this doctrine is applicable in the instant case: the identification of sensitive sites by the Committee in Antrim I; and the issue of the benefit of off-site conservation land in mitigation of aesthetic impacts. The Committee made rulings on both of these issues in Antrim I.²⁷ With regard to the sensitive resource site list, the Committee identified Willard Pond, and the dePierrefeu Wildlife Sanctuary, Goodhue Hill, Bald Mountain, and Gregg Lake, Robb Reservoir, Island Pond, Highland Lake, Nubanusit Pond, Black Pond,

²⁷ 5/12/13 *Decision and Order Denying Application for Certificate of Site and Facility*, Site Eval. Comm. No. 2012-01, pp. 50-53.

Franklin Pierce Lake, Meadow Marsh and Pitcher Mountain as sensitive sites in Antrim I. In fact, AWE's visual impact expert agreed that the Committee had identified these resources as sensitive resources in Antrim I.²⁸ The resources themselves have not changed and their determination as important resources in the region is independent of any changes that AWE is proposing in the current docket. Here, as well, the promulgation of rules for the Committee poses no bar to issue preclusion because all of these sites fall within the definition of scenic resources under Site 102.45.

As to the issue of off-site conservation land as mitigation, the Committee in Antrim I was very clear on this issue. It stated that the dedication of off-site lands to a conservation easement would not suitably mitigate the impact explaining that additional conserved lands would be of value to wildlife and habitat but they would not mitigate the "imposing visual impact that the Facility would have on valuable viewsheds."²⁹

With regard to both of these issues, the tests for *collateral estoppel* have been met. Both issues were fully litigated in Antrim I, and the party to be estopped, AWE is the same party in both dockets.³⁰ With regard to the issue of off-site conservation land, the additional 100 acres on the ridge top of Tuttle Hill does not impact this analysis because it was not the amount of conservation land that the Committee determined was insufficient as mitigation for aesthetic impacts but the fact of it, in other words it is conservation land itself, that the Committee determined was unsuitable as mitigation for aesthetic impacts.³¹

These issues remain the same as they did in the first project. Again, these issues were

²⁸ Tr. Day 5 PM, 9/23/16, p. 70.

²⁹ 5/12/13 *Decision and Order Denying Application for Certificate of Site and Facility*, Site Eval. Comm. No. 2012-01, pp. 50-53.

³⁰ Tr. Day 7 AM, 9/29/16, p. 127 – 129.

³¹ ³¹ 5/12/13 *Decision and Order Denying Application for Certificate of Site and Facility*, Site Eval. Comm. No. 2012-01, pp. 50-53.

fully resolved in the first action and the Petitioner had a full and fair opportunity to litigate these issues in the first action. As such *collateral estoppel* should prohibit AWE from re-litigating these issues in the instant docket.

The recent changes to the statutes governing the Committees proceedings are no bar to the application of the doctrines of *res judicata* or *collateral estoppel* because the statute does not speak directly to these common law principals. *United State v. Texas*, 507 U.S. 529, 534 (1993); *Phillips v. Pembroke Real Estate*, 459 F. 3d, 133 & n. 3 (1st Cir. 2006). Statutes that invade the common law are to be read with a presumption favoring the retention of long-established and familiar principals except when a statutory purpose to the contrary is evident. *Texas*, 507 U.S. at 534. The statute in question does not speak to these common law judicial doctrines. It does not address claim or issue preclusion or the rationale behind the doctrines which is to avoid repetitive litigation, promote judicial economy and a policy of finality and certainty in our legal system. *Brzica*, 147 N.H. at 454. For this reason the changes to the statute cannot be interpreted to prevent the application of *res judicata* or *collateral estoppel* in the instant case. *Texas*, 507 U.S. at 534.

b. The Applicant has not Met Its Burden to Establish that the Project Will Not Have an Unreasonable Impact on Aesthetics.

Independent of the doctrine of *res judicata*, the weight of the evidence demonstrates that AWE has not met its burden that the project will not have an unreasonable adverse impact on the aesthetics. As part of its application, AWE was required to submit a visual impact assessment of the proposed energy facility. Site 301.05(a). AWE retained David Raphael to perform a visual impact assessment for the proposed 9 turbine project. At the outset, Mr. Raphael stated in his Visual Impact Assessment (“VIA”) that New Hampshire did not define a method for conducting

visual impact assessments or criteria for assessing whether a project had an unreasonable impact on aesthetics.³² He indicated that there are a multitude of resources and approaches that have been developed for conducting a visual assessment and no one method has risen to the top as the best process of preeminent source.³³ He identified several processes he used including the Bureau of Land Management (BLM) Visual Resource Management (VRM), the US Forest Service's Scenery Management System, the Federal Highway Administration's Visual Impact Assessment for Highway Projects.³⁴ He cited these processes that were primary in the development of the methodology for his VIA for this particular project.³⁵

The evidence presented demonstrates that Mr. Raphael's report and testimony contain mistakes and misjudgments that affect his ultimate conclusion about the impacts caused by the project. For example, there are a number of problems related to Mr. Raphael opinions about Audubon Society of New Hampshire's ("ASNH") dePierrefeu Wildlife Sanctuary ("Sanctuary"). Notwithstanding his touted methodology he incorrectly believed that ASNH owned only 50% of the shore of Willard Pond, based upon an outdated flier at a kiosk in the Sanctuary.³⁶ He testified at the technical session jurisdictional docket that there was no awareness of the wildlife sanctuary beyond the local and regional area.³⁷ He further testified that it was not listed on any other website except for Audubon's, and he and his team concluded that while it is a nice place it doesn't rise to the level from a scenic perspective as outstanding or unique.³⁸

Additional problems with his VIA include his inability to produce visual simulation that depict clear skies, or have at least one turbine blade in the simulation at the 12:00 position, or

³² App. Ex. 33, Appendices 9a, VIA p 3.

³³ *Id.*

³⁴ *Id.*

³⁵ *Id.*

³⁶ Tr. Day 5 PM, 9/23/16 pp. 5-6.

³⁷ Tr. Technical Session, Jurisdictional Docket 4/23/15 p. 53; Tr. Day 5 PM. Date, p. 132.

³⁸ *Id.*

have objects in the foreground that interfere with the view. Site 301.05 (b)(7) & (8). Most of his simulations contain atmospheric haze and cloudiness that can affect the viewer's perception of potential visual contrast and aesthetic impact. With regard to several resources, Like Franklin Pierce Lake, Pitcher Mountain Fire Tower, Summit Trail Crotched Mountain, Northeast Corner of Willard Pond, Public right of way at Gregg Lake, Landworks includes a simulation but no text or analysis. Further, within the Landworks VIA, it states that the turbines and rotors will be painted a light or white color, however the Siemen's technical specification state that the wind turbine components will be painted light gray in color. The discussion of the recreational Opportunity Spectrum (ROS) was provided on page 31 of the VIA but there was never a clear application of the ROS to Willard Pond, just a designation of "moderate." The "moderate" designation contains 3 different ROS classes, but Landworks does not make clear into which class Willard Pond falls into, pre- and post-project. On page 72 of Landworks VIA in photo #1 Pitcher Mountain Fire tower, view toward the project, the photo caption identifies the project location and a note that the mountain in the center is North Pack Monadnock. However it is actually Crotched Mountain in the opposite direction.

Mistakes like these can appear in any lengthy report, particularly where any number people are working on it. Where they are most problematic is where they appear to inject a bias to affect a certain result. The evidence demonstrates such a bias in Mr. Raphael's report. For example, in his VIA Mr. Raphael did not analyze the Sanctuary as one resource, but chose to cannibalized it into 3 separate sites and analyzed each as if they were not related.³⁹ In this way, he was able to argue that there was no visibility of the project from the Sanctuary. Moreover, the value of the hiking trails within the Sanctuary partially derives their value from being in the

³⁹ App. Ex. 33, Appendices 9a, pp 53, 57.

Sanctuary. By analyzing them as separate and unrelated components, he devalued the individual resource as separate from the Sanctuary experience. For example, he describes Goodhue Hill as inconsequential and states that the purpose for the patch cut from which all 9 turbines are visible had nothing to do with opening up views for scenic vistas.⁴⁰ Mr. Raphael's description of the impacts from Bald Mountain discounts the view from the ledges by from which 8 turbines and the met tower can be seen⁴¹ by describing it as off the beaten path and a place where one has to creep down to see the project through the trees.⁴² And nowhere in his report does he discuss the clustering effect from three significant sites on the Sanctuary as a whole.

As for Willard Pond, Mr. Raphael stated that it is not unlike many ponds in the region.⁴³ He states that the pond is not designated by the state as a scenic pond and the 2010 Town of Antrim Master Plan does not highlight Willard Pond for its scenic attributes.⁴⁴ He adds that the Master Plan does not have clearly written community standards that seek to preserve its scenic beauty.⁴⁵ From the viewpoint of user activity, he states that the use of the Pond is intermittent but does not appear overly extensive.⁴⁶ In this regard Mr. Raphael notes that aesthetic experts agree that areas that receive large numbers of users may be considered more sensitive since more people are likely to view the proposed project.⁴⁷ And although, Mr. Raphael agreed with the SEC determination in Antrim I that it was a visually sensitive resource he believed it was best characterized as not a resource of State and national significance.⁴⁸ He states that the viewer impact would be mitigated by user activity and he noted that there is some evidence that scenic

⁴⁰ *Id.* at p. 117.

⁴¹ See CP Ex. 1 VIA, Appendix F Viewpoint 27.

⁴² App. Ex. 33, Appendices 9a, pp 120.

⁴³ *Id.* at 126.

⁴⁴ *Id.*

⁴⁵ *Id.*

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ *Id.* at 122.

quality is less important to people engaging in fishing or motor boating.⁴⁹

The evidence presented before the Committee tells quite a different story about these resources. As noted, *supra.*, Mr. Raphael was incorrect that Audubon owned only 50% of the shoreline of Willard Pond; it owns all but the boat ramp.⁵⁰ Further, a quick internet search revealed numerous references at various websites to the Sanctuary and the resources within it.⁵¹ At one website an author described the experience at the Sanctuary as follows: “We love the rockbound Willard Pond in the dePierrefeu-Willard Pond Wildlife Sanctuary were we were the only people on still waters. Just us, the great blue heron and a family of loons. We let the loons come to us sitting in the still water and not paddling.”⁵² Another website described Willard Pond as incredibly secluded.⁵³ Other websites touted Willard Pond for its forested undeveloped shoreline and the triple treat of fly-fishing brook, rainbow and tiger trout.⁵⁴ Willard Pond is further described as being known for its clear water and it is described as a “real treasure.”⁵⁵ The websites also included mention of Goodhue Hill and the various activities on the trailing like bird watching.⁵⁶ Bald Mountain is described as the signature mountain in the sanctuary known for uncrowded trails and good views.⁵⁷ There was also a website for family hikes that specifically directs hikers to the scenic overlook and ledges that Mr. Raphael described as off the beaten path and difficult to navigate.⁵⁸

Further, the testimony during the adjudicatory hearing from witnesses familiar with the Sanctuary also painted a very different picture of the type and duration of use of the Sanctuary

⁴⁹ *Id.*

⁵⁰ Tr. Day 5 PM, 9/23/16, p. 132.

⁵¹ CP Exs. 15 – 19; Tr. Day 5, PM pp. 107-109, 111, 132-143.

⁵² *Id.* at p. 133.

⁵³ *Id.* at p. 134.

⁵⁴ *Id.* at pp. 134-135.

⁵⁵ *Id.* at 137-138.

⁵⁶ *Id.* at 135-136.

⁵⁷ *Id.* at 139,

⁵⁸ *Id.* at 140-141.

from Mr. Raphael's.⁵⁹ Additional testimony from local residents provided evidence of the emotional attachment that they have to Sanctuary, Gregg Lake and Meadow Marsh, describing their trips to the Sanctuary as a family ritual, and describing how their children were able to partake in educational activities at the nearby resources.⁶⁰

Mr. Raphael opinions about these resources are so different than this evidence because his methodology is heavily weighted with an emphasis on national and State resources over regional or local resources, and this is key in his identification of "Sensitive Sites."⁶¹ Even his determination of what is a scenic resource is far more narrow than the Committee's rules. *See*, Site 102.45.

In his analysis, Mr. Raphael's began with 30 resources in the visual study area that have views of the project for the purpose of identifying whether the resource was a sensitive resource.⁶² In this step of his methodology, Mr. Raphael evaluated the resource for its sensitivity based upon two categories, Cultural Designation and Scenic Quality.⁶³ He described Cultural Designation as an indicator that considers the local, regional or national cultural significance of that resource which, he states is often indicated by formal designation, ownership or inclusion in a current or recent community (or official) planning document that recognizes its cultural natural recreational or scenic value.⁶⁴

A close inspection of how these ratings were described reveals a bias in favor of those resources that are national or state resources.⁶⁵ For example, the description for a "low" rating begins with "local, quasi-public and private conserved or designated resources that are identified

⁵⁹ Tr. Day 8, PM, pp. 57 – 60, 81 – 84.

⁶⁰ Tr. Day 9, PM, pp. 8 – 12.

⁶¹ App. Ex. 33, Appendices 9a, pp. 61-71.

⁶² He did not include Highland Lake in this category as he incorrectly determined it did not have views of the project. *See* CP Ex. 1, Prefiled Testimony of Kellie Connelly, p. ___.

⁶³ App. Ex. 33, Appendices 9a, pp. 59 – 71.

⁶⁴ *Id.* at p. 61.

⁶⁵ *Id.*

for values other than purely scenic.”⁶⁶ National or State resources are not included in this category.⁶⁷ Under the “moderate” rating the description begins with State or federal resources that have been conserved or designated primarily for purposes other than purely scenic.⁶⁸ Resources found on regional website can be included in the “moderate” category for their scenic recreational values but may not be in a guidebook.⁶⁹ *Id.* Finally, a “high” rating is reserved for resources that have been conserved or designated primarily for their scenic value.⁷⁰ A local resource can only fit into this category if it is specifically identified in a comprehensive plan or other regulatory document because of its scenic value, or if it is highly advertised in numerous guidebooks, websites and brochures for its scenic value.⁷¹

This rating system is too rigid for a number of reasons. First, the SEC has included a definition of scenic resources in its rules that does not differentiate between state, federal and local or regional resources in this manner. Site 102.45 (a) – (f). For example, it includes recreational trails, parks, or areas established protected or maintained in whole or part with public funds and it also includes conservation lands or easement areas that possess a scenic quality. Site 102.45 (b) &(d).

Mr. Raphael all but ignores this regulation and instead requires that unless a municipality explicitly identified a resource with a scenic designation then it cannot make the cut. This rigid standard is problematic for several reasons. As Mr. Raphael agreed, apart from the Department of Transportation (that designates scenic byways), the State does not have one process for designating scenic resources.⁷² He also agreed that while towns could designate scenic

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶⁹ *Id.*

⁷⁰ *Id.*

⁷¹ *Id.*

⁷² Tr. Day 6 AM 9/28/16, p. 12

resources in their Master Plans⁷³ that not all towns have done so and it is an evolving process.⁷⁴

He also testified that the purpose in such a designation is that it becomes a clearly written community standard that provides the specificity and guidance to individuals or developers as to what specifically the Town holds dear, in terms of scenic values and scenic sites and scenic vantage points.⁷⁵

Returning to the methodology, it is not clear as to how this evaluation figures into Mr. Raphael's assessment of cultural designation as his report includes no reference as to how he merged this research into these rankings.⁷⁶ He included various charts entitled "Inventory of Resources or Statewide of National Appeal,"⁷⁷ and a final ranking of Cultural Designation but the report is lacking in transparency as to how these two lines of research were applied to reach the result he did.⁷⁸

This process resulted in a Cultural Designation ranking of resources with a "high" rating that include many scenic byways (which are designated by the NH DOT or NH Department of Resources and Economic Development) that are miles away from the site, and many of the resources identified by the town of Antrim on its website, and in its Master Plan as recreational areas deserving of protection, like Meadow Marsh, and Goodhue Hill

⁷³ AWE suggests that Ms. Vissering agreed with this proposition as a consultant to the town. It is notable, however, the fact that she provided that advice to the town did not prevent her from identifying a number of resources that were not so designated as sensitive resources in her opinions in Antrim I or in the Jurisdictional Docket.

⁷⁴ Id at p. 13.

⁷⁵ Id. at p. 14.

⁷⁶ App. 33, Appendices 9a, pp. 59-69.

⁷⁷ It is also noteworthy that the list includes a number of selected books and publications that make no sense from the viewpoint of uniform application to all of the various listed resources. For example, you would not expect to find any mention of the Pitcher Mountain Fire Tower in the Flyfisher's Guide to Northern New England. Id. at 60-68. Further the websites listed are federal or state websites so the likelihood of finding a mention of a local resource in those publications is low.

⁷⁸ App. 33, Appendices 9a, pp. 67-68.

receiving a low rating.⁷⁹ In additional, of the three water bodies that the Town of Antrim identifies in its Master Plan, one Willard Pond received a “moderate” rating and both Gregg Lake and Franklin Pierce Lake received a “low” ranking. This is true even though the Town of Antrim identified these Resources in its Master Plan as both recreational and *scenic resources*.^{80 81} So while it is unclear how Mr. Raphael factored this Cultural Designation into the overall “Sensitive Resource” designation, what is clear is that anything with a “low” Cultural Designation rating did not make it to the final list for further analysis of Viewer Impact and/or Effect.⁸²

What is equally problematic is that in his selection of sensitive resources Mr. Raphael virtually ignored the identification by the Committee in Antrim I of sensitive scenic resources that were impacted by the project.⁸³ There the Committee found:

- The ridgeline extends along the northwest border of the Town of Antrim and along with Willard Mountain, Robb Mountain, Bald Mountain and Goodhue Hill, and creates a cradle that encompasses Willard Pond, Gregg Lake, Meadow Marsh and a number of areas containing sensitive viewpoints.
- At least one of these visually sensitive areas, Pitcher Mountain, already has an existing view of the Lempster wind project located in Lempster, New Hampshire.
- The size of the proposed wind turbine generators, when imposed upon the Tuttle Hill/Willard Mountain ridgeline would appear out of scale and out of context with the region. This is particularly so when considering the viewshed impacts on a combination of visually sensitive areas.
- There are significant qualitative impacts upon Willard Pond, Bald Mountain, Goodhue Hill and Gregg Lake.

⁷⁹ *Id.* at 67-69.

⁸⁰ LA Ex. 5, Master Plan, Water resources, p. V-5.

⁸¹ Mr. Raphael testified that he reviewed the Master Plan but he apparently missed this reference. Tr. Day 6 AM, pp. 8-10.

⁸² App. Ex. 33, Appendices 9a, pp. 68-71, 82-89.

⁸³ Counsel for the Public makes this argument on the facts of the case and independent of the legal argument that Mr. Raphael should have analyzed all of these sites as sensitive sites on grounds of issue preclusion.

- There are moderate impacts on additional locations including, but not limited to, Robb Reservoir, Island Pond, Highland Lake, Nubanusit Pond, Black Pond, Franklin Pierce Lake, Meadow Marsh and Pitcher Mountain.
- The size of the proposed wind turbine generators, when imposed upon the Tuttle Hill/Willard Mountain ridgeline would appear out of scale and out of context with the region. This is particularly so when considering the viewshed impacts on a combination of visually sensitive areas.
- The Audubon's wildlife sanctuary is an area to which state and federal funds have been designated. Regardless of the definition used to identify an area as being of "statewide significance", it is clear that the Facility would have a significant impact on areas that are of significant value for their viewshed in the Town of Antrim and the surrounding region.
- A majority of the Subcommittee agreed with the assessment of Ms. Vissering that the Facility is not appropriately scaled and designed to work within the geographic setting. Ex. PC 1 at 18. In short, the turbines are too tall and too imposing in the context of the setting. They would overwhelm the landscape and would have an unreasonable adverse impact upon valuable viewsheds.⁸⁴

In addition the Committee made additional findings specific to Willard Pond and the dePierrefeu Wildlife Sanctuary as follows:

- a) The Facility would have a particularly profound impact on Willard Pond and the dePierrefeu Wildlife Sanctuary which is owned in fee and managed by Audubon.
- b) The Wildlife Sanctuary comprises 1,700 acres. The Facility is proposed to be constructed within one mile of the property boundary of the Wildlife Sanctuary. In addition, Audubon holds conservation easements on approximately 1,300 acres of land adjacent to the Wildlife Sanctuary. Willard Pond is located in the interior of the Wildlife Sanctuary. Willard Pond is a state designated Great Pond.
- c) Willard Pond is approximately 100 acres and boasts an undeveloped shoreline and pristine water quality. Motorized vessels are prohibited from the Pond. Willard Pond is surrounded by forested peaks, including Bald Mountain and Goodhue Hill.

⁸⁴ 5/2/13 Decision and Order Denying Application for Certificate of Site and Facility, p. 50-51. *Petition of Antrim Wind Energy, LLC*, N.H. Site Eval. Comm., no. 2012-01).

- d) Willard Pond and the Wildlife Sanctuary are popular locations that are enjoyed by numerous visitors. Environmental education programs, fishing, birding, wildlife viewing, and solitude all appear to generate visitors to the Pond and Wildlife Sanctuary.
- e) The Pond and the Wildlife Sanctuary are part of a larger tract of conserved lands consisting of approximately 30,000 acres and known as the "super sanctuary."
- f) Public funds have been dedicated to the dePierrefeu Wildlife Sanctuary and the surrounding conservation lands through a conservation program known as the Forest Legacy Program, the federal government has invested approximately \$3.5 million to conserve the lands within and directly adjacent to the Wildlife Sanctuary. Transcript Day 8 Morning at 63, 68-69. The State has invested approximately \$400,000.00 for similar purposes. In addition, Willard Pond and the dePierrefeu Wildlife Sanctuary sit within the "Quabbin to Cardigan Initiative," an interstate regional effort to conserve the Monadnock Highlands of north central Massachusetts and western New Hampshire.⁸⁵

The Site Evaluation Committee derives its authority to make decisions about the siting of energy facilities in the State under RSH 162-H:4. See also, RSA 162-H:1. An integral part of those decisions is the identification of sensitive scenic resources. RSA 162-H:16, IV; Site 301.05; Site 301.14; Site 301.16. So even though Mr. Raphael states that in terms of scenic values, scenic sites and scenic vantage points, he was looking for that designation as a clearly written community standard that provides the specificity and guidance to individuals or developers as to what specifically the community holds dear,⁸⁶ he disregarded the prior decision of the Committee as to what it deemed were sensitive scenic resources impacted by the project in Antrim I. Given that AWE sought the jurisdiction of the SEC in the instant case one would have thought that the clearly written statement by the Committee of what it determined were sensitive sites in the visual study area would have been important to assess.

Out of 13 resources identified by the Committee as sensitive resources he included only

⁸⁵ *Id.* at pp. 49 - 51

⁸⁶ Tr. Day 6 AM, 9/28/16, p. 14

three - Willard Pond, Bald Mountain, and Pitcher Mountain in his list of resources that were subject to examination of Viewer Impact and only Willard Pond to examination for Viewer Effect.⁸⁷

It is the applicant's burden to establish that the project does not have an unreasonable adverse impact on aesthetics and the evidence demonstrates that AWE has failed to do that by submitting an incomplete visual impact assessment in omitting sensitive resources from his analysis that by the author's own standards and criteria should have been included.

The evidence showed further that the remaining steps in Mr. Raphael's protocol contained arbitrary measures and were internally inconsistent. For example in measuring viewer effect Mr. Raphael uses a process involving six criteria that he describes were evolved over time from a variety of resources.⁸⁸ The first criterion, "Number of turbines" is simply a quantitative measurement that is based on the work of another visual impact professional.⁸⁹ With regard to this criterion and several others, Mr. Raphael use perception of the hub and not the turbines rotors as to determine make those determinations.⁹⁰ For another criterion, "Angle of View" Mr. Raphael uses a measure of anywhere between 102.0 degrees to 360 degrees as the basis for the measurement even though he also states that the central field of view occurs within 40-60 degrees and is the area that most highly influences public perception of a scene given that fixed viewing direction.⁹¹ Further, it is noteworthy that Mr. Raphael agreed that the angle of view can increase the closer one gets to turbines,⁹² so the selection of sensitive scenic resources miles away necessarily guarantees that this percentage will be a low measurement.

⁸⁷ App. Ex. 33, Appendices 9a, pp. 82-89.

⁸⁸ Tr. Day 5, PM pp. 89-91.

⁸⁹ Id. at 90/

⁹⁰ Tr. Day 5, PM, 93- 94, 116-117; App. Ex. 33 VI pp. 82,

⁹¹ Id. pp. 121 – 123.

⁹² Tr. 4/23/15, Technical Session, Petition for Jurisdiction, p. 55.

Mr. Raphael described the category “Visual Dominance” as considering the scale of a project in relation to a specific vantage point as well as its contrast with those surroundings.⁹³ In this regard, he made the determination that the dominance factor was “high” for Willard Pond.⁹⁴ Notwithstanding this “high” rating, Mr. Raphael discounted that rating after paddling around the pond with copies of the simulations.⁹⁵ Even though Mr. Raphael previously characterized Willard Pond as pleasant but not unique, he determined that users of the pond would be drawn to the beauty of the shore of the pond and not the turbines.⁹⁶ Further he testified that if you paddled in a clockwise direction, one wouldn’t see the turbines.⁹⁷

Of all of the sensitive resources, only one, Willard Pond was analyzed for viewer effect. This is because 8 out of the 10 resources Mr. Raphael selected as sensitive resources were miles away, all with background views, so they were nearly assured to have low ratings in 4 out of 6 of the categories for Viewer Impact. With regard to his analysis for Viewer Effect among the categories were 2 that were internally contradictory, those being “Extent of Use” and “Remoteness.”⁹⁸ Mr. Raphael acknowledged a resource could not receive a “high” rating for the “Extent of Use” and a “high” rating for the category of “Remoteness” unless it was an exception.⁹⁹

Another weakness in Mr. Raphael’s report is that he fails to adequately describe or account for the “typical user.” The evidence showed that Mr. Raphael described users of the

⁹³ App. Ex. 33, Appendices 9a, p 24. Tr. Day 6 AM, 9/28/16, p. 21.

⁹⁴ Throughout his report and with regard to these ratings, Mr. Raphael uses a numerical rating scale that he then translates into “high”, “Moderate” or “low”. App. Ex. 33 V1A. 87, fnt. 150. Mr. Raphael did not keep records of any of these numerical evaluations.

⁹⁵ App. Ex. 9, pp. 13-14.

⁹⁶ *Id.*

⁹⁷ *Id.*

⁹⁸ App Ex. 33, Appendices 9a, pp. 88-90.

⁹⁹ Tr. Day 5 PM, pp 130. (acknowledging that one of the descriptors for a high rating under “Remoteness”, that “motorized or mechanized use is not permitted or possible” is the opposite of one that would merit a “high” rating for “Extent of Use”, to wit, “motorized or mechanized use that are allowed are evident,”

wildlife sanctuary as hikers, paddlers and people who fished Willard Pond. He did not account or distinguish between a “typical user” of the Sanctuary as opposed to a typical user of other water resources like Gregg Lake, Black Pond or Franklin Pierce Lake. But the evidence showed such a distinction should have been made.¹⁰⁰ It is also noteworthy that even though he has experience with user surveys, as in the Champlain Wind case, he did not use, or even recommend one in this case. Given that Audubon does not track visitors, a professional, objective user survey could have revealed much more about how users would perceive the impacts created by the project as opposed to ad hoc, anecdotal reports.

Another unusual aspect of Mr. Raphael’s report is that there is a considerable portion of it devoted to photographs and narrative about other wind farms both from within New Hampshire and without. When asked about why so much of the VIA was devoted to other projects, Mr. Raphael replied that he wanted to provide the Committee with a comparative view because he believed that it was useful to include those comparisons to the other project that has been built.¹⁰¹ However, Counsel for the Public would submit that comparison like those included in Mr. Raphael’s report are not useful because each project will affect different resources that need to be adjudged on their own merits. And each development has characteristics and will affect the scenic character of the area in its own unique way. Finally comparisons with other projects are not helpful in determining whether a project meets the Committee’s licensing criteria.

Comparisons with the Lempster project are not particularly helpful for a number of reasons. First, the character of the project area is different. There were already 2 cell towers in

¹⁰⁰ Because Mr. Raphael did not consider any of these 3 water resources a sensitive, he did no analysis of users for purposes of viewer impact or effect.

¹⁰¹ Tr. Day 6, AM, pp. 49-51.

the regions before the project was built. The town was also host to a pre-existing motor cross track which one resident described as much noisier than the turbines. Sufficient study has not been done to assess the impact on real estate and no scientific study has been done to establish if there has been an increase in the use of Pillsbury State Park and if so, the basis for that increase. As for after the fact informal interviews, there is no way of knowing whether the people who find the wind turbines objectionable visit the State park any longer. So these types of anecdotal interview can produce skewed results. Finally, there was no visual impact assessment conducted for that project, in the first place. Thus, there are too many differences between the projects to merit a comparison. Comparisons also run counter to the Committee's longstanding practice not to look at prior decisions as precedent recently codified in RSA 162-H:10, III.

c. The Applicant Has Not Met Its Burden to Establish that the Unreasonable Impacts to Aesthetics are Capable of Being Mitigated.

Mr. Raphael describes the mitigation proposals made by the applicant in his VIA on page 131.¹⁰² The mitigation proposals differ from that offered in Antrim I insofar as they include; elimination of turbine 10 and a reduction in the height of turbine 9 by approximately 45 feet; an additional 100 acres of land conservation on the ridge top of Tuttle Mountain, a Land Conservation Funding Agreement with the New England Forestry Foundation ("NEFF") to provide \$100,000.00 to NEFF to acquire additional conservation lands in the region; \$40,000 to the town to enhance recreational facilities at the Gregg Lake Beach; and \$5000 per year for the life of the project to the Antrim Scholarship Committee.¹⁰³

¹⁰² App. Ex. 33, Appendices 9a, p. 131.

¹⁰³ App 33, Exec. Summ. P. ES 1-2.

As noted, *supra.*, Counsel for the Public submits that as to off-site conservation land, the Committee in Antrim I, determined that the dedication of off-site lands to a conservation easement would not suitably mitigate the impact explaining that additional conserved lands would be of value to wildlife and habitat but they would not mitigate the “imposing visual impact that the Facility would have on valuable viewsheds.”¹⁰⁴ The Committee in the instant docket should be bound by that ruling under grounds of *collateral estoppel*/issue preclusion. *In re Breau, supra.*

Independent of those grounds, Counsel for the Public’s visual impact expert, Kellie Connelly considered a number of possible mitigation measures to address the unreasonable adverse impact to the sensitive resources in the area,¹⁰⁵ however she would not recommend using off-site conservation land as a means for mitigation for visual aesthetics because this approach does not actively mitigate the site concern or potential impact within an area but instead uses the promise of an unknown entity to justify leaving the offensive project in place.¹⁰⁶ Similarly Ms. Connelly opined that a one-time payment of \$40,000 to the Town of Antrim is not appropriate mitigation for aesthetic impacts.¹⁰⁷ She testified that it would set a precarious precedent for how the Town justifies potential development impacts within the community because this monetary fiscal gain that is not grounded in long-term checks and balances of regulated town growth or development.¹⁰⁸

Finally, in addition the foregoing arguments, the additional 100 acres of the ridge top on Tuttle Hill that AWE proposes to conserve is inadequate as mitigation for the project. In this

¹⁰⁴ 5/12/13 *Decision and Order Denying Application for Certificate of Site and Facility*, Site Eval. Comm. No. 2012-01, pp. 50-53.

¹⁰⁵ CO Ex. 1 , Pre-filed testimony of Kellie Connelly pp. 11-14,

¹⁰⁶ *Id.* at 14.

¹⁰⁷ *Id.*

¹⁰⁸ *Id.*

regard it is really a swap, much like the payment of \$40,000 to the Town. For the period construction over 7000 tons of rock will be blasted from the site and will be filled with the infrastructure (cement, rebar, and electric connections). Roads will be constructed and partially re-vegetated. The wind farm will operate for 20 year and possibly longer. So for the period of construction and operation of the projects conservation of the ridge would not reduce the severity or lessen the intensity of these impacts. Further after the period of decommissioning in 40 or so years, the conservation easements contain reservations for a large residential structure, roads and cell towers.¹⁰⁹ In addition to the foregoing arguments, these reservations undermine the values of the conservation easements.

d. The Project Will Have an Unreasonable Impact on Aesthetics

As noted, *supra.*, in addition to Jean Vissering, counsel for the public retained Kellie Connelly, RLA to review AWE's visual impact assessment and perform an independent visual impact assessment for the project. Ms. Connelly is a well-credentialed landscape architect with years of experience working with in the field.¹¹⁰ Prior to starting her own firm she worked with Environmental Design and Research (EDR) a landscape architect firm that has performed visual impact assessments in several projects before this committee including one wind project.¹¹¹ Her training the field of visual impact assessment was based not only on working directly with EDR but also working an additional 13 years on rating panels used by EDR on many of energy facility projects including wind projects.¹¹² Ms. Connelly is an advocate of wind energy but she came to this project prepared to perform an analysis free of any bias.¹¹³ She testified that she

¹⁰⁹ Tr. Day 7, AM, 9/29/16, pp. 114-118, 120-126.

¹¹⁰ CP Ex. 1, Pre-field Testimony, p.2-3.

¹¹¹ *Id.*; Tr. Day 12 AM/PM, 11/01/16, p. 10.

¹¹² *Id.*

¹¹³ *Id.*

did not receive any instruction from Counsel for the Public with regard to any result she might reach and also that it wasn't until she completed her analysis that she knew the outcome.¹¹⁴

Ms. Connelly testified that her methodology was based upon processes used by most landscape architects and were based upon industry standard and protocols.¹¹⁵ Her VIA has utilized the standards put forth in NH Site 301.50 Effects on Aesthetics as well as encompassing a version of existing agency approved/developed methodologies that include, but are not limited to; the Bureau of Land Management, Visual Resource Management System (VRM), the United States Army Corp of Engineers, Visual Resource Assessment Process (VRAP), the United States Department of Agriculture, Forest Service, Landscape Aesthetics Handbook, and the United States Department of Transportation, Federal Highway Commission, Guidelines for the Visual Assessment of Highway Projects, and the New York State Department of Environmental Conservation, DEP-00-2; Assessing and Mitigation Visual Impacts.¹¹⁶

She testified that she came to this project with a good understanding of the resources and in the visual study area based upon her experience as an AMC guide.¹¹⁷ She worked with EDR as a subcontractor in Viewshed Analysis, Field Data Collection, Visual Simulations, Methodology Text, and Figures.¹¹⁸ She followed all of the protocols and requirements for visual simulations under Site 301.05.¹¹⁹

She was informed in her selection of sensitive sites to be analyzed by field work, her research of the visual study area, her review of Jean Vissering's prior work on the site, Mr.

¹¹⁴ *Id.* p. 34.

¹¹⁵ Tr. Day 13,

¹¹⁶ PC-Ex 1, Pre-filed Testimony of Kellie Connelly, p 5.

¹¹⁷ Tr. Day12, Am/PM 11/01/16, p. 11

¹¹⁸ PC-Ex 1, Pre-filed Testimony of Kellie Connelly, p. 5.

¹¹⁹ *Id.*

Raphael's works and the SEC's work on this site.¹²⁰ Her selection of the sensitive sites was also informed by research evidencing the vigor and commitment of the local population's passion and investment in purchasing, connecting, protecting, and preserving local conservation lands as a means to protect the regional landscape, such as the dePierrefeu Wildlife Sanctuary and adjacent conservation areas.¹²¹

After selecting the sensitive sites she rated the impacts using visual simulations that depicted the "worst case scenario."¹²² She testified that this is not only common the industry and is also based upon her understanding of Site 301.05(7).¹²³

She testified using visual simulations is standard practice to perform visual assessments. She believes that the selection of a variety of resources in the foreground, mid-ground and background serves to inform the assessment of the impact and effect of the project within the context of the region.¹²⁴ In addition to her ratings she also employed the use of two well-credentialed registered landscape architects experienced in participation and preparation of visual impact assessments.¹²⁵ Ms. Connelly testified as the prime expert her field work and preliminary analysis formed the basis for the work of the ratings panel. The work of the entire panel is used in determining the overall impacts. In addition the two additional raters served and a check and balance of her work.¹²⁶

Ms. Connelly testified that Terraink's visual impact assessment resulted in a finding that the project would have result in an overall high-moderate study area visual contrast rating and an

¹²⁰ Tr. Day 12, AM/PM, 11/01/16, p. 10-11,

¹²¹ PC-Ex 1, Pre-filed Testimony of Kellie Connelly, p. 6

¹²² Tr. Day 13, AM, 11/07/16, p. 29-30.

¹²³ *Id.*

¹²⁴ Tr. Day 12, AM/PM, 11/01/16, p. 32.

¹²⁵ CP-Ex. 22, 23.

¹²⁶ Tr. Day 13, AM, 11/07/16, p. 152.

unreasonable adverse visual impact to (6) sensitive resources within the study area.¹²⁷ While the various sensitive resources studied in this VIA indicate varying levels of potential visual impact, it is the DePierrefeu-Willard Pond Wildlife Sanctuary as a whole that is most significantly impacted by the installation of the wind turbines.¹²⁸ The conservation land and associated educational facilities in the wildlife sanctuary are permanently affected by the proposed industrial installation.¹²⁹ Based upon the visual impact assessment Ms. Connelly determined that there wer (6) sensitve resources that are anticipated to have the highest potential visual impact due to the installation of the wind turbine project. These viewpoints include VP#1 – Willard Pond; VP#5 – Meadow Marsh Preserve; VP#7 – White Birch Point Historic District, Gregg Lake; VP#27 – Bald Mountain; VP# 33 – Goodhue Hill (Trail) and VP#67 – Black Pond.¹³⁰ The raters reviewed mitigation options for these resources and determined that the only means to reduce or mitigate the potential visual impact on these (6) sensitive resources of regional significance is to relocate the project since further reducing the turbine heights will potentially create an increased visual disturbance situation due to the occurrence of bisected blades on the horizon, and reorganizing the wind turbines on the existing ridge will not result in obscured views.¹³¹ With regard to Willard Pond she disagreed with Mr. Raphael regarding his opinion that paddlers on the pond not pay much attention to the turbines because they will be engaged in pond based activities.¹³² She testified that the movement and sound and the scale of the built element on a ridgeline is going to draw human interest such that one cannot help but be drawn to the turbines.¹³³ Ms. Connelly also disagreed with Mr. Raphael’s assessment of the quality of the

¹²⁷ CP-Ex. 1, Pre-filed Testimony of Kellie Connelly, p. 6.

¹²⁸ *Id.*

¹²⁹ *Id.*

¹³⁰ *Id* at p.7

¹³¹ Tr. Day 12, AM/PM, 11/01/16, p. 15-16.

¹³² *Id.*

¹³³ *Id.*

pond.¹³⁴ There she described it has having scenic attributes bot in its land form, topography, glacial erratics and the quality of the water.¹³⁵ She described it as having moderate use and a pristine quality.¹³⁶

The raters considered mitigation options based upon BLM VRM methodology and the NH DEC protocols.¹³⁷ The raters including Ms. Connelly determined that there were a number of resources which received moderate impacts for which mitigation options would serve to reduce adverse impacts such that they were no longer unreasonable.¹³⁸ However for the above identified six resources the only option that would reduce the adverse impact was to relocate it.¹³⁹ Ms. Connelly also testified that she draw a distinction between “mitigation and “best-management practices.”¹⁴⁰ In this regard, “best management practices” are techniques that all designers should be using when developing a project, whereas mitigation occurs after a project is sited and after it has been designed.¹⁴¹

As noted *supra.*, Ms. Connelly testified that she does not ascribed to the using off-site conservation land or money as mitigation for aesthetic impacts.¹⁴² She testified that while it does a appear in the BLM VRM list of mitigations options it is near the bottom of the list in descending order of options and it also comes with conditions.¹⁴³

Finally Ms. Connelly testified that the visual impact assessment that was conducted by Terraink investigated the potential project visibility and visual impact of the proposed project by using viewshed analysis, field review, visual simulations, and a rating panel to determine the

¹³⁴ *Id.*

¹³⁵ *Id.*

¹³⁶ *Id.* at 17.

¹³⁷ CP-Ex. 1 Testimony of Kellie Connelly, pp. 11-12; Tr. Day 12, AM/PM, 11/01/16, pp. 85-86.

¹³⁸ CP-Ex. 1 Testimony of Kellie Connelly, pp. 15

¹³⁹ *Id.*

¹⁴⁰ Tr. Day 12 AM/PM, 11/01/16, 34-36.

¹⁴¹ *Id.*

¹⁴² CP-Ex.1 Testimony of Kellie Connelly, p. 14.

¹⁴³ Tr. Day 12, AM/PM 11/01/16, pp.132-133.

existing scenic quality and user sensitivities, and the resulting contrast with the project in place.¹⁴⁴ Given the large number of sensitive resources with significant impacts the project is determined to have unreasonable adverse visual impact and the only means to reduce, or mitigate, the visual impact is to relocate the project.¹⁴⁵

For her part Ms. Connelly testified that she believed she spent enough time in the area to understand the resources in their context.¹⁴⁶ In addition to her field work, she conducted extensive research of the visual study area and she believes that the sites she selected as sensitive sites accurately reflect impacts in the study area as she included sensitive sites in the fore-ground, mid-ground and background.¹⁴⁷ It is that balance that helps determine the impact on the entire visual study area.¹⁴⁸

Ms. Connelly testified she included White Birch Point in the analysis as part of the resource being analysis of Gregg Lake.¹⁴⁹ There were already simulations from other professionals including Mr. Raphael from other vantage points of Gregg Lake in the record thus she thought it important to use the focal point White Birch Point for the simulation because it was also eligible for placement as a historic district.¹⁵⁰ The simulation itself was taken from a point of public access.¹⁵¹

Ms. Connelly also testified that she selected Black Pond as a sensitive public resource. Note should be taken that it was also identified as a sensitive resource by the Committee in Antrim I. There is not dispute that there is public access to the lake. The simulation was

¹⁴⁴ Tr. Day 13, AM, 11/07/16, p. 6-7

¹⁴⁵ CP-Ex.1 Testimony of Kellie Connelly, p. 16.

¹⁴⁶ Tr. Day 13, PM 11/7/16, p. 17 -21.

¹⁴⁷ *Id.* at 23.

¹⁴⁸ *Id.*

¹⁴⁹ Tr. Day 13, PM, 11/07/16, p. 28-29.

¹⁵⁰ Tr. Day 13, AM 11/01/16, p. 140

¹⁵¹ *Id.* at p. 141.

taken from an amphitheater on the shore. Ms. Connelly testified that she believed that it was a valid viewpoint selection because she deemed it quasi-public property.¹⁵² In that regard she testified that unlike a private residence the public comes to the location with their children.¹⁵³ In the summer there are 300 camper plus over 100 individuals there to mentor as well as individuals who can rent the camp for activities.¹⁵⁴ Also from her analysis of the viewshed maps there is visibility from the pond itself.¹⁵⁵ Even if Black Pond were removed from the analysis it would not have changed her overall opinion.¹⁵⁶

Ms. Connelly also testified that she accounted for how typical users utilized the resource and she described her use of multiple user groups for resource analysis at length.¹⁵⁷ Further evidence of this analysis can be found in the VIA at page 21-22 of her report. Within her sensitive site analysis, beginning on page 39 through page 53, the expectations of the typical user are addressed with current conditions in keeping with how they are classified using the categories of the Recreational Opportunity Spectrum. Also included how the experience of the typical user will change with the proposed conditions.¹⁵⁸ To the extent that the use of “commuters” is deemed inappropriate, she testified that it was such a low number in her analysis that even if it were removed it would not have changed the overall result.¹⁵⁹

The only aspect of Ms. Connelly’s methodology that was new was a rating form that she developed for use by her rating panel. Tr. Day 13, PM 11/07/17, p.. She testified that she visited all of the sensitive sites and also doing all of the initial work in order to perform the rating, like

¹⁵² Tr. Day 12, PM 11/01/16, p. 151-152; Tr. Day 13, PM/ 11/07/16, P. 31

¹⁵³ *Id.*

¹⁵⁴ *Id.*

¹⁵⁵ *Id.*

¹⁵⁶ *Id.* at 31.

¹⁵⁷ Tr. Day 13, AM, 11/17/16 pp. 126-129, 134.

¹⁵⁸ Tr. Day 13, AM, 11/07/16 pp. 134.

¹⁵⁹ *Id.* at 36.

investigation of the visual study area, selection of sensitive sites.¹⁶⁰ As far as the other two raters not going to all of the sensitive sites, contrary to the assertions by Mr. Raphael, the BLM has no such requirement.¹⁶¹ In fact the BLM manual indicated that ratings should be completed in the field depending on the sensitivity of the resource and the availability of personnel. *Id.* In all other respects the ratings were conducted exactly as the BLM indicates.¹⁶²

There was much made by AWE of Ms. Connelly's use of the rating forms and counsel for AWE introduced a number of exhibits App. 62 – 67 and 69 – 73 that were entered into over objections. Counsel for AWE indicated that he created these exhibits although no foundation was laid as to how he created them or even their relevance.¹⁶³ They were introduced to attempt to establish that there was a problem with one aspect of Ms. Connelly's rating form, that being "sensitivity analysis" which counsel for AWE indicated the scale should have been evenly distributed.¹⁶⁴ However, there was no evidence presented to support that conclusion. Ms. Connelly testified that the scale was set up in conformity with a "scenic quality" scale as established by BLM.¹⁶⁵ And if one examines the scenic quality scale developed by BLM it is clear that the BLM scale is not evenly distributed.¹⁶⁶

The rating scale for scenic quality as indicated by the BLM is as follows: 1 -11 (low); 12-18 (moderate) and 19-32(high).¹⁶⁷ If one calculates the percent distribution scale for BLM's scenic quality rating based upon its own scale, using simple algebra, the percentage

¹⁶⁰ Tr. Day 13, AM, 11/07/16, p. 22.

¹⁶¹ *Id.* at pp. 23-24; See also App. Ex. 59.

¹⁶² *Id.* at 25.

¹⁶³ *Id.* p. 49.

¹⁶⁴ *Id.*

¹⁶⁵ *Id.* at 50-51.

¹⁶⁶ App. Ex. 60

¹⁶⁷ It appears that the page containing this rating scale was left out of Ex. 60 in error. It is appended hereto at part of this memorandum.

distribution scale is as follows: is calculated from the BLM scenic quality ratings and scale, the percentage works out as follows: (low) 11 points = 34%; (moderate) 7 points = 22%; (high) 14 points = 44%. What this demonstrates that counsel for AWE's premise that an uneven distribution scale is flawed is simply not supported by anything in the record.

The relevance of this entire line of inquiry is even more suspect when one considers the charts introduced by AWE include mistakes and the math used to identify the percent distribution is wrong. For example in reviewing App. Ex. 62, counsel for AWE includes the numeral 5 for a low rating. If one looks at Ex. 58, however, the rating for "low" is 5 or less. So it should have read 1- 5. Counsel for AWE didn't explain how he calculated the percent distribution and it is difficult to ascertain how he arrived at the percentages but doing simple algebra if the rating scale is 1 - 5 (low), 6-15 (moderate) and 16-25 (high) then the percent distribution scale is actually (low) 5 points = 20% ; (Moderate) 10 points = 40% and (high) 10 points = 40%. The counsel for AWE further complicates these errors by trying to introduce "corrected" charts using the existing ratings with his "corrected" scales. Ms. Connelly testified that it wouldn't be accurate to include the actual rating from one scale and transpose it to another scale because if the rater had been using a different scale the ratings could have been different.¹⁶⁸ With regard to the remaining exhibits in the group created by counsel for AWE, they contain a number of incorrect assumptions, for example that Ms. Connelly was double counting user groups. Counsel for AWE also attempted to re-do her rating of the entire project by backing out the "local user" group. Ms. Connelly defended her use of local users as separate and distinct from recreational users and she defended her rating system as

¹⁶⁸ Tr. Day 13, PM, 11/17/16, p. 27 - 28.

being in line with those used by BLM and the Army Corps of Engineers.¹⁶⁹ The evidence in the record supports this distinction. Because there was no double counting, the exhibits created by AWE should be disregarded. Ms. Connelly defended her system and rating scales as being in line with those used by BLM and the Army Corps of Engineers. However, she could hardly be expected to respond to these charts complete with unsupported premises, improperly transcribed ratings, and bad math.

Ms. Connelly's VIA and opinions were similar to that of Ms. Vissering as to the overall impact of the project on a list of sensitive resources in the visual study area. While she used a different method than Mr. Raphael, the weight of the evidence does not support a finding that his method is superior or that he reached a superior result. Mr. Raphael's methodology was heavily biased to weight national and State resources higher than local or regional resources and his method for identifying a "sensitive resource" was too rigid given the Site regulations and the fact that the State does not have a uniform method of identifying sensitive resources. Further, Landworks disregard of the sensitive sites identified by the SEC in Antrim I is not supportable based upon Mr. Raphael's own stated purpose behind his criteria. Assuming for argument's sake that Mr. Raphael used sound methodology to determine viewer impact and effect, his report is incomplete because he failed to properly identify the sensitive resources in the area, and as a consequence they were not fully analyzed as part of his VIA. AWE has the burden to establish that the project will not have an unreasonable adverse impact on aesthetics. Landworks VIA is incomplete and biased. As such Counsel for the Public urges the Committee to support a finding that AWE has not met its burden in this regard.

¹⁶⁹ Tr. Day 13, Am 11/7/16, p. 112.

e. Orderly Development of the Region.

Pursuant to Site 301, the Committee must consider the following factors in making its determination of whether a proposed energy facility will unduly interfere with the orderly development of the region: (a) The extent to which the siting, construction, and operation of the proposed facility will affect land use, employment, and the economy of the region; (b) The provisions of, and financial assurances for, the proposed decommissioning plan for the proposed facility; and (c) The views of municipal and regional planning commissions and municipal governing bodies regarding the proposed facility.

The evidence present during the adjudicatory hearing raises several concerns in this regard. Site 301(a). With regard to the first criteria, the planned site for the facility is within the Rural Conservation District. Cite. The Master Plan which was adopted by the Town in 2010, addresses future land use to achieve the following results: to protect Antrim's valuable natural resources by directing future growth toward land that can accommodate it; to provide adequate areas for light industrial growth by directing future growth toward land that can accommodate it; to encourage protections of open space in unfragmented forest lands, wildlife corridors, scenic and historic areas; to protect and preserve Antrim's rural and small town character; to provide incentives to create a range of housing types for a range of household incomes; and to direct higher density development toward areas of existing infrastructure (highways roads and utilities) in order to minimize the cost of providing public services.¹⁷⁰ According to Mr. Levesque, the Town's Master Plan, Zoning Ordinance and Open Space Conservation Plan which was adopted by the Town at Town Meeting in 2006 indicate the intent of the town to prevent the kind of development that is being proposed on Tuttle Hill.¹⁷¹ So it would seem as it affects land use the

¹⁷⁰ LA Ex. 1, Pre-filed Testimony of Charles Levesque p, 14.

¹⁷¹ *Id.* at 15-28.

proposed project is not in keeping or consistent with the Town's future land use planning.

With regard to the local economy there is no dispute that during the construction there will be more activity in Town as will there be more demand on Town services. Mr. Cavanaugh testified that if he were to become the contractor on this project Reed and Reed would try to employ about 20 -30% of the construction work force from local residents although it is unclear how many of those jobs will actually go to resident of the town or the regions.¹⁷² But the number of fulltime permanent jobs that will result is very small that being four full-time equivalent positions.¹⁷³

With regard to other aspects of the economy AWE's witness, Mr. Magnusson relied on a number of studies, that he didn't perform, regarding real estate values. It is concerning however, that when using the Town of Lempster as an example he was unable to answer if there was any analysis of how long homes that were put up for sale were on the market or how many homes were removed from the market because they couldn't sell.¹⁷⁴ He also testified in response to evidence that properties taxes in Lempster had been abated based upon a decrease in value due to the impact the wind project had on the views¹⁷⁵ that it was just "speculation" to assume the abatement was granted based upon the views.¹⁷⁶ It appears that the evidence is unclear at best as to whether the wind farm being in as close proximity to residential properties as the Antrim project would be will have a negative effect on real estate values.

Regarding the projects effect on tourism, again, the evidence submitted by AWE is not convincing. Apart from studies submitted by Mr. Magnusson that he did not perform, his

¹⁷² Tr. Day 2, PM, 09/15/16, p. 7.

¹⁷³ Tr. Day 3, PA, 9/20/16, p. 5.

¹⁷⁴ Tr. Day 3, PM, 9/20/16, p.8-9

¹⁷⁵ Tr. Day 6, PM 09/28/16, p. 108.

¹⁷⁶ Tr. Day 3, PM, 9/20/16, p.8-9

reliance on the impact in the Town of Lempster is unconvincing.¹⁷⁷ Mr. Magnuson was unaware of the Motocross track that is also in Lempster and what its affect is on the Town.¹⁷⁸ Based upon an analysis of the rooms and meals tax and an increase in traffic on Route 10, that could be attributable to the motocross track, there was no empirical evidence that the wind farm there affected tourism one way or another. In this regard user surveys would have been useful in judging the potential impact of the project on the dePierrefeu Wildlife Project, Gregg Lake or the other sensitive resources in the study area but none were conducted.

It is true when the PILOT kicks in the town will receive and increase in tax revenues, but based upon the evidence it is not clear if the Town will derive any additional long-term economic benefit from the project. The Board of Selectmen representing the Town have been in favor of the project since the before Antrim I. They have entered into an agreement with AWE to support it.

But it also appears clear that there are many elements that strike a more cautionary note. For example the Southwest Regional Planning Commission recently submitted comments to the Committee wherein they advised the Committee of the goals stated in the Monadnock Region Future, a plan for Southwest New Hampshire and the Southwest New Hampshire Natural Resources Plan.¹⁷⁹ In this letter the Commission states that in reviewing the project proposal with their goals there need to be a balance needed to maintain the quality of the natural resource values that already exist.¹⁸⁰ Id. It expressed concern for impacts to wildlife noting that some portion of the project is proposed to be located in land that is classified and the Highest Ranking Habitat in New Hampshire, as well as concerns about noise, conservation land and visual

¹⁷⁷ *Id.* at 10.

¹⁷⁸ *Id.* at 11-13.

¹⁷⁹ See, Letter from Southwest Regional Planning Commission, 11/1/16.

¹⁸⁰ *Id.*

impacts. ¹⁸¹*Id.* The letter closes by stating that while the project addresses some of the goals and objectives of the Monadnock Region Future document, concerns exist regarding potential impact to surrounding neighborhoods and wildlife habitat. ¹⁸²*Id.*

In addition, it worth noting, that the Town citizenry is very much divided about this project. There have been claims back and forth as to whether the majority favors or opposes the project. From the evidence presented, and the site visits that the project will heavily impact the intervenors abutters and non-abutters group. But it is also clear from the most recent town meeting vote in 2014, that the majority of the town does not favor the project. It also noteworthy that the overwhelming majority of letters the Committee has received from the public indicate opposition to the project including both the Gregg Lake Association representing 26 families and the White Birch Association representing 26 families.

Also under the category of Orderly Development the committee is required to consider the costs of decommissioning. Based upon the Decommissioning Plan submitted by AWE the estimate for costs is not adequate, and that is described more fully, *infra.*,

f. Noise Conditions

At the request of one of the Committee members AWE submitted a draft condition to address noise and shadow flicker at future structures with the area identified by the rules. AWE sought input from Counsel for the Public but incorporated only one comment. The following represents comments Counsel for the Public made to AWE but were not incorporated in its submission to the Committee:

¹⁸¹ *Id.*

¹⁸² *Id.*

- 1) Bullet one addresses only sound reports. Shadow flicker reports should also be included;
- 2) Bullet two: same comment as in Bullet one. Also the mechanism for triggering the receipt of information contains no description as to how the owner/developer will know that the sound/shadow flicker studies are at the Town Hall for the asking. There needs to be more specificity as to the mechanism for providing notice (i.e. explanation as to whether this will be written notice, or posted notice that to every owner/developer) that the studies are at Town Hall and will be given to the party upon request. If the studies are going to be posted on the town website parties need to know where to look for them
- 3) Bullet three - similar comment – is the town going to provide written notice to an applicant that the applicant can request the information from AWE. Further the distance radius should be increased. There may be some people who want to build just outside the 1 mile boundary and they might be subject to just under 8 hours of shadow flicker – I think they have a right to know that fact. Depending on what the Committee rules, mitigation might not be available for these people so all the more reason for them to know what they are getting into.
- 4) Bullet 4. – no comment
- 5) Bullet 5 - does not contain a commitment to comply with the rules. AWE commitment to cooperate and provide reasonable assistance to the property owner is missing a commitment to pay for the testing and/ mitigations measures if any are required.

g. Decommissioning

Under Site 301.08, entitled “Effects on Public Health and Safety”, each application shall include a decommissioning plan prepared by an independent, qualified person with demonstrated knowledge and experience in wind generation projects and cost estimates, which plan shall provide for removal of all structures and restoration of the facility site. Site 301.08 (7). The decommissioning plan required under (7) above shall include each of the following: a) 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; b) the provision of financial assurance in the form of an irrevocable standby letter of credit, performance bond, surety bond, or unconditional payment guaranty executed by a parent company of the facility owner maintaining at all times an investment grade credit rating; c) all turbines, including the blades, nacelles and towers, shall be disassembled and transported off-site; d) all transformers shall be transported off-site; e) the overhead power collection conductors and the power poles shall be removed from the site; f) all underground infrastructure at depths less than four feet below grade shall be removed from the site and all underground infrastructure at depths greater than four feet below finished grade shall be abandoned in place; and g) areas where subsurface components are removed shall be filled, graded to match adjacent contours, reseeded, stabilized with an appropriate seed and allowed to re-vegetate naturally. Site 301.08 (8).

As proposed, the Decommissioning Plan submitted by the applicant included provisions that indicated that a trench would be dug around the perimeter of the foundation and an eight foot deep hole would be dug next to adjacent to each foundation to accept concrete rubble. App. Ex. __ (Application) p. 43. The plan also called for using an excavator with a hydraulic ram/impact hammer or comparable equipment to remove the top 18 – 24 inches of foundation in compliance with all applicable state and federal environmental regulations. *Id.* When asked on cross-examination about the specifics of the process, Mr. Cavanaugh, from Reed and Reed testifies that when they do demolition work on concrete you get a swell factor that is typically 20 – 25%.¹⁸³ Cavanaugh also testified that when Reed and Reed develops a project like Antrim, it blasts the pad so the foundations are going to be 23 foot diameter foundations, five feet deep.¹⁸⁴ He testified that when the foundations are blasted, there is only four and one half to five feet of

¹⁸³ Tr. Day 2, PM at 17 (Mr. Art Cavanaugh, Reed & Reed, Inc., Preconstruction Consultant to AWE.)

¹⁸⁴ See *Id.* at 18.

backfill that will be like a cone.¹⁸⁵ He further stated that they would excavate around the foundations in order to demolish it, and disperse the rubble into the cone they've dug.¹⁸⁶ He didn't develop the trench language that was in the decommissioning plan and he couldn't imagine doing that but they would just excavate around the cone that was created when they originally poured the foundation.¹⁸⁷ Finally the last stages of decommissioning would involve post-construction re-vegetation.¹⁸⁸ On February 19, 2016 AWE supplemented its decommissioning plan to include an agreement to amend its proposed decommissioning plan to require removal of all underground infrastructure to a depth of four feet *where practicable*. (emphasis added.)¹⁸⁹

There are three issues that have arisen with regard to the current decommissioning proposal. First, AWE has not committed to complying with the rules. The rules require that all underground infrastructure at depths less than four feet below grade shall be removed from the site and all underground infrastructure at depths greater than four feet below finished grade shall be abandoned in place. Site 308.08 (f). Based upon its supplemental filing AWE is committed to removing the underground infrastructure to a depth of four feet *where practicable*. Cite.

It is fundamentally recognized that when the language of the statute is examined, the plain and ordinary meanings are to be attributed to the words used. *N.H. Resident L.P. of the Lyme Timber Co. v. N.H. Dep't of Revenue Admin.*, 162 N.H. 98, 101-102 (2011), citing *Appeal of Union Tel. Co.*, 160 N.H. 309, 317 (2010); *Appeal of Regenesys Corp.*, 156 N.H. at 455; *New Hampshire Dept. of Envtl. Servs. v. Marino*, 155 N.H. 709, 713 (2007). It is not proper to consider what the legislature may have said or add words that lawmakers did not see fit to

¹⁸⁵ See *Id.*

¹⁸⁶ See *Id.* at 19.

¹⁸⁷ See *Id.*

¹⁸⁸ *Id.* at 19-23.

¹⁸⁹ App. Ex. ___ Supplement to Application re: New Rules, 2/19/16 p. 5

include. *Id.*, See also *Appeal of Garrison Place Real Estate Inv. Trust*, 159 N.H. 539, 542 (2009); *Marino*, 155 N.H. at 714; *Appeal of Town of Bethlehem*, 154 N.H. at 319. The plain and unambiguous language used in the rule includes the mandatory “shall” which indicates a regulatory mandate. *Appeal of Lake Sunapee Protective Association*, 165, N.H. 119, 127 (2013). Further, the addition to AWE’s agreement to dig down to four feet “where practicable” is not provided for in the rules. The rules simply say that all underground infrastructure at depths less than four feet below grade shall be removed from the site and all underground infrastructure at depths greater than four feet below finished grade shall be abandoned in place. Site 308.08 (f). So it is not enough for AWE to agree to meet this requirement “where practicable.”

Second, there is the issue concerning whether the blasted concrete will be removed from the site or buried in place. Here the plain and unambiguous language of the rule requires the removal from the site of all infrastructure at depths of less than four feet below finished grade. Site 308.08 (f). Jack Kenworthy, testifying for AWE, stated that they were planning on burying the concrete rubble on site and that was the usual and customary practice.¹⁹⁰ AWE also submitted an exhibit and information flyer from the Department of Environmental Services (“Department”) indicating that the Department considered burying concrete in place a “best management practice.” App. Ex. 36. As with several of the Department’s publications, this one is for informational purposes and contains no statutes or rules for guidance.

The laws that apply to the disposal of construction and demolition debris can be found in RSA 149-M. Under RSA 149-M:9, II, it is unlawful for to transport to or dispose of solid waste at any facility as other than an approved facility. Under RSA 149-M “solid waste” is defined as Solid waste" means any matter consisting of putrescible material, refuse, residue from an air pollution control facility, and other discarded or abandoned material. It includes solid, liquid,

¹⁹⁰ TR. Day 2 AM, 9/16/16 pp.162 – 163.

semisolid or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities. For purposes of this chapter, it does not include hazardous waste as defined in RSA 147-A:2; solid or dissolved materials in irrigation return flows; cut or uprooted tree stumps buried on-site with local approval if required, provided that such burial locations are not located within 75 feet of any drinking water supply; municipal and industrial discharges which are point sources subject to permits under section 402 of the federal Water Pollution Control Act, as amended; source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954, as amended; or septage or sludge as defined in RSA 485-A:2, IX-a and XI-a. RSA 149-M: XXII. A "facility" is defined as a location, system, or physical structure for the collection, separation, storage, transfer, processing, treatment, or disposal of solid waste. RSA 149-M:4, IX. Given that the concrete rubble is solid material that results from industrial operations, it falls within the definition of the definition of "solid waste", and if the pulverized concrete is disposed of at the top of Tuttle Ridge, this site would fall within the definition of a "facility." As such, AWE would be required to obtain a solid waste permit in order to dispose of the facility's infrastructure as it proposes in the decommissioning plan. RSA 149-M:9.

Exceptions to the requirements for obtaining a solid waste permit area found in Env-Sw 302.03. the Solid waste rules contain an exception for the collection, store, transfer, process, treat, or dispose of waste concrete, cement, brick or other inert masonry materials or bituminous concrete, provided that: a) the waste is actively managed;¹⁹¹ b) Management practices comply with the universal facility requirements in Env-SW 1000; c) the materials comprising the waste are virgin materials; d) the materials comprising the waste are fully cured; e) the waste is free of any materials or substances that have the potential to leach contaminants to groundwater or

¹⁹¹ Actively managed is defined in Env-Sw 102.04 (a)- (d).

surface water or to emit pollutants in the air, including lead, paint, asbestos and chemicals; f) if landfills the bituminous concrete is not pulverized. Env-Sw 302.03 (9). Thus even if these rules were applicable, the decommissioning plan is inadequate because it contains no provisions for how AWE is going to comply with Env-Sw 302.03(9).

Counsel for the Public maintains, however that the solid waste rules do not apply to the decommissioning plan. While both the solid waste rules and the Site decommissioning rules relate to the same general topic concerning the disposal of solid waste, the Site rules are specific to decommissioning of energy facilities and the solid waste rules address disposal of waste generally. Further the Site rules are the more recent rules having become effective on December 16, 2015 whereas the solid waste rules became effective on October 25, 2005. To the extent that a conflict exists between Site 301.08 (7)(f) and Env-Sw 302.03, the latter statute that deals with the subject in a specific way will control. *Petition of Public Service Co. of NH*, 130 N.H. 265, 283 (1988) (noting the more specific recently enacted statute controls over general earlier enacted statute), *appeal denied sub. nom., Public Service Co. of New Hampshire v. New Hampshire*, 488 U.S. 1035 (1989); see also *Bel Air Assoc. v. N.H. Dep't of Health and Human Services*, 154 N.H. 228, 233 (2006).¹⁹² Site 301.08(7)(f) was enacted after the solid waste rules. It contains an unambiguous requirement to remove the infrastructure from the site, and it contains no exceptions for concrete.

Finally AWE cannot rely on the waiver provision under Site to request relief from the Committee's decommissioning rules. The Committee enacted these rules in a painstaking process with the input from many stakeholders. If AWE were permitted a waiver from the requirements of the rules because it was not "practicable" to remove the top four feet of the

¹⁹² The same principals of statutory construction are applied to both statutes and rules. *N.H. Resident L.P. of the Lyme Timber Co., v. N.H. Dep't. of Revenue*, 162 N.H. 98, 101 (2011).

infrastructure of the facility, or because it is the usual practice in the industry to bury concrete in site, then the rules would be meaningless because those grounds could and would apply to the decommissioning of every energy facility. Such a construction is not supportable. See *Appeal of Barry*, 142 N.H. 284, 287 (1997); see also *Weare Land Use Ass'n., v. Town of Weare*, 153 N.H. 510, 511-512 (2006) (statute should not be interpreted in manner that would render it meaningless as that would produce an illogical result.)

Based upon the foregoing, the decommissioning plan has to be amended to comply with the Site rules, and the estimate of the cost of decommissioning must likewise be amended to account for the cost of removal of the infrastructure including the concrete from the site.¹⁹³

IV. Conclusion

As noted at the outset, Counsel for the Public's role in these proceedings is to examine whether a project strikes an appropriate balance of environmental impacts versus the energy it will produce. When the project was proposed in 2012, it was estimated to have a nameplate capacity of 30 MW. The current smaller project has a nameplate capacity of 28.8 MW. Apart from the issues raised in this memorandum, as Ms. Connelly stated this project, looks good "on paper." It will produce a modest amount of electricity, and the Applicant has improved its overall position from the financial viability standpoint. The declaration of purpose under RSA 162-H states that: [t]he legislature recognizes that the selection of sites for energy facilities may have significant impacts on and benefits to the following: the welfare of the population, private property, the location and growth of industry, the overall economic growth of the state, the environment of the state, historic sites, aesthetics, air and water quality, the use of natural resources, and public health and safety. Accordingly, the legislature finds that it is in the public

¹⁹³ Tr. Day 2, AM 9/15/16, p. 162.

interest to maintain a balance among those potential significant impacts and benefits in decisions about the siting, construction, and operation of energy facilities in New Hampshire. RSA 162-H:1. The “impacts” being referred to have everything to do with location. On the basis of the record, the weight of the evidence demonstrates that the Tuttle Hill Ridge is not the appropriate site for this project. Several aesthetics experts have examined this project and determined that it will have an unreasonable adverse impact on the aesthetics of the surrounding area. The Applicant’s expert did not analyze the project with regard to resources that the Town of Antrim and this Committee has previously deemed sensitive and worthy of protection. In addition, the project is proposed to be constructed in the Rural Conservation Zone. It runs counter the Town’s future land use planning, and disregards, the Master Plan, Open Space plans and zoning. It would forever change the character of the Town, and the adverse impact on the pristine dePierrefeu Wildlife Sanctuary and Gregg Lake cannot be understated. The goals of renewable energy project are good ones. However, in balancing the adverse impacts with the benefits, the Tuttle Hill Ridge is not the proper locations for this Project. Counsel for the Public submits that for all of the reasons stated herein, the Committee should find that the Applicant has not met its burden

Respectfully submitted,

COUNSEL FOR THE PUBLIC
By her attorneys

Joseph A. Foster
ATTORNEY GENERAL



Dated: Nov. 21, 2016

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CERTIFICATE OF SERVICE

I, Mary E. Maloney do hereby certify that on this day, I caused a true copy of the foregoing to be served upon the Parties by electronic mail.



Dated: Nov. 21, 2016

Mary E. Maloney



Manual H-8410-1 - Visual Resource Inventory

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the most pleasing and memorable scenery - the scarcity factor can be used to recognize this type of area and give it the added emphasis it needs.

Cultural Modifications

Cultural modifications in the landform/water, vegetation, and addition of structures should be considered and may detract from the scenery in the form of a negative intrusion or complement or improve the scenic quality of a unit. Rate accordingly.

INSTRUCTIONS

Purpose: To rate the visual quality of the scenic resource on all BLM managed lands.

How to Identify Scenic Value: All Bureau lands have scenic value.

How to Determine Minimum Suitability: All BLM lands are rated for scenic values. Also rate adjacent or intermingling non-BLM lands within the planning unit.

When to Evaluate Scenic Quality: Rate for scenery under the most critical conditions (i.e., highest user period or season of use, sidelight, proper atmospheric conditions, etc.).

How to Delineate Rating Areas: Consider the following factors when delineating rating areas.

1. Like physiographic characteristics (i.e., land form, vegetation, etc.).
2. Similar visual patterns, texture, color, variety, etc.
3. Areas which have a similar impact from cultural modifications (i.e., roads, historical and other structures, mining operations, or other surface disturbances).

Explanation of Criteria: (See Illustration 1)

NOTE: Values for each rating criteria are maximum and minimum scores only. It is also possible to assign scores within these ranges.

SCENIC QUALITY

A = 19 or more

B = 12-18

C = 11 or less