STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Petition of Chelsea Solar LLC for a certificate of public good, pursuant to 30 V.S.A. § 248, authorizing the installation and operation of a 2.0 MW solar electric generation facility located off Willow Road in Bennington, Vermont	**)** **)** **)** **)** **)**	**Case No. 17-5024-PET**

PETITIONER'S MOTION TO EXCLUDE TESTIMONY OF DAVID RAPHAEL AND FOR A *DAUBERT* HEARING

On June 22, 2018, the Department of Public Service ("DPS" or the "Department") filed the prefiled testimony of David Raphael. Chelsea Solar LLC (the "Chelsea" or "Petitioner") hereby files this motion to exclude the Raphael testimony in its entirety.

Chelsea seeks to exclude the Raphael testimony on three bases. *First*, Chelsea and the Department executed memorandums of understanding (*see* Exhibit A, the "MOUs") governing Chelsea's 2.0-megawatt AC solar electric generating facility in Bennington, Vermont (the "Project"). The filing of the Raphael testimony violates the MOUs and as such must be excluded.

Second, even assuming the MOUs were not in effect (as the Department argues), there is no justifiable basis on which the Department could take the position it did in the MOUs on the much larger Chelsea Project and do a complete 180-degree turn on the smaller, less impactful Chelsea Project. Chelsea relied on the Department's position taken with respect to the originally configured Project and continued to develop and expend time and money in developing the Project based upon the Department's substantive position reflected in the MOUs. As a governmental agency representing the people of the State of Vermont, the Department has a duty to turn square corners, and to comport itself with compunction and integrity. The changes to the Project cannot justify the 180-degree turn made by the Department. It therefore must be estopped from doing so

and offering the Raphael testimony. Furthermore, it is the Department, not individual experts that the Department might hire on a transactional basis, that is the gatekeeper to determine whether its actions are in the best interests of the people of the State of Vermont. Here, the Department has abdicated its role, leaving in its wake an *ad hoc* standard-less discriminatory review process. As this case illustrates, systemic discriminatory treatment results when the Department's position in a case is determined by the bias and methodology of a single witness. Such a practice is unfair and discriminatory under normal circumstances, but it particularly so here in a legacy case where the "petition [is] treated as a continuation of the previous petition." *See*, May 17, 2018 Order at 5.

Third, Raphael's testimony is, in a nutshell, GIGO. When it comes to expert testimony, the use of unreliable inputs and an unreliable methodology is "garbage in, garbage out." *Bruno v. Bozzuto's, Inc*., 311 F.R.D. 124, 137 (M.D. Pa. 2015). Expert testimony must be reliable and based upon generally accepted and recognized methodology. "Proposed testimony must be supported by appropriate validation — *i.e.*, 'good grounds.'" *Lasek v. Vermont Vapor, Inc*., 2014 VT 33, P12 quoting *Daubert v. Merrell Dow Pharmaceuticals*, 509 U.S. 579, 590 (1993) ("*Daubert*"). Expert testimony cannot be a vehicle for the transmission of rank hearsay. Nor can it dress-up unconstitutional restrictions on development in expert garb to make them enforceable. Nor can it be based upon unverified facts or unreliable assumptions. But Raphael's testimony is unabashed exactly that.

Raphael's methodology is characterized by inaccurate and unverified factual conclusions, contradictions, legal conclusions, the transmission of hearsay from neighbors and the Town, inadequate investigation of the facts, and an unreliable methodology that wholly ignores the law and the constitutional limits on restrictions to property development imposed under the Vermont Constitution. At bottom, Raphael testimony is a result-oriented report lacking in credibility that

exposes him not as an expert that applies reliable and consistent methodology, but as a gun-for-hire that is more than willing to adjust his "methodology" to suit the desired result.

The deficiencies in Raphael's report are manifest and numerous. For example, while Raphael purports to provide an opinion on orderly development of the region—giving four reasons at page 36 to support that conclusion—none of those reasons relate to the region. Rather they all relate to Raphael's view of the Project vis-à-vis the Town. Without analysis or reasons related to the region, his report is merely his report on his incomplete view of how the Project fits into orderly development of the Town. Further, Raphael's report erroneously bases the orderly development conclusion on the equivalent of Act 250's compliance requirement. In addition, even assuming that the Town Plan contained constitutional unambiguous, clear standards applicable to the Project that were violated, the report does not even attempt to explain how the local effects rise to the level of regional impact.

Among the numerous other deficiencies in Raphael's report is its manifestly unconstitutional methodology. Raphael dons the vague, ambiguous, standard-less town plan goals in expert garb in his bid to make them enforceable—flatly violating the time and again holdings of the Vermont Supreme Court that standard-less criteria which restricts property development is unconstitutional, violating both due process and equal protection.[1] Ambiguous and standard-less restrictions on property development are equally repugnant to due process and equal protection when cloaked in an expert opinion.

Making matters worse is the attempt at unconstitutional selective enforcement that

[1] Raphael concedes that the Bennington Town Plan does not have any clear community standards applicable to the project. *See, e.g.*, Raphael Report at 22. ("Plan does not include standards."); *id*. at 24 ("there are no specific goals or policies that would specifically apply to the Project, or standards."); *id.* ("there are no specific standards."); *id*. ("the Project will not violate a clear written community standard intended to preserve the aesthetics or scenic beauty.")

Raphael's methodology represents. Raphael has adopted the Town's and the neighbor's position hook, line and sinker, even though the Town readily admits that commercial scale solar is permitted in the Bennington rural conservation district,[2] but that it still selectively uses its purported Town Plan criteria against projects,[3] a practice the Vermont Supreme Court has unqualifiedly condemned. *See, e.g., In Re Handy*, 171 Vt. 336, 349 (2000) ("Flexibility cannot be a synonym for ad-hoc decision making that is essentially arbitrary.") Raphael tries to create enforceability of what are standard-less unconstitutional criteria, all the while employing an unreliable methodology that even he does not follow in other cases.

I. Legal Standard

Pursuant to 3 V.S.A. § 810 and Commission Rule 2.216(A), evidentiary matters are governed by 3 V.S.A. § 810, which provides that "[i]n contested cases: (1) Irrelevant, immaterial, or unduly repetitious evidence *shall be* excluded." (emphasis added.) 3 V.S.A. § 810(1) further provides:

> The Rules of Evidence as applied in civil cases in the Superior Courts of this State shall be followed. When necessary to ascertain facts not reasonably susceptible of proof under those rules, evidence not admissible thereunder may be admitted (except where precluded by statute) if it is of a type commonly relied upon by reasonably prudent men in the conduct of their affairs.[4]

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[2] *See*, Exh. CS-BW-12 at 21 (the Town Plan "can[not] credibly be construed to bar alternative energy projects in the rural [conservation] district."). *See also*, Exh. CS-BW-25 at 5-6 ("Q: …the basic question right now is, is there anything that would not allow the development of a commercial scale solar facility, in general? A. … the answer is no.")

[3]The Town makes no secret of its selective, *ad hoc* use of its goals and purported standards. *See, e.g.*, the selectboard meeting of September 14, 2015, discussing screening ordinances, available at: https://youtu.be/7ZV-kxuqUNo?t=1h41m17s. Daniel Monks concedes that the Town selectively applies the "material in the Town Plan and in the Scenic Resource Inventory" based upon how the selectboard feels about a particular project. Monks states: "We already have an immense amount of material in the Town Plan and in the Scenic Resource Inventory that does protect us, if we choose to argue that case. Now, *often times we choose not to because we think the project is okay*, but there's lots in there that gives us tools to work with as far as solar's concerned." (emphasis added.)

[4] 3 V.S.A. § 810(1); *See also, Petition of Next Generation Solar Farm, LLC,* Docket No. 8523, Order of 1/15/16 at 3 (Commission applies Vermont Rules of Evidence pursuant to Commission Rule 2.216(A)).

Objections to prefiled testimony in Commission proceedings are governed by Rule 2.216(C), which requires that objections to the "admissibility of prefiled testimony or exhibits shall be filed in writing not more than thirty days after such evidence has been prefiled or five days before the date on which such evidence is to be offered, whichever is earlier."[5] David Raphael's pre-filed testimony was filed on June 22, 2018; therefore, this Motion is timely.

An expert is a person with specialized knowledge, skill, experience, training, or education which qualifies that person to form helpful opinions in anticipation for litigation or preparation for trial. In order to be admissible, the court must find, in addition to the expert's qualifications, that the opinion evidence will be relevant to the issues in the case, that it is reliable, and that it will be helpful to the trier of fact.

It is the specialized knowledge or skill, or other attribute of the witness, which permits a person to form and offer opinion evidence, rather than fact evidence, and it is the ability to offer opinion testimony which distinguishes the expert witness from fact witnesses. "[A]ll expert testimony [must be] both relevant and reliable." *985 Assocs., Ltd. v. Daewoo Elecs. Am., Inc*., 2008 VT 14, P7. The Vermont Supreme Court has explained that *Daubert* is "intended to keep misleading 'junk science' propagated primarily for litigation purposes out of the courtroom while simultaneously opening the door to well-reasoned but novel scientific or technical evidence." *Id.* at P8.[6]

[5] PUC Rule 2.216(C).

[6] The Vermont Supreme Court adopted *Daubert v. Merrill Dow Pharmaceuticals,* 509 US 579 (1993) in scientific evidence cases in 1993, as Vermont Rule of Evidence 702 is identical to the federal rule. *See State v. Streich*, 658 A.2d 38, 46 (Vt. 1995) citing *State v. Brooks*, 643 A.2d 226, 229 (Vt. 1993). In 2000, Vermont implicitly extended the *Daubert* principles to other technical or specialized matters. *See State v. Kinney*, 762 A.2d 833, 841–42 (Vt. 2000) citing *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 147 (1999). The total adoption of the *Daubert* standard occurred in 2004. *See* 2004 Amendment to Vermont Rule of Evidence 702 (effective July 1, 2004) (making Vermont Rule of Evidence 702 identical to Fed. R. Evid. 702); *USGen New England, Inc. v. Town of Rockingham*, 177 Vt. 193, 2004 VT 90 (discussing adoption of *Daubert*).

Vermont Rule of Evidence 702 states:

> If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

Raphael's testimony falls short of all three criteria under VRE 702. His testimony is not based upon sufficient facts or data, it is the product of unreliable principles and methods, and Raphael has not applied the principles and methods reliably to the facts of the case.

Daubert applies in bench trials as well, although in a more relaxed manner. *Petition of Vermont RSA Limited Partnership*, 2017 Vt. PUC LEXIS 10, *4 (March 10, 2017) ("In a bench trial, the judge has the discretion to admit questionable expert testimony, but must not give it more weight than it deserves. Additionally, the [Commission] is a body of specialized knowledge with significant experience in reviewing testimony and exhibits on this issue, suggesting even greater discretion to admit testimony and evidence that does not strictly meet the standards established by *Daubert*.") (internal footnotes omitted.) Nevertheless, "the trier of fact must find that such testimony is relevant and reliable before admitting expert testimony into evidence. Trial judges act as gatekeepers who screen expert testimony ensuring that it is reliable and helpful to the issue at hand." *See, Investigation Into Petition of AARP*, 2010 Vt. PUC LEXIS 211, *11-12 (May 05, 2010) (Tierney, H.O.) (internal footnotes, quotations and citations omitted.) Thus, although courts and the Commission have recognized that their "gatekeeping role is less critical" when trial court sits as factfinder, none have abandoned "the requirement that the judge find the expert's testimony relevant and reliable." *USGen New England*, 177 Vt. 193, 2004 VT 90, ¶ 25.

II. Argument

A. Basic Principles.

Restrictions on development of real property "are in derogation of the common law." *In re Willey*, 120 Vt. 359, 365 (1958). Such restrictions must be strictly construed. *Id.* "[E]xemptions should be construed in favor of the owner." *Id.* At common law, restrictions on development were governed by the ancient legal maxim *Sic utere tuo ut alienum non laedas* meaning in essence that every person should use her property as not to injure that of another. *Richardson v. Vermont C. R.R.*, 25 Vt. 465, 470 (1853) ("a man has an entire dominion over his own soil, and of the space above and below, to any extent he may choose to use it, unless restrained by some covenant, or a counter user, for such a time as to warrant the presumption of a grant.") But "every holder of property, however absolute his title, holds it under the implied liability that his use of it shall not be injurious to the enjoyment of others having an equal right to the enjoyment of their property, nor injurious to the rights of the community. All property is held subject to general regulations made by the Legislature, under its police power, for the common good and general welfare." *W. Union Tel. Co. v. Burlington Traction Co.*, 90 Vt. 506, 516 (1916).

When development is to be restricted, clear standards must be set. *See, In Re Kisiel*, 172 VT 124, 130 (2000). The Vermont Supreme Court has held that a Town Plan can be used to restrict development only when clear, written, specific objective criteria where provided. *See, In Re Green Peak Estates*, 154 Vt. 363, 368 (1990) (enforcing specific standard prohibiting development on slopes in excess of 20 percent).

If a purported restriction on development does not provide *clear* guidance with *objective criteria* as to what the requirements are, then it is not a restriction that can be constitutionally

imposed. *See, In Re Kisiel*, 172 VT at 130.[7] The situation in *In Re Chaves A250 Permit,* 2014 VT 5 (2014) is similar to that presented here. The issues advanced by the project's challengers in *Chaves* were remarkably similar to those advanced here by the Town and incorporated into Raphael's methodology. In *Chaves*, the neighbors argued that the regional and town plans used mandatory language regarding "minimizing impacts" on historical sites. The challengers cited "the purpose of the rural residential-3 district, where the project [was] located, [was] to 'provide for agriculture, forestry, *low-density residential development* and other compatible land uses in a manner that maintains the Town's rural character, scenic landscape and natural resources.'" *Chaves,* 2014 VT at 40. (emphasis added.)

The challengers in *Chaves* also cited the town plan's "stated policy in the scenic areas section [] to '[m]aintain natural and man-made features that are of local scenic, cultural and historic significance and protect them from activities that impair their integrity, character and/or quality.'" *Id*. The challengers further cited "the town's policy [] to '[p]rotect places of outstanding cultural, aesthetic, archeological, natural and/or historical value from development that impairs their character and quality.'" *Id.* Finally, the challengers relied on language in the regional plan which specified that the type of project at issue, mineral extraction, should "*minimize[]* adverse effects on aesthetics ... and special community resources." *Id*. (emphasis added.)

These are exactly the same arguments used here by the Town and neighbors and incorporated as the linchpin of Raphael's methodology. The Vermont Supreme Court held that the language was broad and nonregulatory, espousing general policies about maintaining features,

[7] The only reason why the section 248(b)(1) criteria is constitutional is because it can only restrict development if there are clear, objective standards expressed in a town or regional plan. Otherwise, section 248(b)(1) would itself be standard-less, and an unconstitutional restriction on property development.

protecting valuable areas, and minimizing impacts, but contained no specific requirements that were legally enforceable. *See, Chaves*, 2014 VT at 12.

The Vermont Supreme Court rejected the challengers attempt to equate the town plan with the status of an unambiguous, clear and unqualified community standard because it "contain[ed] no specific requirements that [were] legally enforceable." *Id*. at P41. The Court also cited *In re JAM Golf, LLC*, 2008 VT 110, ¶¶ 13-14, which held that ordinances that required design to "'protect' natural resources was unconstitutionally vague because it created no real standard." *Id*. The Court's holding in *Chaves* is controlling as the Bennington Town Plan does not contain any specific requirements that are *legally enforceable*. *See also*, *Regan v. Pomerleau*, 2014 VT 99, P16 (2014) (rejecting claims based upon the town plan because they were not "*mandatory and set[] forth no specific enforceable standards*.") As the Supreme Court emphasized in *Regan*, to constitute a clear, ambiguous community standard, a town plan must require mandatory compliance and set forth specific enforceable standards.

Raphael's methodology is nothing more than a vacuous bid to do an end-run around the constitutional limitations imposed by the Vermont Supreme Court. His conclusions cannot be separated from his unreliable methodology that seeks to do indirectly, what the Vermont Supreme Court has prohibited directly. His testimony and report therefore must be excluded in their entirety.

B. The MOUs Require The Exclusion Of Raphael's Testimony.

In docket 8302, the Department executed a memorandum of understanding agreeing that the Project satisfied all relevant section 248 criteria. The agreements between Chelsea and the Department are memorialized in (i) that certain Partial Memorandum of Understanding, dated as of February 9, 2016, between the Chelsea and the Department (the "First Department MOU"), and

(B) that certain Second Partial Memorandum of Understanding, dated as of June 17, 2015, between the Petitioner and the Department (the "Second Department MOU" and together with the First Department MOU, the "Department MOUs").

The Department MOUs make it clear that (i) all issues regarding the Project as between Chelsea and the Department had been resolved,[8] (ii) the Department would not object to any prefiled direct and supplemental testimony and exhibits of Chelsea,[9] (iii) Chelsea's filings (as modified by the Department MOUs) complied with each of the Section 248 criteria[10] and (iv) the Department supports the Project.[11]

There is no dispute as to the validity and enforceability of the MOUs when executed. The MOUs can only be terminated if the Commission fails to approve *the MOUs* in all material aspects.[12] The Department concedes that if the MOUs were not terminated then it must withdraw the Raphael testimony.[13] But the Department argues that the MOUs terminated as a result of the February 16, 2016, order in docket 8302 (the "First CPG Order"). The Commission, however, in

[8] "The Parties have discussed various aspects of the Project and have resolved all outstanding issues between them related to the solar array portion of the Project…" ¶2 page 1 of the First Department MOU. "The Department and the Petitioner have now resolved all outstanding issues between them related to that portion of the Project involving the Green Mountain Power distribution line extension and placement of utility poles on the Project site…" ¶4 page 1 of the Second Department MOU.

[9] "All prefiled direct *and supplemental testimony* and exhibits of Chelsea Solar, this MOU and the Petition shall be admitted without objection…" §1 of the First Department MOU (emphasis added).

[10] "The Stipulating Parties agree that the filings described in paragraph 1 above, as modified by the terms and conditions of this Stipulation comply with each of the section 248 criteria…" §1 of the First Department MOU.

[11] "Should the Board waive PUC Rule 3.500 with respect to compliance with the NESC, the Department supports the project so long as Chelsea Solar asserts the project complies with the NEC.

[12] *See* §8 of the First Department MOU, §9 of the Second Department MOU, and Finding 149 of the First CPG Order.

[13] *See*, DEPARTMENT OF PUBLIC SERVICE'S RESPONSE TO CHELSEA SOLAR'S RULE 60(b)(6) MOTION AND MOTION TO CONSOLIDATE, July 12, 2018, at 2.

the First CPG Order, specifically accepted the MOUs "with all of their provisions and conditions without material change or condition."[14] Thus the Department cannot ignore its specific agreements to support the Project in the MOUs.

Because the findings adopting the MOUs with DPS were part of the First CPG Order, DPS is precluded from taking any new and different positions here to collaterally attack the Project, unless it can clearly demonstrate the issue relates solely to the amendments.[15]

In the case of the MOUs with DPS, those MOUs were approved, *see* First CPG Order, Findings 148, 149 and Ordering Para.1, and were relied on for other Findings (*e.g.* Findings 69, 79, 90, 116, 127, 128). *See also* First CPG Order at 24 and 57 at fn. 46.) As a result, the MOUs continue in force for this "petition [which is] a continuation of the previous petition." *See*, May 17, 2018 Order at 5. Because the MOUs are not terminated, as the Department concedes, Raphael's testimony must be excluded.

C. Even If The MOUs Are Not Enforceable, The Department Is Estopped From Offering Testimony Except With Respect To The Changes In The Project.

There is no reasonable basis on which the Department can claim *in good faith* that the smaller design could result in a complete 180-degree turn in its position. Such behavior by governmental entities is given no quarter by the courts. *See, e.g.*, *W.V. Pangborne & Co. v. New*

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[14] *See* Section VIII. of the First CPG Order, "The finding, conclusions and recommendations of the Hearing Officer are hereby adopted, except as rejected above." The recommendation of the Hearing Officer to accept the MOUs with all of their provisions and conditions without material change or condition (page 47 of the Proposal for Decision, which is part of the CPG Order) was adopted by the Commission.

[15] *See, In Re Dunkin Donuts SP Approval*, 2008 VT 139, ¶12 ("*Dunkin*")

> [w]e have often indicated that a stipulated agreement incorporated into a court order has *the same* preclusive effect as a final judgment on the merits. *See, e.g., Pouech v. Pouech,* 2006 VT 40, ¶20, 180 Vt. 1, 904 A.2d 70 ("Once a stipulation is incorporated into a final order, concerns regarding finality require that the stipulation be susceptible to attack only on grounds sufficient to overturn a judgment.")

(emphasis in original.)

Jersey Dep't of Transp., 116 N.J. 543, 561-562 (N.J. 1989) ("[The] government must 'turn square corners' rather than exploit litigational or bargaining advantages that might otherwise be available to private citizens. The government's primary obligation is to comport itself with compunction and integrity.") (internal citations and quotations omitted.); *United States v. Vaval*, 404 F. 3d 144, 152 (2d Cir. 2005) (A reviewing court must not hesitate to examine the conduct of the government to ensure it "comports with the highest standard of fairness.")

Chelsea relied on its negotiations with the Department and the MOUs in developing the Project and continuing to expend resources to develop the Project. As the hearing officer observed in his order of May 17, 2018, "the refiled petition does not request approval for a larger project, but instead proposes a project that has a significantly smaller footprint and thus raises fewer concerns for neighbors and other interested parties." *Id.* at 5. Echoing the standard of the Vermont Supreme Court in *Chaves*,[16] the hearing officer stated: "It would be bad policy if vested rights were available only if a landowner refuses to make reasonable changes to a project to accommodate the concerns of others." May 17 Order at 5. The same rationale and policy applies here to the Department because it is the government agency that represents the people of the State of Vermont. Barring the Department from a 180-degree turn, when there is no justifiable basis for doing so, is even more compelling here given the substantial and immediate public interest involved as the Commission reaffirmed in its July 10, 2018, order in Case 18-2660-INV:

> Scientists agree that the earth has been and continues to be experiencing a period of climate change that features an increase in average temperatures. These same scientists are also confident that the cause of this climate change is mainly due to human activities, in large part the burning of fossil fuels, which releases greenhouse gases ("GHGs") into the atmosphere, trapping heat.
>
> Global climate change has already begun to have effects on the natural environment in the form of shrinking glaciers, earlier ice breakup on rivers and

[16] *See*, *Chaves* at P16 ("Applicants are encouraged to resolve differences with interested parties by amending a project to respond to issues.")

> lakes, shifting plant and animal ranges, loss of sea ice, sea-level rise, drought, severe storms, and longer, more intense heat waves. Scientists are confident that temperatures will continue to rise for decades with associated long-term effects, including changes in precipitation patterns, a further increase in drought and heat waves, intensifying hurricanes, and accelerated sea-level rise.
>
> How much the world's climate will change depends on the amount of GHG emissions and exactly how they interact with the climate. In spite of an increasing awareness regarding our GHG emissions and their impact on the climate, our emission levels continue to increase. Combatting the effects of climate change in part requires mitigation strategies. Mitigation strategies are those strategies designed to curb the level of human-induced GHG emissions into the environment.

(internal footnotes omitted.)

Even the vice chair of the Bennington selectboard (who is also a regional director of the Vermont Land Trust) concedes that the Chelsea project site is ideal for solar because of its otherwise limited value:

> *"the lot is small, there is no river or lake to protect, the forest is in terrible condition (basal area is so low it barely qualifies as forest in many places and it is rife with invasives), it does not connect to other conserved lands, it is not part of an animal corridor, it does not provide significant public access, it is not high quality farm land nor is it suitable for low-income housing, and is not tribal or cultural heritage land."*

Exhibit CS-BW-17.

Faced with changes that lessen impacts and changes that result in a Project which even the Department's new expert witness states is not visible, the Department has abdicated its role as the advocate for the people of the State of Vermont and has allowed its new expert to run amok promoting a result-oriented unconstitutional methodology, contrary to the expert opinion of the Department's original expert.

Worse, the Department's new policy of abandoning its gatekeeper function on behalf of the people of the State of Vermont and turning it over to the particular expert hired for a case, results in discriminatory treatment across projects and cases. That discriminatory treatment is self-

evident within this case itself. The Department's original expert took a favorable position on the project after negotiating various mitigation measures. Yet faced with changes that *lessen* impacts, the Department changes its position solely based upon the view of its new expert. If one looks outside this case to other cases in which just Raphael is involved, it is evident that Raphael discriminates among projects. *See, e.g.*, Exhibit B. If one were to look to cases involving other experts hired by the Department, the approach and methodology in those cases would vary from the methodology here. The end result is an *ad hoc*, standard-less approach by the Department—directly opposite to the way government must conduct itself. Not only is the result bad policy in a critical environmental area, but it is an approach that results in *systemic discrimination*, which itself is unconstitutional behavior for a government agency. While government agencies acting in a prosecutorial role enjoy broad discretion, they cannot turn that discretion over to a different witness in each case, even if the witness is a purported expert.

The Department blindly submitting and adopting an expert's report for or against a project is not based upon any justifiable standard. It is also arbitrary and capricious because there is a failure to exercise discretion. "Flexibility cannot be a synonym for ad-hoc decision making that is essentially arbitrary." *See, In Re Handy*, 171 Vt. 336, 349 (2000). The Department's new approach is particularly unfair and questionable here because it is being applied retroactively, and the Department already took a position on the larger Chelsea project (on which Chelsea relied). Fundamental fairness and due process requires that the Raphael testimony be excluded.

D. Raphael's Testimony On Orderly Development Must Be Excluded Because It Is Immaterial and Irrelevant.

3 V.S.A. § 810 provides that "[i]n contested cases: (1) Irrelevant, immaterial, or unduly repetitious evidence *shall be* excluded." Raphael's testimony is irrelevant and immaterial for three reasons. *First*, while it purports to provide an opinion on orderly development of the

region—giving four reasons at page 36 to support that conclusion—none of those reasons relate to the region. Rather they all relate to Raphael's view of the Project vis-à-vis the Town, which as he explains is in reality not "his" report at all but for all practical purposes is merely a restatement of the position of the Town and neighbors. Without analysis or reasons related to the region, his report is merely his report on his view of how the Project fits into orderly development of the Town. A report on Town orderly development is immaterial. *See, e.g., In re Petition of Rutland Renewable Energy,* 2016 VT 50, which re-affirmed that all municipal zoning restrictions are preempted in the section 248(b)(1) review, and that regional, not municipal, development is the focus. *Second*, assuming *arguendo* that Raphael's view that the Project is contrary to the Town Plan were correct, his orderly development conclusion is solely based upon purported non-compliance with the Town Plan, which is an Act 250 requirement not a section 248(b)(1) requirement. A report that bases the orderly development conclusion on the equivalent of Act 250's compliance requirement is irrelevant and immaterial in this case. *See, In re Petition of Rutland Renewable Energy, 2016 VT 50,* ¶35 ("An Act 250 permit may not be issued unless the project is "in conformance with any duly adopted local or regional plan." 10 V.S.A. § 6086(a)(10). Yet the Legislature has not included in § 248 any language suggesting that the Board must afford any deference to the Town's recommendations, explain its departure from those recommendations, or ensure that the project conforms to the Town's recommendations.") (Robinson, L., concurring). *Third*, even assuming arguendo that the Town Plan contained constitutional unambiguous, clear standards applicable to the Project that were violated, the report does not even attempt to explain how the local effects rise to the level of regional impact. But such an analysis is required if the ultimate conclusion is that the Project unduly interferes with orderly development of the region. *See, id*. at P12 ("'while in some instances localized impacts may be found to interfere with orderly

regional development due to their character or severity, there is no credible evidence in the record that demonstrates that the localized impacts from this particular project would rise to such a level'" quoting *Petition of Rutland Renewable Energy, LLC,* Docket 8188, Order of March 11, 2015.)

E. Raphael's Testimony Must Be Excluded Under VRE 702 Because It Is Based Upon An Unreliable, Unaccepted And Constitutionally Impermissible Methodology.

The proper scope of an expert's testimony is delineated by Rule of Evidence 702. That rule provides that

> [a] witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:
> (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
> (b) the testimony is based on sufficient facts or data;
> (c) the testimony is the product of reliable principles and methods; and
> (d) the expert has reliably applied the principles and methods to the facts of the case.

"[A] court's Rule 702 inquiry involves the assessment of three issues: (1) the qualifications of the expert, (2) the reliability of the methodology and underlying data employed by the expert, and (3) the relevance of that about which the expert intends to testify." *Washington v. Kellwood Co*., 105 F. Supp. 3d 293, 304 (S.D.N.Y. 2015). *See also United States v. Tin Yat Chin*, 371 F.3d 31, 40 (2d Cir. 2004)).

With respect to nonscientific evidence, "[c]onsistent with *Kumho Tire*, the Rule [702] as amended provides that all types of expert testimony present questions of admissibility for the trial court in deciding whether the evidence is reliable and helpful." Fed. R. Evid. 702 advisory committee note. *See also In re Methyl Tertiary Butyl Ether (MTBE) Prods. Liab. Litig*., 593 F. Supp. 2d 549, 556 (S.D.N.Y. 2008) (discussing 2000 Amendments to Rule 702). The district court must thus act as a "gatekeeper," following general standards "in deciding whether the evidence is reliable." Fed. R. Evid. 702 advisory committee note. "Some types of expert testimony will be

more objectively verifiable, and subject to the expectations of falsifiability, peer review, and publication, than others." *Id.* Moreover, "some types of expert testimony will not rely on anything like a scientific method, and so will have to be evaluated by reference to other standard principles attendant to the particular area of expertise." *Id*.

David Raphael offers testimony on two criteria—aesthetics and orderly development. As to aesthetics, he agrees with the Petitioner's expert that the Project meets the aesthetics criteria under section 248(b)(5). Raphael disagrees, however, with the Petitioner's expert who concluded that *there is no adverse effect* from the Project on aesthetics. Raphael's position is that although the Project is not visible, there is an adverse effect (although not undue) simply from the change in purported "open space" from a vegetated state to a cleared field—even though the "open space" is private.[17] Raphael agrees with Petitioner's expert that there is no clear, written community standard in the Bennington Town Plan that is violated by the Project.

As to orderly development, Raphael concludes that the Project does not satisfy the orderly development criteria under section 248(b)(1), but he reaches that conclusion based upon errors of

[17] Raphael's methodology here is contradicted by, for example, his methodology in the Thomas Dairy Solar report (Exhibit B), where he treats open space differently to suit his conclusion:

> The Project will not result in the permanent loss of any meaningful open space. This is not an open space accessible to the public, nor is there any designated or official public use or access for this property, now or in the future. This is private property and a commercial dairy operation that is inappropriate for active, public open space uses.
>
> ***
>
> [W]hile the solar site is currently an open field, it does not contribute to any notable or specified open space views. It is located along a very busy US Highway on the edge of an urban and built up portion of the road. A short view of the Project, which will appear as an extension of the main dairy complex and operation, will not interrupt or diminish the visual quality of the area, and it will not be visible from more important and critical viewsheds identified in the Town Plan, such as those along Prospect Hill Road. Therefore, if this Project is developed, there will not be any permanent, detrimental or adverse impacts on open space, or open space views.

law, errors of facts, incomplete investigation, and an unreliable methodology. Raphael's testimony fails the requirement of being both reliable and based upon an appropriate methodology.

This is not a question of weight that should be given to Raphael's report. Here it must be excluded. *See, e.g., Teenier v. Charter Communs., LLC*, 2017 U.S. Dist. LEXIS 115441 *10-11 (E.D. Mich. 2017) (rejecting notion that conclusions are solely an issue of weight as opposed to admissibility—"as the Supreme Court noted in *General Electric Co. v. Joiner*, 522 U.S. 136, 146, 118 S. Ct. 512, 139 L. Ed. 2d 508, 'conclusions and methodology are not entirely distinct from one another.' '[G]arbage in, garbage out' [results from a] methodology [that] is unreliable.") *See also, Alexian Bros. Health Providers Ass'n v. Humana Health Plan, Inc*., 608 F. Supp. 2d 1018, 1027 (N.D. Ill. 2009) (excluding expert report stating "the *Daubert-Kumho* canon teach[es] that the critical issue is the soundness of [the expert's] methodology, for only such soundness provides a reasonable assurance that the GIGO ('garbage in, garbage out') hazard has been avoided.").

1. Raphael's Methodology Is Unreliable Because It Fails To Contain An Analysis Of How Purported Local Effects Unduly Interfere With Orderly Regional Growth.

Even assuming that the Town Plan contained constitutional unambiguous, clear standards applicable to the Project that were violated, Raphael's report does not explain how the purported local effects rise to the level of regional impact. Such an omission is a fatal defect in his methodology. If the ultimate conclusion is that the Project unduly interferes with orderly development of the region, his methodology must contain a comprehensive analysis of how the purported character or severity of the purported local effects unduly interfere with orderly regional growth. *See, In re Petition of Rutland Renewable Energy,* 2016 VT 50 at P12 ("'while in some instances localized impacts may be found to interfere with orderly regional development due to their character or severity, there is no credible evidence in the record that demonstrates that the

localized impacts from this particular project would rise to such a level'" quoting *Petition of Rutland Renewable Energy, LLC,* Docket 8188, Order of March 11, 2015.) The failure to include this missing link makes his entire methodology unreliable, failing *Daubert* and requiring exclusion of Raphael's conclusions and report related to orderly development.

2. Raphael's Methodology Violates Due Process And The Common Benefits Clause.

Raphael begins his orderly development analysis by outlining his test as follows:

> Orderly development refers to the systematic planning and development of land uses and associated infrastructure in a region or municipality. *It is based on a legal process that sets forth land use parameters and regulations* to guide future development in a pattern envisioned and adopted by the jurisdictional authority.
>
> Raphael Rep. at 30 (emphasis added.)

Chelsea agrees that orderly development is based upon a *legal process*. Regions and Towns must issue and update plans on a periodic basis. Those plans have the ability to set forth constraints on development, but in order to be lawful, those constraints must, among other things, be clear, objective and set unambiguous standards so that property owners know what is and is not permitted.

Raphael's analysis then continues with additional standards under his view of orderly development, but these have no basis in law:

> In reviewing projects for their consistency with the orderly development of the region, the onus is on the Applicant to provide the basis for concluding that the project, as proposed, is consistent with the accepted and established provisions and patterns of development in the town and the region. In addition, any evaluation of Orderly Development must assess the land use and landscape dynamics "on the ground". The project may or may not fit well with surrounding uses and/or conditions. The nature of the landscape may have distinct limitations or environmental or aesthetic "costs" related to development.
>
> Rep. at 30.

To be sure Chelsea bears the burden with respect to the issue of whether the Project would unduly interfere with orderly development of the region under section 248(b)(1). But what Raphael outlines is not what the Petitioner needs to show. The fundamental constitutional premise as outlined by the Vermont Supreme Court is that any restriction on development must be clear and based upon unambiguous objective criteria. Anything less violates constitutional guarantees of due process and equal protection and would constitute an unlawful taking without just compensation.

A section 248 petitioner does not need to show that the "project, as proposed, is consistent with the accepted and established provisions and patterns of development in the town and the region." Rep. at 30. Consistency as used by Raphael is a vague, ambiguous notion, not even remotely reaching the required constitutional standard. A petitioner need only show that the Project does not violate a clear, unambiguous standard. If a project does not violate such an enforceable standard, then it is by definition not inconsistent with orderly development.

Similarly, a section 248 petitioner does not need to address Raphael's vague notion of "fit:"

> In addition, any evaluation of Orderly Development must assess the land use and landscape dynamics "on the ground". The project may or may not fit well with surrounding uses and/or conditions. The nature of the landscape may have distinct limitations or environmental or aesthetic "costs" related to development.
>
> Rep. at 30.

"Fit" (to the extent it is an enforceable concept at all) is the responsibility of the regional and town plans. The regions and the towns certainly know how to draft clear, unambiguous standards if they desire to do so. Raphael's concept of "fit" in his methodology is a vague, amorphous, standard-less notion.

Raphael's detailing of his unreliable methodology continues with an erroneous statement of what the law is:

> As the language in the statute states, the analysis must include a review of both the municipal and regional plan parameters for development in this district as well as an understanding of the intent of those plans and the positions of the respective authorities.
>
> Rep. at 30.

That statement of what should allegedly be included in a methodology is not what the statute says. The statute says that all zoning is pre-empted and that the Commission shall give due consideration to regional and municipal plans, a flexible watered-down version of Act 250's requirement of conformance with a town plan.[18] The statute says nothing about the "intent" of the region and municipal plans. "Intent" is vague, ambiguous and unenforceable. *See, e.g., In re JAM Golf, LLC*, 2008 VT 110, ¶¶ 13-14, which held that ordinances that required design to "'protect' natural resources was unconstitutionally vague because it created no real standard."

The Raphael report further elaborates that his methodology also includes the rank hearsay

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[18] *See, e.g., In re Petition of Rutland Renewable Energy,* 2016 VT 50, which re-affirmed that all municipal zoning restrictions are preempted in the section 248(b)(1) review, and that regional, not municipal, development is the focus. As Justice Johnson emphasized in her concurring opinion in *In re Rutland Renewable Energy,* 2016 VT 50, ¶ 36:

> "*[T]he permitting process pursuant to § 248 preempts municipal zoning requirements altogether*—an aspect of the statutory structure that further undermines any suggestion that the Board owes deference to the Town's solar siting standards. See City of S. Burlington v. Vt. Elec. Power Co., 133 Vt. 438, 447-48, 344 A.2d 19, 25 (1975) (holding municipal zoning regulation of transmission line preempted by state regulatory authority). On balance, the plain language of the statute requires that the Board consider and perhaps even address the Town's recommendations as to the effect of the project on development in the region. Beyond that, the statute does not require the Board to give any particular weight to the Town's recommendations beyond that weight the Board, within its discretion, deems to be "due."

See also, id. ¶ 35 ("An Act 250 permit may not be issued unless the project is "in conformance with any duly adopted local or regional plan." 10 V.S.A. § 6086(a)(10). Yet the Legislature has not included in § 248 any language suggesting that the Board must afford any deference to the Town's recommendations, explain its departure from those recommendations, or ensure that the project conforms to the Town's recommendations.") (Robinson, L., concurring).

from the Town and the neighbors, and his preposterous notion that the current Town and neighbor position is *post hoc* evidence of a clear, unambiguous community standard that can restrict development:

> [The report methodology] incorporates the information and perspectives provided by representatives of the Town and materials available in the Docket. A technicality with regard to timing prevents this review from relying on the most recent Regional Plan as well as the Town Plan adopted in 2015. The 2015 Town Plan provides additional and relevant guidance with regard to solar development in locations such as the Rural Conservation District. These chnmages [*sic*] are a reflection of community intent and its position with regard to solar developments such as Chelsea Solar.
>
> Rep. at 30.

Notably, Raphael concedes that even though Chelsea is entitled to vested rights and the use of the 2010 Town Plan, Raphael sees that as a mere "technicality" that he can do an end-run around by characterizing the subsequent Town Plan changes as evidence of what was there all along. Such a methodology is unreliable, unconstitutional and violates Chelsea's vested rights.

The above explanations by Raphael of his methodology becomes the segue to his vacuous claim that the 2010 Town Plan provides a basis to conclude that the Project creates an undue adverse effect on the orderly development of the region.

> While the most recent iteration of the Town Plan adds additional specificity and requirements related to solar development, even the 2010 version provides sufficient language and understanding to provide a basis for whether or not this project will or should be considered or is consistent with "Orderly Development".
>
> Rep. at 31

The Report concedes that the goals and statements in the regional plan are "broad." Rep. at 33. ("The 2007 Bennington County Regional Plan provides an overall sense of how the County's planners envision development in the region. These narratives, and their associated

goals, while broad in perspective, inform our understanding of the regional vision for land use and development, and this project can be "tested", to a certain extent, with regard to the extent to which the proposed development forwards or fights the goals and the vision.")

The Report also concedes that general, non-specific scenic goals are present in most plans in Vermont. ("Act 200 and most regional plans in the state have set forth a prime characteristic and goal for developing in Vermont's landscape and that is a clear separation between growth centers and clustered village/town development patterns and the rural open spaces that surround them. This has become core tenet in Vermont planning.") Obviously, the Vermont Supreme Court is well-aware of that fact and has rejected those non-specific general goals as being able to restrict development. *See, e.g., In Re Kisel* and *Chaves*.

But Raphael abandons any pre-text of serious review of regional orderly development, unmasking the crux of Raphael's unreliable methodology as being based upon the current illegitimate opposition of the Town and the neighbors:

> it is clear from the current town sentiment and efforts in changing the Town Plan that the community and the neighbors did not and do not envision a project such as this with the potential for 1) visual and aesthetic impacts, 2) impacts to adjacent neighborhoods and the rural character that is delineated for this district and its neighborhoods; and 3) the erosion of the buffers and forestland which comprise and create the character for the district edge and gateway area.
>
> Rep. at 34.

Raphael dons the ambiguous, standard-less town plan goals adorned by *post hoc* Town and neighbor opposition in expert garb in his bid to make them enforceable—flatly violating the time and again holdings of the Vermont Supreme Court that standard-less criteria which restricts property development is unconstitutional, violating both due process and equal protection.[19]

[19] Raphael concedes that the town plan does not have any clear community standards applicable to the project. *See, e.g.*, Raphael Report at 22. ("Plan does not include standards."); *id*. at 24 ("there are no specific

Ambiguous and standard-less restrictions on property development are equally repugnant to due process and equal protection when cloaked in an expert opinion. Both the standard-less Town Plan and the *post hoc* "interpretation" of the Town Plan through Town opposition, neighbor opposition and post-2014 Town Plan changes are an impermissible and unreliable part of Raphael's methodology. Not only do those portions of his methodology violate the Vermont Constitution because they are standard-less, they also trample on Chelsea's vested rights, further violating Chelsea's constitutional rights to due process. Each one, and all together, they make his entire methodology unreliable, requiring exclusion under *Daubert.*

3. Raphael's Methodology Is Unreliable Because It Includes The Apple Hill Solar Project In Its Analysis In An Irrational Way.

The Chelsea Project must "meet the statutory requirements for approval under Section 248 on its own merits." *See Procedural Order Re: Motion For Partial Summary Judgment,* Docket 8180, *Petition of Vermont Gas Systems, Inc*. (July 23, 2014) at 11. Apple Hill Solar "is a separate project that is not before [the Commission] for review in this proceeding." *Id.*

Raphael makes several manifest errors in his orderly development analysis which causes his testimony to be unreliable and lack probative value. Raphael's report analyzes the effects of the Chelsea Project as if Chelsea and the neighboring Apple Hill project were a single project before the Commission in this case. But that is manifestly erroneous. There are only two rationale ways Raphael's methodology could have included Apple Hill in his orderly development analysis—either assume the Apple Hill project receives a CPG and exists (scenario A), or assume it does not (scenario B). In scenario A, Raphael's analysis must assume that the clearing for the Apple Hill project already exists, and that the element of a solar array already exists. But Raphael

goals or policies that would specifically apply to the Project, or standards."); *id.* ("there are no specific standards."); *id*. ("the Project will not violate a clear written community standard intended to preserve the aesthetics or scenic beauty.")

does not make such an assumption. In scenario A, he assumes that the entirety of the purported effect on open space for the Chelsea Project and Apple Hill project is an effect attributable to the Chelsea Project. He also assumes incorrectly in scenario A that a solar array would be a new element. That methodology is unreliable because it is logically inconsistent and does not reflect the only two factual potential scenarios.

Raphael fails to analyze scenario B, and instead creates a mash-up of purported effects from Apple Hill solar and Chelsea solar, none of which provide a reliable methodology if Apple Hill Solar is not built. Experts may rely on hearsay while forming their opinions, as long as that hearsay evidence is reasonably relied upon by experts in the field. *United States v. Mejia*, 545 F.3d 179, 197 (2d Cir. 2008). *See also, Brandt v. Rokeby Realty Co*., 2005 Del. Super. LEXIS 184, 2005 WL 16543621, at *4 (Del. Super. Ct. May 9, 2005) (A core requirement is that an expert's reliance on inadmissible hearsay evidence is limited by Rule 703's requirement that it also be reasonably relied upon by others in the field).

Relying on hearsay of the Town's and neighbors' opposition is not a recognized and accepted methodology in aesthetics and orderly development analysis. Indeed, Raphael has publicly stated that projects would simply not get built if the type of rank hearsay his methodology relies on here, were able to infect the legal review of project.[20]

[20] In an October 24, 2012 letter to then Governor Shumlin and then DPS Commissioner Miller (*see* Exhibit C), Raphael wrote:

> Concerns with regard to the requirement of town approval for an energy project to go forward - it strikes me that this is the very reason these decisions are rightfully in the province of a state regulatory body - most towns, when given the opportunity, will listen to the vocal and passionate opposition that exists for almost every proposed project - and will not support the implementation of such projects. I would wager that the NRP [Northwest Reliability Project] would never have been built for example, if individual towns had veto power. There does need to be, however, a viable and meaningful participation opportunity for towns;

Raphael continued:

4. Raphael's Methodology Is Also Unreliable Because It Is Based Upon Untested And Inaccurate Assumptions.

Noise

Raphael states in multiple places of his report that the existing "forest" provides important noise (aesthetic) buffering. *See, e.g.*, Rep. at 11 ("to clear-cut roughly 9.64 acres of vegetation and forest [] will certainly have an impact on the open space values [] (including noise abatement); p. 25 (the project will have "impacts such as [on] highway noise." Raphael assumes without factual basis that the "forest" provides "noise abatement." Raphael is not an expert in noise analysis. His use of an off-the-cuff unsubstantiated noise conclusion renders his overall conclusions unreliable and not based upon a reliable and accepted methodology. Making factual conclusions without foundation is an unreliable methodology. Worse, in this case there is expert noise testimony (which Raphael has wholly ignored) that establishes any increase in sound would be for a short duration and imperceptible to the human ear. In any case, his unsubstantiated noise conclusion forms part of the basis for his open space and by extension aesthetics and orderly development conclusions. This is improper and plainly unreliable under *Daubert*.

Wind

Raphael states that open space value is compromised because winds will increase due to the project. *See,* Rep. at 25 (the project will "increase of southerly and westerly winds due to the extensive loss of vegetation.") Raphael assumes without factual basis that the "forest" provides wind protection. Raphael is not an expert in wind analysis. His use of an off-the-cuff unsubstantiated wind conclusion renders his overall conclusions unreliable and not based upon a

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Town plan prohibition of renewable energy types is a dangerous precedent - there is a reason why towns cannot prohibit telecommunications facilities, although they can and should provide standards and guidance as to siting and mitigation.

(emphasis added.)

reliable and accepted methodology. Making factual conclusions without foundation is an unreliable methodology. Worse, in this case there is expert wind testimony (which Raphael has wholly ignored) that establishes any increase in wind would be for a short duration and imperceptible to humans. In any case, his unsubstantiated wind conclusion forms part of the basis for his open space and by extension aesthetics and orderly development conclusions. This is improper and unreliable under *Daubert*.

Bucolic and pastoral

Raphael asserts a factual basis for his conclusions is that the Apple Hill neighborhood is bucolic and pastoral, purportedly unconnected from the highway or nearby (commercial and industrial uses that are in all directions). *See,* Rep. at 9 ("Even though they are only several hundred feet away, the highway and commercial areas are not visible or noticeable, giving the surroundings a more bucolic and pastoral feel. These areas are completely disconnected from the south and west.") Raphael's factual conclusions are inconsistent with several facts and complaints of the neighbors. *First*, the neighbors assert that they are constantly subjected to continuous highway noise, especially from trucks as the climb north from the interchange. Based upon those claims from the neighbors, the area is certainly not bucolic, pastoral or disconnected from the highway—the highway is a constant known presence. The Petitioner's noise expert report bears that out. *Second*, the neighbors complain about wind, which also contradicts the unreliable assumption that the area is bucolic, pastoral or disconnected from the highway. *Third*, the entire Apple Hill association lives under an ISO-New England transmission corridor. Even for those homes that cannot see the HTVL from their homes, they see it when the drive outside of the AHHA area. Raphael's wholly ignoring the presence of the HTVL corridor, while complaining about the normal distribution line extension for the Apple Hill project strains credulity even further. *Fourth*,

as the neighbors have repeatedly pointed out the Apple Hill is in a hot zone with its groundwater contaminated by PFOAs. Living with PFOA contamination can hardly be described as bucolic. Bu PFOA contamination, like so many other things, do not support Raphael's strained narrative, so he omits it, further illustrating the unreliability under *Daubert* of his methodology.

Petitioner's Expert

Raphael states that the Petitioner's expert agrees that the Project would have an adverse effect on aesthetics. That statement is false.

5. Raphael's Methodology Is Unreliable Because It Selectively Applies Post-2010 Town Plan Criteria.

Raphael concedes that he is de facto applying post-2010 Town Plan criteria despite Chelsea's vested rights. But Raphael selectively chooses which Town Plan criteria to apply. For example, his methodology fails to address the fact that the Project is a preferred site because of the retained screening. He also fails to address the Town screening ordinance's focus on screening. Both of those criteria look to whether the project is screened. If it is then it satisfies the Town Plan. His methodology fails to address the fact that the new Town Plan identifies certain parcels specifically as preferred for solar (in addition to its designation applicable to the Chelsea Project as preferred because it is screened by retained vegetation). Preferred sites in the RCON district are within the vicinity of the Project site, and far larger. *See*, Figure 1 *infra*.

6. Raphael's Methodology Fails To Focus On The Region, Making It Inaccurate And Unnreliable.

Raphael's orderly development conclusion turns entirely on the incorporation of local opposition. His methodology, however, does not look at the Project from the regional perspective. The test under Section 248(b)(1) is whether the proposed project will unduly interfere with the orderly development of the *region*, not the town. There are seventeen towns within the

Bennington Region and this Project is located in only one of them. The region is Bennington County not the Town. The site itself and the clearing required at the site for the Project is a mere 0.004% of the approximately 370,000 acres in the region. While Raphael purports to provide an opinion on orderly development of the region—giving four reasons at page 36 to support that conclusion—none of those reasons relate to the region. Rather they all relate to Raphael's view of the Project vis-à-vis the Town. Without analysis or reasons related to the region, his report is merely his report on his view of how the Project fits into orderly development of the Town, which is an inaccurate and unreliable methodology for reviewing effect on orderly development of the region. *See, In re Petition of Rutland Renewable Energy,* 2016 VT 50, reaffirming that all municipal zoning restrictions are preempted in the section 248(b)(1) review, and that regional, not municipal, development is the focus. Moreover, even assuming that the Project was contrary to unambiguous standards in the Town Plan, his orderly development conclusion is solely based upon purported non-compliance with the Town Plan, which is an Act 250 requirement not a section 248(b)(1) requirement. A methodology that bases the orderly development conclusion on the equivalent of Act 250's compliance requirement is inaccurate and unreliable. Raphael's report states that its "review is based on the 2010 Bennington Town Plan, the 2004 Town of Bennington Scenic Resource Inventory, the 2009 Bennington Park and Open Space Plan, and the 2007 Bennington County Regional Plan." Report at 30. No mention is made of the Regional Energy Plan or the Town Energy Plan. Raphael's methodology also ignores the goals in the regional and town plans that support the Project. *See,* Attachment I. A methodology that fails to include such highly relevant regional and town plans is unreliable.

7. Raphael's Methodology Is Unreliable Because It Uses An Incomplete Review of What Is "On The Ground."

Raphael blindly recites Town Plan goals related to the RCON zone, and purports to take

an "on the ground" look at the site and the surrounding area. But that is merely lip-service. Raphael's methodology tries to side-step the fact that commercial solar is permitted in the RCON district by creating his own characterization of the uses in the vicinity of the Project site.

> This district, except for the highway infrastructure to the south, is a distinctly rural, non-industrial landscape with a low density development character that lacks the type of physical intrusion and footprint that this project represents. Over a mile of new electrical connector line is required for this project (without Apple Hill).

Rep. at 34.

But Raphael's methodology is incomplete and inaccurate, and thus unreliable. *First*, it is wholly inconsistent to acknowledge that commercial scale solar is permitted in the RCON zone, but then try to create a rationale for why this particular solar project in the RCON zone would unduly interfere with regional orderly development. *Second*, Raphael's assumption of where commercial scale solar in the RCON is permitted or exists is inaccurate, hence more GIGO. An on-the-ground review of the vicinity of the Project site would reveal that there is no bright-line as Raphael asserts as Figure 1 (below) shows.

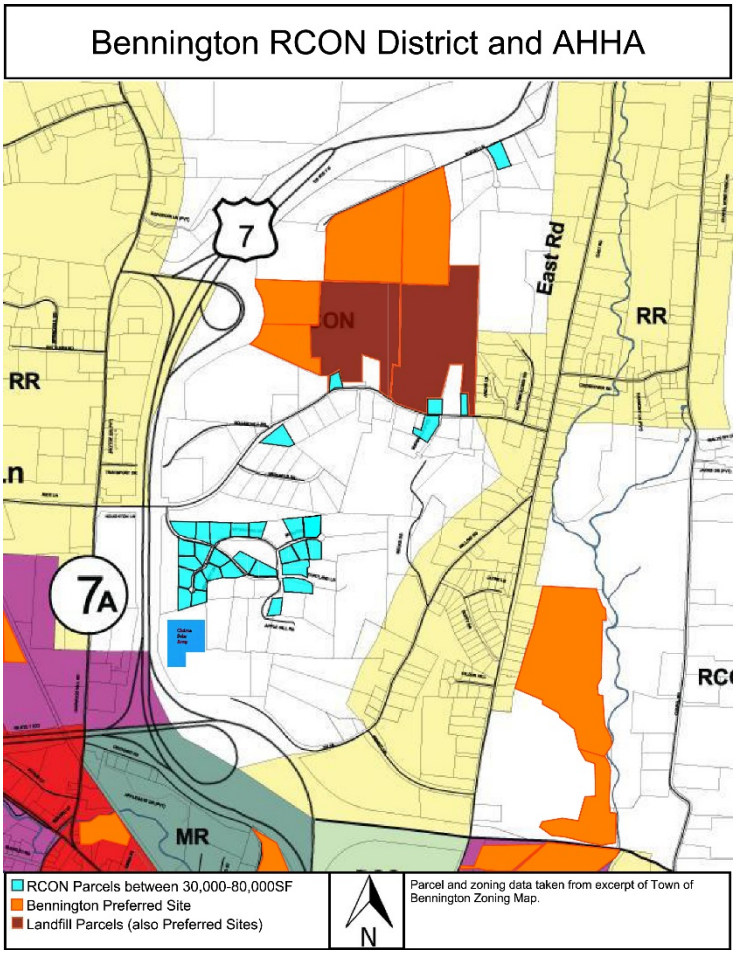


Figure 1 also illustrates that:

1. The RCON continues to the westerly side of Route 7, as shown on Figure 1.

2. The Apple Hill neighborhood is a *de facto* rural residential zone because of all the parcels that fall below the 80,000 square lot size for the RCON zone.

3. The Project site is surrounded by mixed uses. To the south is the highway interchange and commercial zones; to the west is route 7 and industrial and commercial zones; to the north is the compact undersized lots of the Apple Hill neighborhood that the ISO-NE HTVL bi-sects; to the north is a landfill operation and a massive specifically identified site for solar; to the east is a rural residential zone and another massive specifically identified preferred site for solar. Both specifically identified preferred sites are in the RCON and are multiples of the size of

the Chelsea array.

4. The AHHA neighborhood has already, and long ago, transformed the area away from RCON standards.

Raphael's "on the ground" methodology also omits to consider the PFOA contamination of the area, which is leading to connection to public water supply—another alleged no-no for an RCON district. These inaccuracies and omissions make his methodology unreliable, requiring exclusion.

8. Raphael's Methodology Is Unreliable Because He Does Not Apply It In Other Cases.

Contrast Raphael's methodology here with his methodology in a very recent report from June 26, 2018 regarding the Thomas Dairy Solar LLC ("TDS") 500kw project. *See* Exh. B. The TDS project is located off Rt. 7 in Rutland and would be clearly visible from Route 7. In order to play down the impacts to aesthetics and support his conclusion of no adverse effect, Raphael massages a number of criteria to describe the TDS project.

Raphael describes the TDS area as a transitional area between the dense commercial core of Rutland City and the more rural residential areas of Rutland Town and Pittsford. He makes that characterization despite the fact that his overhead map (p. 4) and his photos (p.7) show wide open spaces with minimal commercial uses, and certainly none near the scale of the solar project. The transitional description could equally be applied to the Chelsea methodology.

Raphael then characterizes the area as "quite varied and highly versatile." TDS at 6. He geographically looks 2500 feet to the south for examples of warehouses, a car dealership and other commercial uses. The he expands the "area" yet another 2500 feet to the south noting the presence of a hydro-station and a GMP solar project. *Id.* If that methodology for characterizing the area were applied to the Chelsea project, it would encompass the industrial zones, commercial zones,

landfill, specifically designated preferred solar sites (including a site that could have clearing 4-6 times that of the Chelsea project).

For TDS Raphael then looks more than 2 miles north to expand the geographical area that is used to define the site, reaching equipment sales of Kenworth and Townline. *Id*.

Raphael then explains that the presence of an existing utility corridor nearby helps justify his conclusion that the TDS project is compatible with its surroundings. *Id*. at 9. But in the case of Chelsea, Raphael wholly ignores the fact that the AHHA community lives under two high voltage transmission lines.

The kicker comes with the following:

> Hydro-facilities, solar arrays, highway traffic, strip development, warehouses, car dealerships and a host of other commercial enterprises are all prominent features in the landscape here, **[i.e., within 1-2 miles from the project site]** and solar panels harnessing the earth's resources in an already settled and working landscape would not be incompatible with the development patterns that are already present and visible here. The Project will only occupy a fraction of the property and is proposed on a portion of the parcel that will have the least amount of visibility."

With respect to the Chelsea Project, Raphael abandons the methodology used for TDS solar vividly illustrating that his methodologies are not reliable but merely result oriented. The methodology used in TDS—looking to the geographical area of "fit" within a radius of 2-plus miles—would eviscerate his conclusions with respect to the Chelsea Project. In the case of the Chelsea Project the built commercial, industrial and solar environment is much closer than he needed to go for the TDS project to justify his conclusions there.

Raphael also includes another factor in the TDS methodology which was not present in the methodology for the Chelsea Project:

> the Project does not introduce unduly adverse elements like excessive exterior lighting, additional traffic, noise, odors, dust or other impacts that are typically considered inharmonious.

Id. at 9.

So too here. The Chelsea Project does not introduce unduly adverse elements like excessive exterior lighting, additional traffic, noise, odors, dust or other impacts that are typically considered inharmonious. But Raphael omits those factors from his methodology, presumably because they do not support his results-oriented conclusion.

Other contradictions in the methodology are illustrated by the following excerpts from his TDS report:

> The colors and materials proposed for this Project are suitable insofar as 1) they are consistent with materials used in many similar solar projects approved by the Commission, 2) they do not stand out or make the panels or structures highly visible (i.e. the darker color of the panels and metal finish of the structures blend in better with the background), and 3) they are contextually appropriate for the conditions of the area. There are also a variety of other manmade structures, colors, and materials visible within close proximity of the Project viewshed, like houses, fences, barns, utility poles, distribution lines, other solar arrays, display cars and trucks, etc.
>
> The dark solar panels will be attached to a fixed mounting system composed of grey steel and aluminum support pieces. The metal/grey color of the frames and racks that support the panels are less visible during winter and often blend in with surrounding ground cover, trees, buildings, and background landscape. Because views are only likely for northbound travelers along a short stretch of road, and the fact that the Project is set within a hillside and bounded by other landscape and manmade features, the Project will be readily absorbed into its surroundings. The colors and materials will blend well with the branching density and colors of the adjacent woodlands and background hills, as well as the proposed landscape planting proposed along the perimeter of the fence (see Figure 1. Landscape Mitigation Plan).
>
> TDS at 15.

Raphael's TDS methodology then reaches his ultimate conclusion by focusing on among other things the "limited visibility,"—a factor he discounts in the Chelsea methodology. TDS at 19. He also asserts that the reduction in "open space" is not an issue because it "has no permanent impact on open space,"—another factor he discounts in the Chelsea methodology. *Id*.

9. Raphael's Methodology Is Also Unreliable Because It Unconstitutionally Introduces A Consent Requirement.

Raphael's opinion on orderly development is essentially a regurgitation of the Town's and the neighbors' position in this Case. Raphael concedes that his conclusion is based upon what he views as the "intent" of the Town Plan, which is in turn in his view is based upon the opposition from the Town and the neighbors. Raphael's analysis is like a barometer that going up and down based upon local opposition. The louder the local opposition, then a project violates the Town's approach to orderly development.

Raphael's orderly development opinion implements a *de facto* consent requirement. Placing the power to decide even indirectly whether a project satisfies the orderly development criteria with private landowners is a *de facto* delegation of legislative power to those private landowners. *See, DOT v. Ass'n of Am. R.R.*, 135 S. Ct. 1225, 1238 (2015) (Alito, J. concurring) ("By any measure, handing off regulatory power to a private entity is 'legislative delegation in its most obnoxious form.' *Carter v. Carter Coal Co.*, 298 U. S. 238, 311 (1936).")

Here the *de fac*to power granted to the objecting landowners through Raphael's adoption of their position is standard-less, allowing for unbridled discrimination based upon the whim of adjoining landowners. Such standard-less discretion violates property owners' due process rights. *In re Appeal of JAM Golf, LLC*, 2008 VT 110, ¶ 14. For example, in *Town of Westford v. Kilburn*, 131 Vt. 120, 124, 300 A.2d 523, 526 (1973) ("*Killburn*"), a municipal zoning ordinance denied permission for any business, commercial, industrial or agricultural uses unless all adjoining landowners and long-term lessees consented to the use. The appellants, who wanted to use their barn for barn dances, attacked the ordinance for delegating power, without standards, to neighbors. The Vermont Supreme Court struck down the neighbors' role, concluding that the delegated authority to adjacent property owners was impermissible as there were "no standards to govern

its use." *Id*. at 125-26, 300 A.2d at 527. So too here. As in *Killburn*, Raphael's methodology, which effectively delegates to neighbors a development power, opens the door to "unbridled discrimination". *Id.* at 125, 300 A.2d at 526 citing *Waterville Hotel Corp. v. Board of Zoning Appeals*, 241 A.2d 50, 52 (Me. 1968) ("without the guidance of any standards, equal protection is denied the citizens.")

In fact, Raphael has prior to this Case agreed with that view.[21]

Similarly, in *In re Miserocchi*, 170 Vt. 320, 749 A.2d 607 (2000), the Vermont Supreme Court held that "a decision arrived at without reference to any standards or principles is arbitrary and capricious; such ad hoc decision-making denies the applicant due process of law." *Id*. at 325, 749 A.2d at 611 (citation omitted).

The *de facto* delegation to the neighboring landowners and the Town through Raphael's orderly development conclusion also violates the Common Benefits Clause of the Vermont Constitution as it (i) enables such landowners and the Town to arbitrarily favor some neighbors over others[22] and (ii) it benefits such landowners to the direct detriment of their neighbors who wish to develop solar facilities. If government cannot "exercise[e] its authority inequitably and without a rational basis or for the emolument of a particular group [or against a particular person]," *In re Town Highway No. 20*, 2012 VT 17, P34 (2012), it certainty cannot delegate the *de facto* right to do so to a private person.

10. Raphael's Adoption Of The Town's 10-acre Rule Violates the Common Benefits Clause of the Vermont Constitution, And Violates Chelsea's Vested Rights Causing His Method To Be Unreliable.

The 10-acre rule adopted by the Town and then given force in Raphael's report

[21] *See*, fn. 20, *supra*.

[22] Indeed, the Town freely admits that it does so. *See*, fn. 3, *supra*.

discriminates based upon the size of the solar generating facility. The Common Benefits Clause of the Vermont Constitution, which guarantees equal protection of the laws, in pertinent part, reads,

> That government is, or ought to be, instituted for the common benefit, protection, and security of the people, nation, or community, and not for the particular emolument or advantage of any single person, family, or set of persons, who are a part only of that community. . .
>
> Vt. Const., ch. I, art 7.,

"The concept of government exercising its authority inequitably and without a rational basis or for the emolument of a particular group [or against a particular person] was anathema to that end." *In re Town Highway No. 20*, 2012 VT 17, P34 (2012). Government action is judged under a "more stringent test" under the Common Benefits Clause than the United States Constitution's Equal Protection Clause's rational basis test. *Baker v. State*, 170 Vt. 194, 205 (2000). The Vermont Supreme Court has declared that Article 7 "only allows the statutory classifications . . . if a case of necessity can be established overriding the prohibition of Article 7 by reference to the "'common benefit, protection, and security of the people.'" *See, State v. Ludlow Supermarkets, Inc*., 141 Vt. 261, 268, 448 A.2d 791, 795 (1982) ("*Ludlow*") (invalidating a Sunday closing law that discriminated among classes of commercial establishments on the basis of their size.)

The Common Benefits Clause of the Vermont Constitution differs markedly from the federal Equal Protection Clause in its language, historical origins, purpose, and development. While the federal amendment may thus supplement the protections afforded by the Common Benefits Clause, it does not supplant it as the first and primary safeguard of the rights and liberties under the Vermont Constitution. *See State v. Badger*, 141 Vt. 430, at 449 (1982) (Court is free to "provide more generous protection to rights under the Vermont Constitution than afforded by the

federal charter"). Although Vermont Supreme Court decisions over the last few decades have routinely invoked the rhetoric of suspect class favored by the federal courts, *see, e.g., Choquette*, 153 Vt. at 51, 569 A.2d at 458, there are notable exceptions.

The principal decision in this regard is *Ludlow*, where, Chief Justice Albert Barney, writing for the Court, invalidated a Sunday closing law that discriminated among classes of commercial establishments on the basis of their size. After noting that the Vermont Supreme Court, unlike its federal counterpart, was not constrained by considerations of federalism and the impact of its decision on fifty varying jurisdictions, the Court declared that Article 7 "only allows the statutory classifications . . . if a case of necessity can be established overriding the prohibition of Article 7 by reference to the "'common benefit, protection, and security of the people.'" *Id*. at 268, 448 A.2d at 795. The Court held that even though the preference for small business enterprises was premised on such enterprises being "essential and fundamental to the economy of the state," without more, "this objective of favoring one part of the community over another *is totally irreconcilable with the Vermont Constitution*". *Id*. at 269 (emphasis added). The same holds true here. The incorporation into Raphael's methodology of the Town's new 10-acre rule, through his "open space" analysis discriminates solely based upon the size of a solar generating facility. The 10-acre rule cannot be justified by any necessity. Indeed the 10-acre rule harms the common benefit and the good of the state by reducing the amount of renewable energy that can be produced, thus resulting in increased fossil fuel use and the resulting climate, environmental and health adverse effects from fossil fuels. As per *Ludlow*, such discrimination against commercial development based upon its size is unconstitutional. It can fare no better indirectly through Raphael's methodology.

F. Raphael's Legal Conclusions Must Be Excluded.

Under Vermont Rule of Evidence 702, experts are precluded from tendering opinions on ultimate legal issues or credibility in litigation. *See, e.g. Rathe Salvage, Inc. v. R. Brown & Sons*, 46 A.3d 891, 901 (Vt. 2012).[23] Raphael's conclusion on undue interference with orderly development of the region is a legal conclusion. Other expert's in the field in Vermont, and Raphael in other cases, review regional and local plans to determine whether there is any legally enforceable standard in those plans that restrictions development. When and if none apply, then the orderly development criterion is satisfied. Raphael's testimony here, on the other hand, abandons that methodology in favor of one that appoints him the self-appointed czar of what is intended or not intended to be permitted. Under his standard-less approach he reaches a legal conclusion that the Project unduly interferes with orderly development of the region. But regardless of the unreliability of his methodology, his legal conclusion on orderly development is required to be excluded. *Id*.

III. Conclusion

For the reasons stated above, Chelsea moves for the exclusion of the Raphael testimony. Chelsea requests that a *Daubert* hearing be scheduled as expeditiously as possible. Exclusion of the Raphael testimony would save the parties deposition time of both Raphael and the Department so a ruling on excluding his testimony prior to August 10 is requested.

Dated: July 23, 2018 Respectfully submitted,

[23] In *In re Appeal of JAM Golf, LLC* 969 A.2d 47, 51 (Vt. 2008), the Vermont Supreme Court affirmed the decision of the Environmental Court to admit testimony from South Burlington's wildlife expert concerning wildlife corridors. The court found that despite the "hypothetical" nature of some of the expert's testimony, the testimony was reliable for the purposes of *Daubert* because it was based on the type of facts and data with which wildlife experts are familiar—topographic features and wildlife patterns—and in doing so, held that a wildlife expert is afforded the authority to interpret and rely on such technical information, even if it was not observed firsthand.

/s/ Thomas Melone
Thomas Melone
Bar No. 5456
Allco Renewable Energy Limited
1740 Broadway, 15th floor
New York, NY 10019
Phone: (212) 681-1120
Email: Thomas.melone@AllcoUS.com

Attorneys for Chelsea Solar LLC

ATTACHMENT 1

The Town Plan expresses the following goals and policies:

- ✓ "Support efforts to develop renewable energy facilities." P.3.

- ✓ "[E]fforts must be made to establish reliable local energy from renewable sources." P. 7.

- ✓ "The economic sectors and needs identified earlier in this chapter will remain important to the community, but will need to be adapted over time to take advantage of opportunities offered by things such as local renewable energy resources." P. 12.

- ✓ "Produce as much of the community's energy demand as possible using local resources." P.12.

- ✓ "support [] local foods and renewable energy." P.14.

- ✓ "Incentives for investment in conservation and renewable energy systems should be supported." P.55.

- ✓ "Future electricity supply constraints are a concern because of expiring contracts with Vermont Yankee and Hydro Quebec as well as possible fuel shortages at regional fossil-fuel based generating plants. Resolving these problems will require implementation of a "smart grid" where supply can be more closely matched with demand as well as through development of a large number of small renewable-energy-based generating facilities distributed throughout the region." P. 83.

- ✓ "[T]he great majority of fuel used for transportation and heating and cooling homes and businesses is derived from nonrenewable fossil fuels. In addition to the negative environmental impacts associated with burning oil, gas, and similar fuels, the available supply of those fuels is strictly limited and within a relatively short period of time, production will not be able to keep pace with demand (for further details, see Bennington Regional Energy Plan, 2009). The result will be escalating prices and physical shortages of energy products that will begin to cause severe problems if we have not reduced our reliance on those fuels." P.92.

- ✓ "The town [] should support [] development of renewable energy resources." P.94.

- ✓ "Generation of energy from renewable energy resources supports conservation of non-renewable energy resources while helping to maintain a clean environment." P. 94.

- ✓ "Potential renewable energy resources in Bennington include: *** Solar energy to heat buildings, water, and to power photovoltaic cells. Pp. 94-95.

- ✓ "It is likely that the smart grid will rely on many distributed small generators located closer to the points where the electricity is used; consequently, the town should support

economically and environmentally sound development of local electricity generating capacity." P. 95.

- ✓ "Actively promote the energy-related benefits of town policies that:*** Support development of renewable energy resources." Pp. 95-96.

- ✓ "Create and support programs and facilities that provide stable, affordable, and clean renewable sources of energy, including wood (and other biomass), wind, water (hydroelectric), solar, and geothermal. Give strong consideration to the energy needs of the community when evaluating the environmental and economic affects of such programs and facilities." P. 96.

- ✓ "The town should continue to pursue [] renewable energy projects." P.96.

The policies and goals expressed in Bennington energy plan encourage projects such as the Chelsea Solar project, and also encourage the use of trees for biomass:

- ✓ "Alternative energy sources such as solar, [] and biomass-based fuels can provide significant amounts of clean energy well into the future. Developing these resources is extremely important." P.2.

- ✓ "Commercial Renewable Energy Opportunities in Bennington *** The amount of money spent on energy in Bennington—as pointed out in previous sections—suggests that real economic benefits can be realized if some significant portion of that energy is generated from local sources." P.38.

- ✓ "renewable energy must focus on local resources." P.38.

- ✓ "Available resources that potentially can provide for some of the area's energy needs include: biomass (wood and field crops), [] and direct solar radiation. [] Developing those resources now also will help provide energy security for the community, assuring availability of the energy needed to sustain economic prosperity well into the future." P. 38.

- ✓ "Biomass Energy Potential *** Any discussion of renewable energy in Bennington County must include wood, which together with direct solar energy, is the most obvious and ubiquitous source of locally available energy. The Bennington Regional Energy Plan estimates that forests, just within Bennington County, could sustainably provide over 150,000 cords of wood per year for fuel (in addition to timber harvested for sawlogs, veneer wood, and pulpwood). That quantity of wood could easily satisfy all of the residential space heating needs for the region, with a significant volume of biomass remaining for use in commercial/industrial applications and for electricity generation. Forest resources in nearby areas of new York and Massachusetts provide additional resources that could be available for local energy utilization (Biomass Energy Resource Center data)." P.38.

- ✓ "Although widely available, a significant increase in the utilization of local wood products for commercial energy production poses some serious challenges. Much of the forested land in Bennington County is not currently available for harvesting because it is located in federally designated wilderness or other protected areas." P.38.

- ✓ "Despite the hurdles that must be overcome to make wood a significant, and perhaps primary, local source of heat energy, its abundance, reliability, and the fact that reliance on this fuel provides jobs and recycles money in the local economy suggest that planning for greater utilization of the resource should be pursued. The reduced net carbon and sulfur dioxide emissions realized through combustion of biomass rather than coal, oil, or gas provides an additional reason to pursue greater use of this renewable resource." P.38.

- ✓ Space heating in homes and small businesses can be accomplished with wood or wood-pellet burning stoves or furnaces. Cord wood is readily available from local suppliers and requires little preparation beyond splitting and drying." P.38.

- ✓ "Solar energy technologies are proven and [] have a relatively minor environmental impact." P.43

- ✓ "there are compelling reasons to attempt to implement solar technologies wherever possible." P.43.

- ✓ The town energy committee should "advocate for [] renewable energy projects. P. 45

- ✓ "All developments should be planned to take maximum advantage of opportunities for utilization of solar energy." P.45.

- ✓ "The town should support efforts to develop appropriate cost-effective biomass energy resources." P.47.

The goals of the Bennington Regional Energy plan:

- ✓ "Alternative energy in the form of 'renewable' sources such as solar [] can provide significant amounts of clean energy well into the future. Developing those resources is extremely important." P. i.

- ✓ "To maintain a good quality of life, vibrant communities, and prospering economies, we will have to [use] energy obtained from clean renewable sources." P. i.

- ✓ "Decrease our reliance on non-local energy sources through [] development and use of local renewable energy sources." P.i.

- ✓ "Renewable energy will become increasingly important in the coming decades, and the most efficient and valuable energy sources will be the ones that are closest to the end users." P.ii.

- ✓ "it will be important to supplement any out-of-region generating capacity (nuclear, hydro, and other sources) with locally generated electricity." P. ii.

- ✓ "A 'smart grid' that relies on many smaller scale distributed sources of electricity will need to be developed." P.ii.

- ✓ "By taking a lead in efforts to [] develop local renewable energy sources [] Bennington County can become a uniquely vibrant and successful region." P.ii.

- ✓ "The impacts on climate, the so-called 'global warming' that has resulted from the rapid release of billions of tons of carbon dioxide that had been locked in solid and liquid fossil fuels, has been well-documented. The disruption of natural ecosystems, human settlements, and economic activity, together with the other adverse environmental impacts of fossil fuel combustion (e.g., smog, acid rain) further compel us to seek and use alternative sources of energy." P.6.

- ✓ "Transportation is an energy-intensive and complex process, whether the commodity being transported is food in a truck or electricity over a transmission line. Because we need to conserve energy in every way possible, local production of energy for use in our region will become increasingly important. We must find ways to []use the renewable energy resources available locally for [] electricity generation." P. 6.

- ✓ "[N]ew large-scale generating sources will need to be found and supplemented with locally generated electricity from renewable resources." P. 7.

- ✓ "Decrease our reliance on non-local energy sources through [] development and use of local renewable energy sources." P.8.

- ✓ "Give full consideration to use of locally available renewable energy resources for [] and electricity." P.24.

- ✓ "Seek additional electric generating capacity from local renewable resources to provide energy for electric vehicles." P.30.

- ✓ "***Such present day objectives as viewshed protection***, [] ***will need to be partially retracted to make way*** for the compelling future demand for energy." P.32. (emphasis added.)

- ✓ "Support development of local and regional industries that produce energy through conservation and renewable sources of energy." P.32.

- ✓ "We must transition from nonrenewable to renewable energy sources, and because of net energy constraints resulting from acquisition, processing, and transportation of energy, much of that renewable energy will need to be derived from local sources." P.34.

- ✓ "Energy from renewable sources can help address space and water heating needs, provide fuel for transportation, and generate electricity (that can, in turn, be used for heating, transportation, and many other functions). Space and water heating can be accomplished using solar energy, wood (cordwood, pellets, or chips)." P.34.

- ✓ "[C]ommercial generation of electricity using [] large scale arrays of pv panels, [] can offset coal, natural gas, and nuclear fuel use, adding valuable years to the generating capacity of those energy sources." p.36.

- ✓ "Any discussion of renewable energy in Bennington County must include wood, which together with direct solar energy, is the most obvious and ubiquitous source of locally available energy. The 1982 Regional Energy Plan estimated that forests, just within Bennington County, could provide over 150,000 cords of wood per year for fuel (in addition to timber harvested for sawlogs, veneer wood, and pulpwood). That quantity of wood could easily satisfy all of the residential space heating needs for the region, with a significant volume of biomass remaining for use in commercial/industrial applications and for electricity generation." P.36.

- ✓ "Despite the hurdles that must be overcome to make wood a significant, and perhaps primary, local energy source, its abundance, reliability, and the fact that reliance on this fuel provides jobs and recycles money in the regional economy suggest that planning for greater utilization of the resource should be pursued." P.38.

- ✓ "Obtaining energy from wood is a relatively simple process using simple and time-tested technologies. Many homes can be heated with a single wood or pellet burning stove or furnace. Cord wood used in stoves or furnaces is readily available from many local suppliers and requires little preparation beyond splitting and drying." P.38.

- ✓ "In addition to a concerted effort at conservation in all energy sectors, the most feasible future sources of electricity for the region come from smaller renewable resource based generating facilities distributed throughout the area." P.47.

- ✓ "The value of energy conservation and development of renewable energy resources should be given significant weight when evaluating new projects and programs." p.51.

- ✓ "Recognize and support economically and environmentally sound development of the region's renewable energy resources." P. 52.

The goals of the 2007 Regional Plan:

- ✓ "Energy planning should emphasize the use of diverse and reliable supplies of energy resources in an efficient and environmentally sound manner." P.6.

- ✓ "Particular attention should be given to the development of renewable energy resources in the area." P.6.

- ✓ “Land use, transportation, economic development, and housing policies and strategies should support the efficient use of energy resources.” P.6.

- ✓ “Reduce the flow of energy dollars leaving the Bennington region by decreasing our reliance on non-local energy sources.” P.65.

- ✓ “Encourage the development of renewable energy resources.” P.65.

EXHIBIT A

DPS MOUs without Exhibits

STATE OF VERMONT PUBLIC SERVICE BOARD

Petition of Chelsea Solar LLC, pursuant to 30 V.S.A. § 248, for a Certificate of Public Good authorizing the installation and operation of a 2.0 MW solar electric generation facility to be located at 500 Apple Hill Road in Bennington, Vermont	))))))	Docket No.8302

PARTIAL MEMORANDUM OF UNDERSTANDING

This Partial Memorandum of Understanding ("MOU") dated as of February 9, 2015 is between Chelsea Solar LLC ("Petitioner") and the Vermont Public Service Department (the "Department") with respect to the installation and operation of a 2.0MW solar electric generation facility located at 500 Apple Hill Road in Bennington, Vermont (the "Project"). Petitioner and the Department are also referred to collectively herein as the "Stipulating Parties" and individually as a "Party."

The Parties have discussed various aspects of the Project and have resolved all outstanding issues between them related to the solar array portion of the Project, and as such wish to memorialize their mutual understandings in this Partial Memorandum of Understanding and stipulate as to certain conditions, as set forth below. This is the first of two anticipated Memoranda to cover the Project. The Second MOU will address that portion of the Project involving the Green Mountain Power distribution line extension and placement of utility poles on the Project site and south and east of the Project. While the parties agree to attempt to reach a second MOU concerning the GMP line extension after the appropriate studies have been completed, they expressly reserve the right to litigate any issues that may arise concerning the location or construction of the GMP distribution line notwithstanding anything contained herein.

1. All prefiled direct and supplemental testimony and exhibits of Chelsea Solar, this MOU and the Petition shall be admitted without objection as evidence in this proceeding, along with the Petitioner's initial and supplemental responses to the first and second set of discovery requests propounded by the Department. (Attached hereto as Exhibits A-C). The Hearing Officer and the Board may rely on this evidence to issue findings of fact, conclusions of law and an Order and a Certificate of Public Good consistent with the Proposal for Decision to be submitted within 15 days of the filing of the second MOU.

2. The Stipulating Parties agree that the filings described in paragraph 1 above, as modified by the terms and conditions of this Stipulation comply with each of the section 248 criteria; provided that the Department's support thereof shall be subject to its obligations under Title 30 of the Vermont Statutes Annotated.

3. Given that Chelsea Solar has represented that its Project will comply with the National Electric Code ("NEC"), the Department recommends that the Board approve Chelsea Solar's request for a waiver of PSB Rule 3.500 with respect to compliance with the National Electrical Safety Code ("NESC").

4. Should the Board waive PSB Rule 3.500 with respect to compliance with the NESC, the Department supports the project so long as Chelsea Solar asserts the project complies with the NEC. Should the Board not approve Chelsea Solar's request to waive Rule 3.500 with respect to compliance with the NESC, Chelsea Solar agrees that its Project will comply with the NESC along with all of the applicable Section 248 criteria.

5. The Stipulating Parties further agree that the CPG should be conditioned as follows:

a) The central equipment skid referenced on Page 4, Line 12 of the Pre-filed Testimony of Brad Wilson will be a dark grey color.

b) The Project must comply with the applicable requirements of the NEC.

c) Petitioner agrees to maintain, for the life of the Project, the Supplemental Mitigation Plan described in Exhibit SUP-MK-1 (Figure 2) to the Supplemental Pre-filed Testimony of Mark Kane. The parties hereto agree that if Petitioner adheres to and maintains the Supplemental Mitigation Plan for the life of the Project, the Project will comply with the section 248(b)(5) criteria pertaining to aesthetics~~,~~ and visual impacts

d) In order to implement the Supplemental Mitigation Plan, the parties agree that as a condition to any CPG issued for this project, the Board ~~to~~ should conduct a post-construction site visit with the Petitioner's landscape architect and the Department's aesthetic expert to determine what areas along the northern boundary of the Project require additional screening (if any) to satisfy the intent of the Supplemental Mitigation Plan. Following that site visit, Petitioner shall file a recommendation on additional screening and the Department shall file a response indicating their concurrence or their alternative recommendation.

e) Petitioner shall define the limits of clearing of any vegetation outside the actual array on construction diagrams to be submitted as an attachment to the Proposal for Decision in this matter and shall verify that those limits are known and understood by personnel

involved in the construction and maintenance of the project. Petitioner acknowledges that this is particularly critical for the southwestern boundary of the project.

6. This Stipulation represents an agreement among the Stipulatinag Parties with respect to the Project. It may be modified only upon the mutual written agreement by the Stipulating Parties, and is subject to any necessary Board approvals.

7. The Stipulating Parties agree that this Stipulation shall not be construed by any party or tribunal as having precedential impact on any future proceeding involving the Stipulating Parties, except as necessary to implement this Stipulation or to enforce an order of the Board resulting from this Stipulation.

8. The Stipulating Parties agree that this Stipulation should not be construed by any party or tribunal as having precedential or any other impact on any other proceedings involving a different project, different subject matter, or other parties. With respect to such proceedings, the Stipulating Parties reserve the right to advocate positions that differ from those set forth in this Stipulation.

9. The Stipulating Parties agree that, should the Board fail to approve this Stipulation in all material aspects, the Stipulating Parties' agreements set forth herein shall terminate and the Stipulating Parties shall have the right to submit filings in this docket and the Stipulating Parties' agreements in this Stipulation shall not be construed by any party or tribunal as having precedential impact on any testimony or positions that may be advance in these proceedings. Any disputes arising under this Stipulation shall be resolved by the Board under Vermont law.

[SIGNATURE PAGES TO FOLLOW]

Date this February 9, 2015

CHELSEA SOLAR LLC

By: _____

VERMONT PUBLIC SERVICE DEPARTMENT

By: _____

EXHIBIT B

STATE OF VERMONT
PUBLIC SERVICE BOARD

Petition of Chelsea Solar LLC, pursuant to 30 V.S.A. § 248, for a Certificate of Public Good authorizing the installation and operation of a 2.0 MW solar electric generation facility to be located at 557 Apple Hill Road in Bennington, Vermont	)	Docket No.8302

SECOND PARTIAL MEMORANDUM OF UNDERSTANDING

This Second Partial Memorandum of Understanding (the "Second MOU") dated as of June 17, 2015 is among Chelsea Solar LLC ("Chelsea" or "Petitioner") and the Vermont Public Service Department (the "Department"). Petitioner and the Department are also referred to collectively herein as the "Parties" and individually as a "Party."

PRELIMINARY STATEMENT

On June 19, 2014, Chelsea filed a petition and supporting testimony and exhibits with the Vermont Public Service Board ("Board") requesting a certificate of public good ("CPG") under 30 V.S.A. § 248 to install and operate a 2.0 MW solar electric generation facility to be located at 500 Apple Hill Road in Bennington, Vermont ("Project").

On February 9, 2015, the Department and the Petitioner entered into a Partial Memorandum of Understanding resolving all outstanding issues between them related to the solar array portion of the Project (the "First MOU").

The Department and the Petitioner have now resolved all outstanding issues between them related to that portion of the Project involving the Green Mountain Power distribution line extension and placement of utility poles on the Project site and south and east of the Project

(collectively, the "Line Extension") and as such wish to memorialize their mutual understandings in this Second Partial Memorandum of Understanding and stipulate as to certain conditions, as set forth below.

STIPULATION

1. All prefiled testimony and exhibits, the First MOU, this Second MOU, and the Petition shall be admitted without objection as evidence in the proceeding. The terms and conditions of the First MOU and this Second MOU shall supersede any inconsistent prefiled testimony and exhibits. The Hearing Officer and the Board may rely on this evidence to issue findings of fact, conclusions of law and an Order and a Certificate of Public Good consistent with the Proposal for Decision submitted to the Board.

2. If the Vermont Agency of Natural Resources ("ANR") requires any utility pole(s) within the Line Extension to be moved in connection with the agreement described in paragraph 4 of the Second Partial Memorandum of Understanding entered into as of the date hereof between the Petitioner and ANR, the Petitioner will not agree to such move without the consent of the Department if the Department objects to the movement based on aesthetic impacts of the proposed new location(s).

3. The parties agree to use their good faith efforts to request that GMP alter the current GMP line extension design to ensure that the portion of the line extension which begins at the Chelsea project and is comprised of GMP metering equipment including but not limited to meters, reclosers and physical disconnect switch mechanisms be ground mounted as opposed to placed above ground on utility poles (with the goal of reducing the number of poles used, and concomitantly reducing the visibility of those features of the project) so long as such

placement is consistent with good utility practice and does not significantly increase Petitioner's cost of interconnection.

4. The parties agree to use their good faith efforts to work with each other as well as the Vermont Agency of Transportation to investigate and implement visual mitigation in the form of landscape screening of the line extension corridor as visible from Route 7 and the Vermont Welcome Center. Petitioner agrees to pay up to $5,000 for such mitigation measures that are allowed by the Vermont Agency of Transportation, following a consensus among the parties' aesthetics experts that the screening will provide beneficial aesthetic mitigation, so long as such measures do not significantly increase the cost of the project. The parties acknowledge that the Vermont Agency of Transportation, in its sole discretion, will control the maintenance of any such landscape screening. The parties acknowledge that this agreement relates solely to the Chelsea Solar Project and does not relate to the Apple Hill project which will be separately addressed by the parties.

5. This Stipulation represents an agreement among the Stipulating Parties with respect to the Project. It may be modified only upon the mutual written agreement by the Stipulating Parties, and is subject to any necessary Board approvals.

6. The Stipulating Parties agree that this Stipulation shall not be construed by any party or tribunal as having precedential impact on any future proceeding involving the Stipulating Parties, except as necessary to implement this Stipulation or to enforce an order of the Board resulting from this Stipulation.

7. The Stipulating Parties agree that this Stipulation should not be construed by any party or tribunal as having precedential or any other impact on any other proceedings involving

a different project, different subject matter, or other parties. With respect to such proceedings, the Stipulating Parties reserve the right to advocate positions that differ from those set forth in this Stipulation.

8. The Stipulating Parties agree that, should the Board fail to approve this Stipulation in all material aspects, the Stipulating Parties' agreements set forth herein shall terminate and the Stipulating Parties shall have the right to submit filings in this docket and the Stipulating Parties' agreements in this Stipulation shall not be construed by any party or tribunal as having precedential impact on any testimony or positions that may be advance in these proceedings. Any disputes arising under this Stipulation shall be resolved by the Board under Vermont law.

[SIGNATURE PAGES TO FOLLOW]

Dated this 17th day of June, 2015.

CHELSEA SOLAR, LLC

By: _____

Michael Melone, Esq.

VERMONT PUBLIC SERVICE DEPARTMENT

By: _____

AESTHETIC ASSESSMENT OF THE PROPOSED THOMAS DAIRY SOLAR PROJECT

Rutland, Vermont

Date:

June 26, 2018

Prepared for:

Thomas Dairy Solar I LLC

Prepared by:

LandWorks
Landscape Architecture. Planning. Graphic Design.
228 Maple Street, Suite 32
Middlebury, Vermont 05753
Phone: 802.388.3011
Fax: 802.388.1950
www.landworksvt.com
info@landworksvt.com

TABLE OF CONTENTS

1. PROJECT BACKGROUND

1.1 Introduction

This aesthetic assessment is prepared on behalf of Thomas Dairy Solar I LLC (the Applicant) to provide an objective, professional opinion on the proposed Thomas Dairy Solar Project (Project) in the town of Rutland, Rutland County, Vermont. This report is conducted within the parameters set forth in Title 30 Section 248 and 8010 of the Vermont Statutes Annotated, and PUC Rule 5.112, for review of commercial energy generation and transmission projects. The analysis thus follows and responds to the process and determinations required under the Quechee Analysis, established in 1985 in the Environmental Board's Quechee Lakes decision.

The methodology for the aesthetic assessment of this Project includes visual and cartographic analyses, field study, and document research and review. Our primary analyses assess the Project's visibility and potential for visual and aesthetic impacts, with a focus on vantage points from major federal, state or local roads, relationships to nearby public lands and areas of public interest, tourism destinations with scenic resources, areas with high scenic value and/or official designation as a cultural, aesthetic, or recreational facility or resource. Locations that involve residential areas in close proximity to the proposed solar project are also considered, although review of aesthetics under Section 248 using the Quechee Analysis specifically does not guarantee that views from individual private homes and properties will never change. The PUC has established that the focus of an aesthetics analysis is not "in contemplation of protecting private property, but rather a mechanism for protecting members of the public from exposure to aesthetic degradation." [1]

The following discussions, narratives, and appendices, assembled by the professional staff at LandWorks run through a full Quechee Analysis of the proposed Thomas Dairy Solar Project and demonstrate and conclude that the Project will not result in an undue, adverse impact on aesthetics in accordance with the two-step Quechee Analysis.

1.2 The Aesthetic Assessment

Under Section 248(b)(5), the Vermont Public Utility Commission must find that the Project will not have an undue adverse effect on aesthetics, giving due consideration to Criterion 8 of Act 250. Act 250's Criterion 8 addresses aesthetic impact within the parameters of the so-called Quechee Analysis, which was established to provide a consistent and defensible method for evaluating the aesthetic impacts of projects undergoing Act 250 review. The Quechee Analysis

[1] Re: Rinkers, Inc., No. 302-12-08 Vtec at 17-18 (Vt. Envtl. Ct. May 17, 2010) (Wright, J.) (quoting Re: Lawrence E. Thomas, Permit No. #2W0644-EB, Findings of Fact, Concl. Of Law, & Order, at 11 (Vt. Envtl. Bd. Feb. 18, 1986)).

is a two-step process, which begins with assessing the nature of the project, its context, and whether it will lead to adverse aesthetic impacts. This step asks whether the project is in harmony with its surroundings, and the analysis is based on a clear understanding of the nature of the visual and aesthetic impacts. This step must describe the surrounding area of the project and the compatibility of the project with those surroundings. It also asks: 1) whether suitable colors and materials have been used; 2) how visible the project is; 3) how the project affects open space in the area; and, 4) whether the project has been proposed for visually sensitive land.

"Our analysis, however, does not end with the results of the Quechee test. Instead, our assessment of whether a particular project will have an 'undue' adverse effect on aesthetics and scenic or natural beauty is significantly informed by the overall societal benefits of the project."
~Findings, PSB Docket 6860

If the conclusion from this first step of the analysis is that the aesthetic impacts of the project will not be incompatible with its surroundings, then the aesthetic impacts of the project are considered not adverse. If this is not the case, then the project is considered to have an adverse impact and the second step of the analysis is required to determine if the adverse impacts are undue. The second step asks three questions: 1) does the project violate any clear, written community standards intended to protect the scenic beauty of the area; 2) does the project appear shocking or offensive to the average person; and 3) has the applicant taken all generally available and reasonable steps to mitigate the identified adverse impacts of the project as proposed? If the answer to questions 1 or 2 is yes, or the answer to question 3 is no, then the aesthetic impact of the project is considered unduly adverse under the Quechee Analysis. This analysis also recognizes that the Public Utilities Commission weighs "societal benefits" when considering the aesthetic impacts of projects within its purview (see side panel). In other words, the needs of the many outweigh the needs of the few.[2]

Visibility alone is not a sole factor in determining the adversity of a project. The former Environmental Board has defined aesthetics as involving "…overall perception" and "the sense of place and the quality of life that a place affords" (Vt. Envtl. Bd. May 25, 1999). Accordingly, this aesthetic assessment considers not only the visibility of the Project when answering the questions in the two-step Quechee process, but also the effects on "overall perception," "sense of place," and "quality of life".

1.3 Project Description

The Project is a 500 kW (AC) group net-metered solar electric generation facility located off 2096 US Route 7 in Rutland, Vermont, Rutland County (See Context Map on page 4). The solar

[2] In Re: Northern Loop Project, Docket 6792, Order of July 13, 2003

site is proposed on approximately 3.0 acres of a 181-acre dairy farm owned by the Thomas family (Orin Thomas & Sons Inc.) for nearly 180 years. The Project will be located more than 400 feet east of Route 7 behind the main dairy buildings and residential properties owned by the Thomas family.

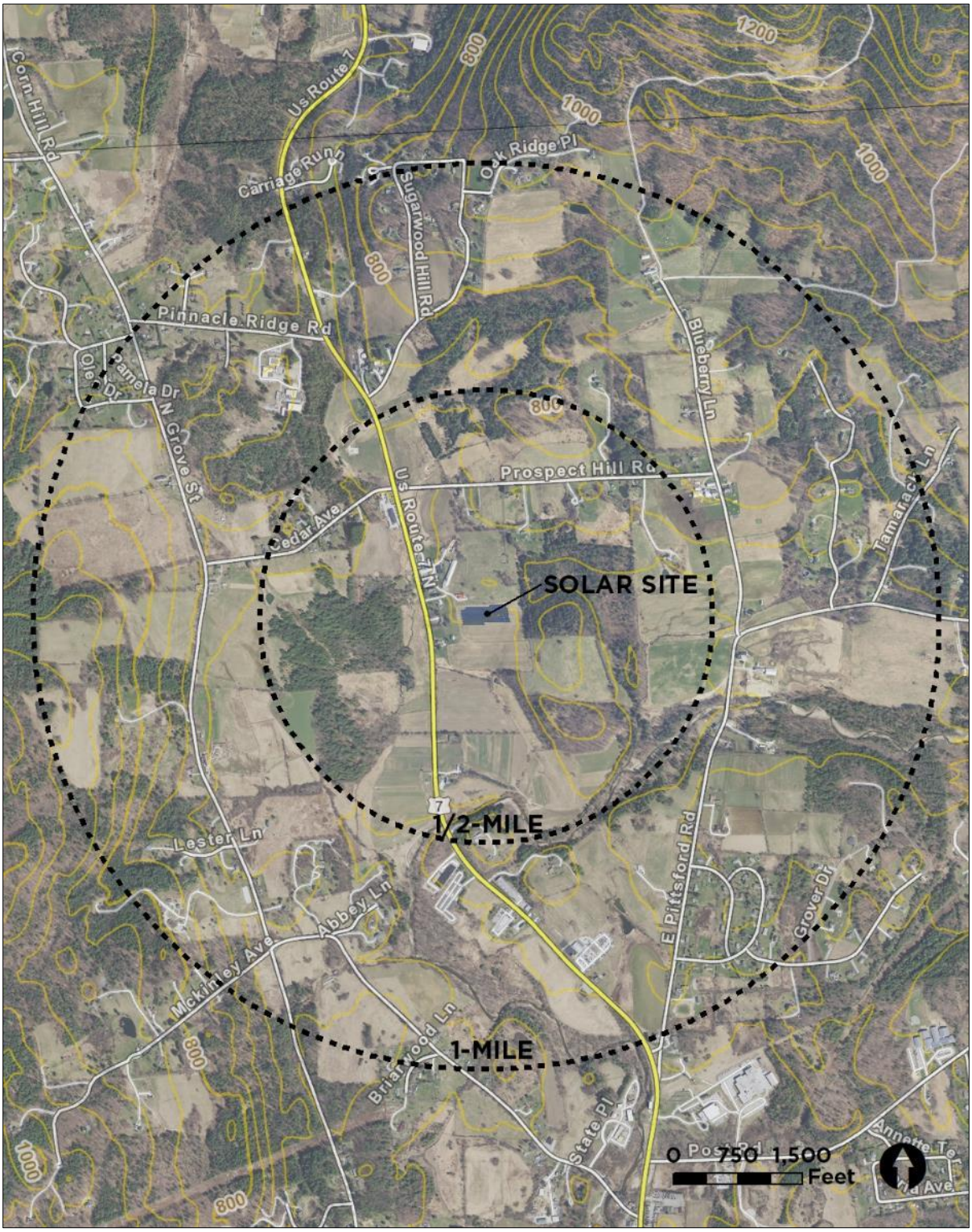
The Project will consist of approximately 2,160 solar photovoltaic (PV) modules attached to a fixed, ground-mounted system composed of aluminum racking supported by pile-driven or helical-screwed steel posts. The solar cells in each panel are dark blue in color, and the panel glass is treated with a low-glare, anti-reflective coating. The bottom of each array will be approximately 3 feet off the ground and will be no more than 9 feet at the highest point. The stationary mounting structures will be grouped into arrays arranged in approximately eight (8) east to west rows ranging in length from about 179 feet to 540 feet with panels tilted and facing solar south (180 degrees magnetic). The space between each row will be around 15 feet to allow for mowing and maintenance vehicles, as necessary, and to avoid shading from the adjacent row of modules.

String inverters, located behind the racking rows, will convert the DC solar power to AC utility grade power. Electrical lines within the site will be buried underground and will link the solar modules to a switchgear pad at the northwestern corner of the solar site. From here, the power will be "transformed" by the transformers to the appropriate voltage for the existing distribution system. The electricity will then be transmitted overhead on utility poles (3-4 poles estimated) installed by Green Mountain Power (GMP), down the existing access road, to the existing interconnection point and distribution lines along Route 7 that are also owned by GMP. No other utilities are needed on the site.

The solar arrays and other equipment will be surrounded by a minimum 8-foot high "wildlife" fence with 6"x6" openings and cedar fence posts to provide for safety and security, in accordance with applicable requirements.

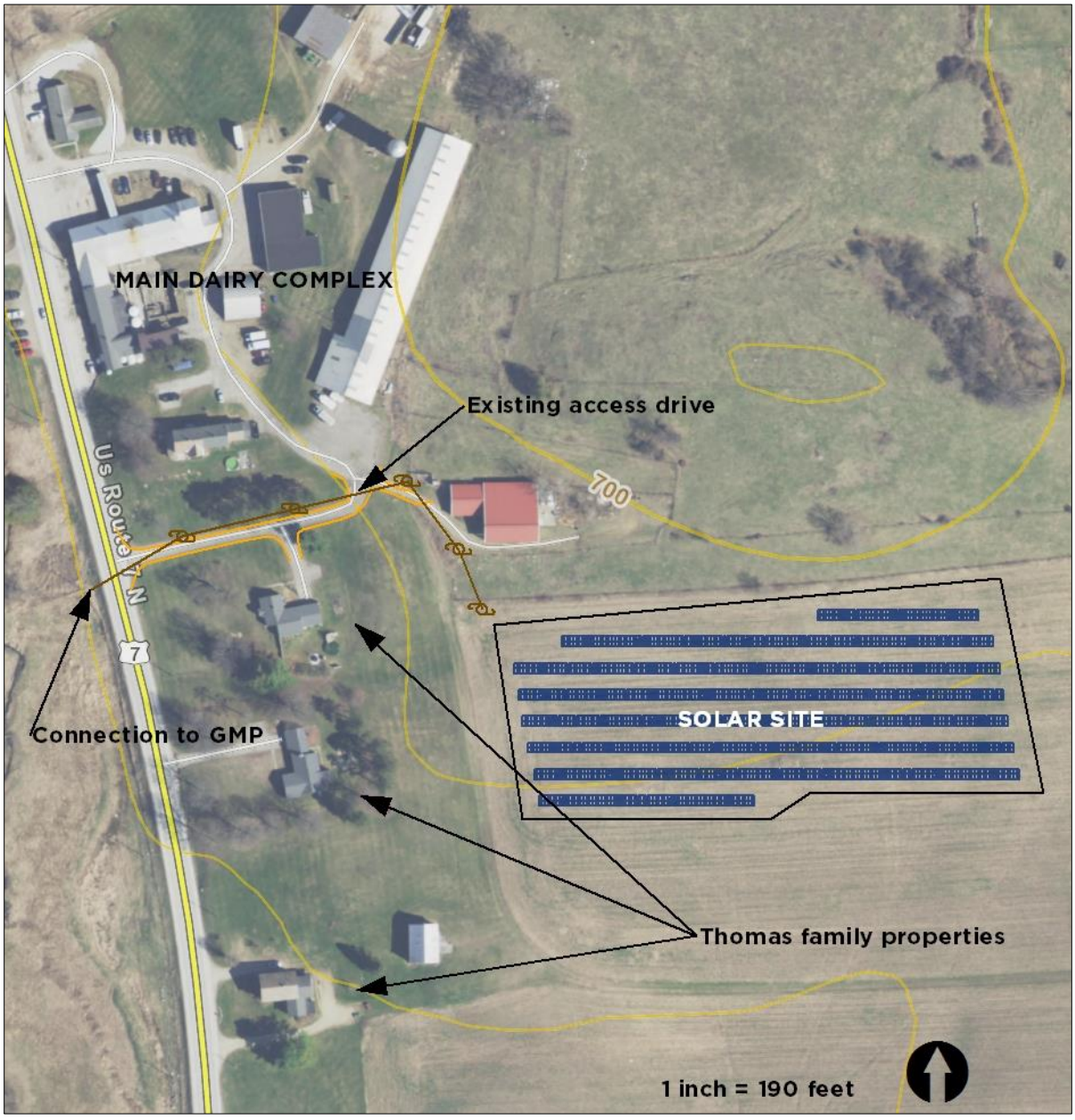
The Project will be accessed by an existing driveway entrance on Route 7 and an existing farm road, both on land owned by the Thomas family. The farm road will be improved as necessary for adequate admission to the site. No additional grading or clearing of the site or removal of soils is required to accommodate the solar arrays. Within the fence, the ground will be covered with native grass mix and periodically mown.

1. Project Background



Context Map

1. Project Background



Aerial overview of Project

2. THE QUECHEE ANALYSIS

As stated in the initial narrative regarding the Quechee analysis, the applicant must address the relationship of the proposed project to its surroundings, describe its color and materials, its impact on open space, and assess other aesthetic qualities. Therefore, this section follows the Quechee analysis on a step-by-step basis. The first step asks a series of questions to ascertain whether or not a project will have an "adverse" impact. If a project is found to be adverse, the second step is triggered, and will determine whether that adverse impact is "undue." The Commission's review of aesthetics does not end there. The Commission's consideration of aesthetics under 248 is significantly informed by the overall societal benefits of the Project. In other words, the needs of the many outweigh the needs of the few.[3]

2.1 First Step of the Quechee Analysis

2.1.A What is the nature of the Project surroundings?

The Project is proposed in the Town of Rutland, Vermont, off Route 7, about 1.75 miles north of Rutland City and the main commercial thoroughfare. (See Context Map on page 4). It is best described as a brief transitional area between the dense commercial core of Rutland City to the more rural residential areas of Rutland Town and Pittsford. While Thomas Dairy has been a staple here for decades, it is by no means the predominant land use. This stretch of Route 7 is quite varied and highly versatile: less than 2,500 feet to the south is a commercial stretch of development comprised of a car dealership, several large warehouses, a large garden center and other commercial business. Another 2,500 feet to the south is a hydro-station along East Creek on the west side of Route 7, the solar arrays of GMP Renewable Education Center on the east of Route 7, and at least a 100-foot tower in the mid-ground. Immediately to the north, Garvey Nissan car dealership is less 600 feet away. For the next 2 miles to the north there is scattered rural residential commercial development, from single family homes to Winslow's tree and pumpkin farm and farmstand to heavy equipment sales of Kenworth and Townline Sales.

The Project property itself hosts a variety of land uses, including the Thomas' residences, dairy offices, barns, outbuildings, and large processing facility with loading docks, all of which are located near the road, as well as fields for grazing cattle and growing corn. The area where the solar project is proposed is more than 400 feet east of Route 7. It is an open field containing soils that are a combination of statewide and prime agricultural. The site is moderately sloping to the north and has been used in the past to grow corn for stock. To the east the topography dips downward before it rises steadily into a forested hill. To the south

[3] In Re: Northern Loop Project, Docket 6792, Order of July 13, 2003

are more open fields the dairy uses for feed crops. To the west there are three residences, all on land owned by the Thomas', as well as the main dairy complex immediately to the northwest.

Looking north up Route 7. The solar site is just over 1,100 feet to the northeast (just south and east of the red barns). The main dairy complex is obscured by foreground vegetation and intervening structures.

Looking north up Route 7 from in front of the main processing facility of the dairy, which is to the right. The Nissan dealership is on the left just a few hundred feet away.

2. The Quechee Analysis

From a farm road near the edge of the woodlands looking west toward Route 7 and over the proposed solar site, which will be situated between the two red structures. Note how it is within a relatively flat area, and the topography begins to rise steadily just north of the site. Also note how the only the roofs of the adjacent homes are visible due to the drop in elevation from the solar site down to the road.

Looking south from the Sugarwood Hill Road and Route 7 intersection toward the Thomas Dairy complex over 1,900 feet away.

2.1.B Is the Project's design compatible with its surroundings?

The size and scale of this Project is compatible with its surroundings given primarily that it will be co-located on the parcel of a large dairy operation. There is an existing driveway and farm road, large facilities and outbuildings, truck traffic, farm equipment and vegetative overgrowth on site, as well as an existing utility corridor nearby. It is also a transitional area that demarcates the densely settled and urban areas to the south from the more rural residential and highway commercial development and working lands to the north. Hydro-facilities, solar arrays, highway traffic, strip development, warehouses, car dealerships and a host of other commercial enterprises are all prominent features in the landscape here, and solar panels harnessing the earth's resources in an already settled and working landscape would not be incompatible with the development patterns that are already present and visible here. The Project will only occupy a fraction of the property and is proposed on a portion of the parcel that will have the least amount of visibility and the least impact on dairy operations. It will be adjacent to the main diary complex and will appear as an extension of the overall operation. Diversifications of portions of this commercial dairy will help improve its value and allow the higher quality areas to remain actively farmed and used, and for the dairy to remain viable. Moreover, the Project does not introduce unduly adverse elements like excessive exterior lighting, additional traffic, noise, odors, dust or other impacts that are typically considered inharmonious.

From the dairy offices looking east at the employee parking area and nearby outbuildings. Route 7 is just behind the viewer, and the main processing facility and loading docks are to the right. The solar site is just over 700 feet to the southeast of here.

Looking north from the western edge of the solar site toward one of the adjacent farm buildings. The fence line of the solar array will basically follow the old farm fence visible in the foreground here. The main dairy complex is just beyond to the northwest (notice the silo on the left).

2.1.C Are the colors and materials selected for the Project suitable for the context within which it is located?

The colors and materials proposed for this Project are suitable insofar as 1) they are consistent with materials used in many similar solar projects approved by the Commission, 2) they do not stand out or make the panels or structures highly visible (i.e. the darker color of the panels and metal finish of the structures blend in better with the background), and 3) they are contextually appropriate for the conditions of the area. There are also a variety of other manmade structures, colors, and materials visible within close proximity of the Project viewshed, like houses, fences, barns, utility poles, distribution lines, other solar arrays, display cars and trucks, etc.

The dark solar panels will be attached to a fixed mounting system composed of grey steel and aluminum support pieces. The metal/grey color of the frames and racks that support the panels are less visible during winter and often blend in with surrounding ground cover, trees, buildings, and background landscape. Because views are only likely for northbound travelers along a short stretch of road, and the fact that the Project is set within a hillside and bounded by other landscape and manmade features, the Project will be readily absorbed into its surroundings. The colors and materials will blend well with the branching density and colors of the adjacent woodlands and background hills, as well as the proposed

landscape planting proposed along the perimeter of the fence (see Figure 1. Landscape Mitigation Plan).

Any potential glare from the panels, which are dark blue or black, will be non-existent for all locations north, east and west of the Project due to orientation of the panels and the intervening topography, vegetation and structures. For the short stretch of Route 7 south of the Project, any potential for glare will not impact visibility for several reasons. In general, given that the whole concept of efficient solar power is to absorb as much light as possible while reflecting as little light as possible, standard solar panels produce less glare and reflection than standard window glass does. The panels will also have anti-reflective coatings to reduce potential reflectivity. In addition to the anti-reflective coatings, the surfaces of PV panels are roughened, or "stippled" or "dimpled", which diffuses reflection, and, thus, eliminates glare. Moreover, potential for glare at these viewing locations will be mitigated by sight barriers, topography, distance, and view duration. During leaf on season, northerly views from Route 7 will often be filtered or blocked by vegetation and structures. The road sits more than 20 feet below the Project, so viewers will not be looking down on to the panels – i.e. the fence and proposed landscaping will block most views of the panels. Even from the longer distance view of roughly 1,200 feet away, the road is even lower – more than 30 feet below the Project.

The Project also occupies a very narrow angle of view in the entire field of view, and the Project will be off-center of the traveler's view focus, which is to the curving road ahead, and less noticeable due to rate of travel – 50 mph or more. There is only the potential for about a 10 second view duration and therefore the potential for glare is effectively limited. During leaf on conditions, the viewing opportunity will be even smaller or non-existent due to intermittent roadside vegetation, and for a short period, the corn stalks that sit south of the Project. The residences to the west of the Project that have potential for visibility and resultant glare are all part of or owned by the Thomas family and therefore there is no conflict of interest. However, a landscape mitigation plan has been prepared that will soften or eliminate views of the Project from these few locations. From other nearby locations, existing topography, vegetation, structures, and orientation block views altogether and the potential for glare.

The entire operation will be fenced in order to provide for safety and security. An 8-foot wildlife fence is currently proposed that will have a locked gate at its entrance, more than 400 feet from Route 7 at its closest point. The fencing will be absorbed into the background of the solar structures and will not stand out or be incompatible, and the landscaping and topography surrounding the Project will also help to hide it. Moreover, the viewable areas of the fence are proposed to be lined with deciduous plantings that will help soften its appearance. A wildlife-type fence is also proposed, which is similar to and compatible with farm fencing already seen all over the Thomas' property.

The proposed new utility poles will also not be out of place or out of character with the existing conditions given that they will be backgrounded by structures, topography or existing vegetation, and distribution lines already crisscross and run through this area and on the property. Route 7 is quite varied in topography and lined with roadside vegetation and structures, so site lines for drivers are extremely limited or non-existent, especially during leaf on season. The visible poles at the access road entrance will be backgrounded by structures, vegetation and topography and will not appear out of place given their distance and the conditions of the road and area. The poles will also be of similar type and size as poles already present in the area and will not appear foreign or contextually inappropriate.

Given these factors, the structural designs and materials selected are not discordant and will be suitable for the context of the Project area.

From atop the hill that rises above the Project looking southwest toward Route 7. The back of one of the dairy's garages is on the right (red structure), while one of the family residences is in the center frame (blue house).

2.1.D What is the Project's impact on open space?

The Project will not result in the permanent loss of any meaningful open space. This is not an open space accessible to the public, nor is there any designated or official public use or access for this property, now or in the future. This is private property and a commercial dairy operation that is inappropriate for active, public open space uses. The proposed area

has already been cleared from the prior activities that took place here (e.g. growing corn for livestock), and there will be no vegetation removal necessary to eliminate shading.

While the soil survey indicates this area contains prime or statewide soils, this is the area on the farm that will have the least amount of visibility and the least impact on dairy operations. It will be adjacent to the main diary complex and will appear as an extension of the overall operation. Diversification of portions of this property will only help improve its value and allow the higher quality open space areas, like along the road, to remain actively farmed and open and for the dairy to remain fully operational. The soils will not be permanently disturbed, and this area could be used again for farming when the solar array reaches the end of its useful life. In fact, the Rutland Town Selectboard and the Rutland Town Planning Commission, along with the Rutland Regional Planning Commission, have approved designation of this site as a "preferred site" in accordance with Net Meter Rule 5.100, and specifically Section 5.103(7).

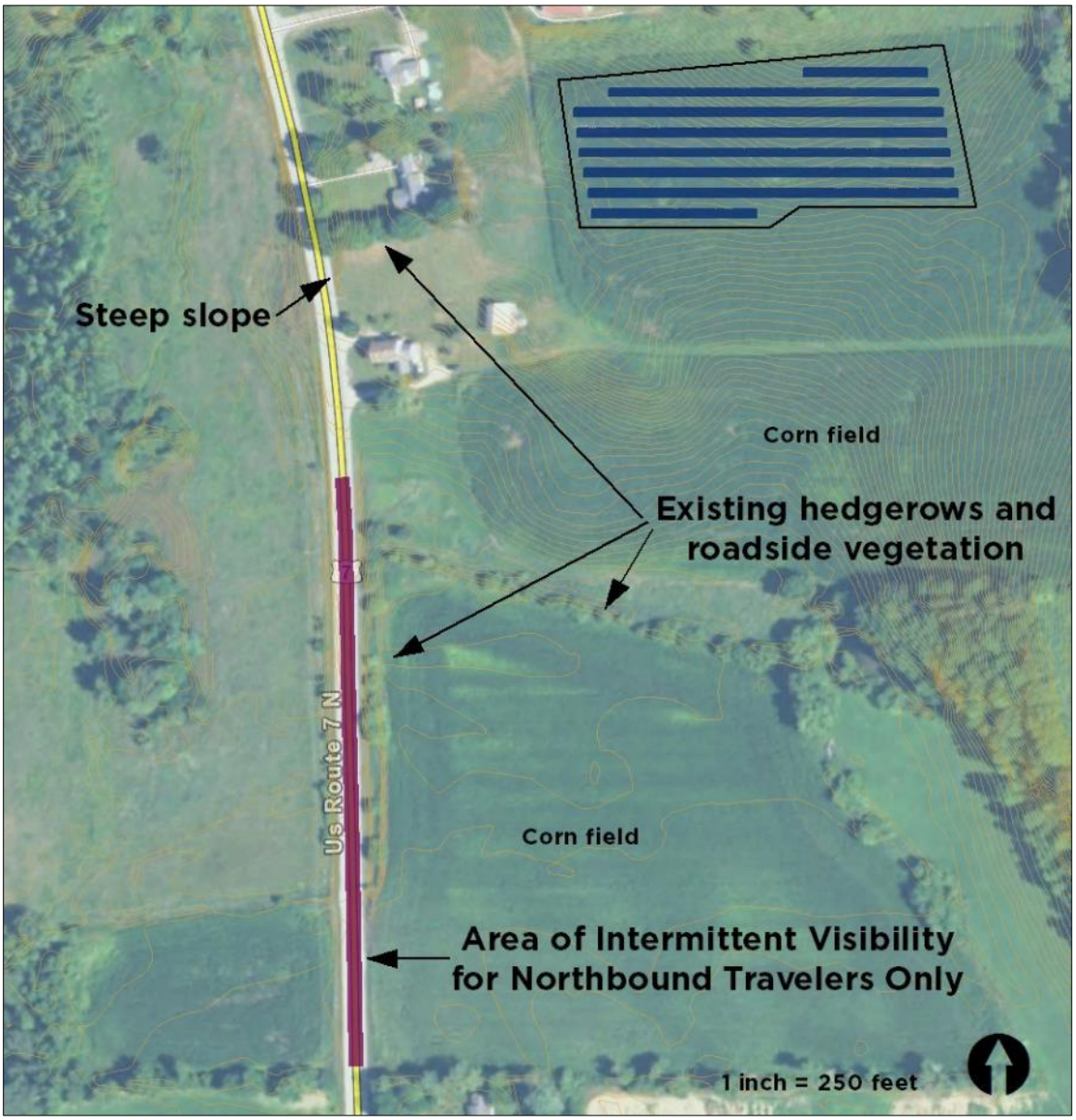
Moreover, while the solar site is currently an open field, it does not contribute to any notable or specified open space views. It is located along a very busy US Highway on the edge of an urban and built up portion of the road. A short view of the Project, which will appear as an extension of the main dairy complex and operation, will not interrupt or diminish the visual quality of the area, and it will not be visible from more important and critical viewsheds identified in the Town Plan, such as those along Prospect Hill Road. Therefore, if this Project is developed, there will not be any permanent, detrimental or adverse impacts on open space, or open space views.

2.1.E Where is the Project visible from?

A site reconnaissance conducted by LandWorks along roads near the site yielded the conclusion that the Project will only be visible for a short stretch along Route 7 for northbound travelers only. There will be virtually no visibility for southbound travelers due to orientation of the Project and intervening topography, vegetation and structures. At the point where visibility may potentially be possible, the Project is already behind the traveler at least 400 feet away and therefore inconsequential and not noticeable. No other roads within the area will have visibility of the Project.

Even for northbound travelers, views of the Project will be limited to an ±850-foot stretch of Route 7 but will not be out of scale or out of character with its surroundings due to: distance of the Project (more than 500 feet at its closest point and more than 1,720 feet away at the furthest); the rate of travel (more than 50 mph); length of view window (± 850 feet of intermittent views due to roadside vegetation and hedgerows i.e. it is not an open stretch of road with unencumbered views); raised elevation of Project and steep slopes (the road sits 20-30 feet lower than the Project); and, intervening vegetation (during leaf on

conditions much of the view window will be blocked by existing linear hedgerows and roadside vegetation). (See image that follows.)



Roughly 850 feet of intermittent visibility from Route 7, which equates to be about 10 seconds of view duration.

The visibility of the Project from this limited area will be diminished by several factors: the Project will only occupy a limited angle of view within the wide panorama view; the Project will be filtered and blended in by existing trees and vegetation (and further blocked by trees during leaf on season), helping the Project to blend into the landscape and not be highly prominent; the orientation of the road and roadside vegetation focuses travelers attention straight ahead and not directly at the Project, which is setback distances of more than 500 feet from the road; the rate of travel makes it more difficult to look sideways as one is

traveling at speeds greater than 50 mph, and drivers focused on cars entering the highway (there are a multitude of access points along this stretch of road); as one travels on Route 7, the roadside structures as well as the background views remain the prominent focal points and draw more attention; and, the intervening vegetation (including corn during growing season), particularly during leaf-on periods, will detract, filter or block some views during several months of the year.

To extend the 3-phase power of the Project to the interconnect along Route 7, GMP will need to place an estimated 3-4 new poles along the existing access road. They will be of similar type and size as existing poles in the area and will be backgrounded by structures, topography and vegetation i.e. they will not be skylined, and will blend in to the surrounding landscape. Route 7 also is not a designated Vermont Byway or highly recognized bikeway through this area and poles visible for a very brief view along this stretch of road will not be out of place or out of character, if even noticeable.

The closest residences along Route 7 are sited more than 200 feet to the west of the Project and are owned by the Thomas family. There are no other properties within the vicinity (more than 1,200 feet away) that are not owned by the Thomas family and that will have the potential to see the Project. The homes along nearby roads, like Prospect Hill Road, Cedar Avenue, or Sugarwood Hill Road, will also have no visibility of the Project, including the overhead electric line, due to intervening topography, vegetation and structures.

In conclusion, when considered from an objective, rather than subjective and neighborly, perspective[4], the conversion of this small portion of a dairy operation to a passive renewable energy facility would be reasonably compatible with expectations for the future use and viability of the property. When considering the historical and ongoing use of this property, as an active commercial operation, the Project would not have an adverse impact on any surrounding properties, particularly given other commercial operations in the area (i.e. automobile sales across the street). From the town and regional perspective, moreover, the Project, as viewed by the average person, would not be adverse and could be seen as a logical reuse of the disturbed property and a practical and necessary accessory use to an active commercial/agricultural operation.

[4] While views from private property are relevant, the PUC should evaluate them from the objective perspective of the average person, as established by *In re Rutland Renewable Energy, LLC*, 2016 VT 50, ¶¶21-22.

View looking southeast from Sugarwood Hill Road with Thomas Dairy in the background. The Project is not visible from here due to intervening topography and vegetation.

From Cedar Avenue intersection looking south along Route 7. The solar array will not be visible from here.

From Prospect Hill Road/Route 7 intersection looking in the direction of the solar site, which is not visible from here due to topography, vegetation and intervening structures.

Looking north from Route 7 toward the solar site (about 1,275 feet away), which will not be noticeable at this point due to intervening trees and structures. Note that even with leaves off the Project will not be prominent.

From the east side of Route 7 about 1,100 feet south the Project at a point where roadside vegetation is sparse. However, during leaf on conditions, and when corn stalks are high, this view will be filtered. Proposed landscape mitigation will also limit or block views. Also note that views of the Project will never be stagnant like this one.

Example image extracted from Google maps showing leaf on conditions along Route 7.

2.1.F Conclusion to the First Step of the Quechee Analysis

From the town and regional perspective, we believe that the Project would not be adverse in this location because it has limited visibility, is contextually appropriate to the area, has no permanent impact on open space, and does not materially affect an identified scenic road or resource. Moreover, and most importantly, it has been designated as a "preferred site" by the town and regional planning commissions and selectboard.

However, given there is a low threshold for adverse impact under Quechee, one could argue that adding ground-mounted solar panels in this particular area could result in an adverse effect due to the prime and statewide soils found here. While the site is well suited to support a facility like this, it introduces a new element in the landscape that was not there before, and some might argue that it could potentially be out of character with the surrounding land uses, even though the Project is sited on a portion of the farm that has the least impact. Therefore, the second prong of the Quechee Test is conducted to determine, if the impact of the Project is adverse, would the impacts be undue.

2.2 The Second Step of the Quechee Analysis

2.2.A Does the Project violate a clear written community standard intended to preserve the aesthetics or scenic, natural beauty of the area?

> *"In order for a provision to be considered a clear, written community standard, it must be 'intended to preserve the aesthetics or scenic beauty of the area' where the proposed project is located and must apply to specific resources in the proposed project area."*[5]

In evaluating whether a project violates a clear community standard, which directly addresses aesthetics or a scenic resource under the Quechee test, the Commission routinely looks to the town plan as the foremost document for providing these standards. If the Commission finds that such standards do exist, and that the project as designed would violate those standards, the adverse impact would be undue.

The development boundaries of the Project are located in the Town of Rutland and under the purview of the Rutland Planning Commission (RRPC). A review of the 2016 Town of Rutland Municipal Plan, the 2014 Town of Rutland Solar Facility Siting Standards and the 2015 Rutland Regional Plan yields the conclusion that the solar Project will not violate a clear, community standard intended to preserve the aesthetics or scenic beauty of the area in accordance with the Quechee test. In addition, it is important to note here that the concept of "preferred sites" as outlined in the Vermont Public Utility Commission (PUC) Rule 5.100 (effective July 1, 2017) and that the Regional and Municipal Energy Planning Standards of Act 174 (effective June 13, 2016) both post-date the Town's solar siting standards. The legislative environment surrounding regional and local input regarding the planning of solar siting projects has changed significantly in recent years; however, the elements of the Quechee test remain the same.

Vermont Public Utility Commission Preferred Site Definition (5.103(7)):

A specific location designated in a duly adopted municipal plan under 24 V.S.A. chapter 117 for the siting of a renewable energy plant or specific type or size of renewable energy plant, provided that the plant meets the siting criteria recommended in the plan for the location; or a specific location that is identified in a joint letter of support from the municipal legislative body and municipal and regional planning commissions in the community where the net-metering system will be located.

http://puc.vermont.gov/sites/psbnew/files/doc_library/5100-PUC-nm-effective-07-01-2017_0.pdf

Regional plans, in general, contain overriding goals, policies, and recommendations, which are characteristically advisory and non-compulsory in nature. Statements are usually made

[5] In Re Halnon, NM-25, Order of 3/15/01 at 22 n.5.

in terms of "encourage," "support," "promote," and "should," terms that in Quechee analysis cases have been determined to constitute non-mandatory language. Regional plans, as a matter of policy, focus on broader issues that affect the region as a whole and typically do not consider impacts on an individual town. The Rutland Regional Plan discusses the importance of aesthetics and scenic qualities of the region with regard to a number of planning topics, including future land use, development patterns, and recreation. Chapter 14: Wildlife and Natural Habitats describes the Rutland Region as having *"an abundance of highly scenic resources thanks to a landscape that is dominated by rugged mountain ranges, clear streams, and fertile valleys…*" (p. 128). Additionally noted in Chapter 12: Recreation & Open Space is that, *"The quality of many outdoor recreational experiences is dependent upon the health of the natural environment, continuance of open space, provision of aesthetically pleasing landscapes and the degree to which the environment has been altered by human activity"* (p. 110), and in Chapter 13: Agriculture and Forestry, *"Active farmlands provide open space and scenic views as well as a land use tradition characteristic of rural Vermont"* (pg. 126). To preserve these areas of scenic value, the Plan provides a goal for new development that states *"No land development should be promoted where the effect of the proposed use unnecessarily impacts highly scenic landscapes, ecologically sensitive lands, or irreplaceable natural resources,"* and should "*be of a design that is compatible with surrounding land uses."* (pg. 134) While these statements point out the importance of addressing scenic and visual resources within the region, the Plan does not provide clear standards for the area within which the Project is proposed. As previously noted, these are broad goals that are not targeted to specific areas, and the Plan does not identify this site in particular as a "highly scenic" area.

The plan also includes *Proposed Regional and Community Standards for Energy Facilities Siting & Development (for Regional and Municipal Plans and Act 250/Section 248 Proceedings),* the introduction to which reads, *"To carry the most authority in a PSB proceeding, a municipal or regional plan must be clear, specific, and consistent in expressing community standards. A plan must be unambiguous on stating a community's position on the development of energy facilities. A collaborative approach shall be used to ensure there is a thoughtful planning process that includes input from the region and the municipality and encourages developers to involve regional and municipal officials as early as possible" (p. 160)*. The section contains specific standards for energy transmission and generation facilities, which include information about access, light pollution, noise, emergency contact information, historic preservation guidelines, and compliance with local bylaws. The standards also state, *"Any proposed facility shall consider the cumulative impact of land use aesthetics, property values, and landowner compensation for multiple energy generation and transmission facilities."* There are also standards specific to Solar Electricity Facilities which provide support for re-use of brownfields sites, guidance for locating inverters and support structures, and a general siting guidance that reads*, "The facility is designed to reduce visibilities from the road with setbacks and screening*." (p.160) While the Project is not

proposed on a brownfield site, it is on a portion of an already developed property that hosts a commercial dairy operation, which could be further developed for other related uses (commercial/industrial), if not solar. Moreover, the solar facility has been sited and set back from the road to comply with state standards, and the support structures will face away from residences (which are owned by the Thomas family). Thus, to this end, the general goals of the Regional Plan will be met.

While it is important to consider relevant regional policies in this Quechee analysis, these must be weighed against the independent and more specific standards provided in the local town plans. The 2016 Town of Rutland Municipal Plan describes the "Agricultural and Forest Working Lands" land use district, in which the project is located, as *"lands presently used for or suitable to support agriculture, forestry, and related commercial, recreation and tourist related enterprises.*" The plan goes on to provide the purpose for the district, "*To protect the existing scenic, rural working landscape and to acknowledge that owners of working lands contribute benefits to the town, region and state from the views, air, water and ecological qualities working lands sustain and from the opportunities for recreation, tourism and business attraction they provide*" and to provide information on development density and siting in the district. (p.8)

The Municipal Plan also includes a chapter title Open Spaces and Scenic Resources which places emphasis on the roadways and pastoral views of the town, saying: *"Of particular concern is the maintenance of scenic resources along the roadways of the Town. These scenic qualities serve to differentiate the Town from the more urban character of the City of Rutland. Pastoral and scenic views of mountains, ridges, and valleys must be preserved. While some development has already occurred that impairs those views, no further development should be permitted that has an undue adverse impact on those scenic resources. The scenic resources of the Town belong to all residents of the Town and to the Town itself. The Town's scenic resources are easily lost by ill-advised development. Once lost, they are irreplaceable." (p.49).* Within this chapter, the Plan considers the "question of 'undue impact' by development upon visual or scenic resources" and identifies the "so-called "Quechee Lakes" standard as the tool to be used to determine such impacts. The plan includes guidance that applies to review of development and identifies "locations declared to be 'scenic resources'" (p. 51). The inventory includes 20 sections of the Town's roadways, each with a start and end point, and all with general descriptions of the direction of the scenic view (e.g. north, south, east, west). The Project Area is encompassed within the inventory, where it states, "US Route 7 North- from East Pittsford Road to Sugarwood Hill Road – views east, south and west." (p.51). However, the description does not identify any specific elements that make this area scenic, such as hillsides, mountain peaks, or landscape elements (e.g. Thomas Dairy and its adjacent fields), nor does it include any information about the depth or scale of the scenic view and what elements in the view are worth preserving, or how to preserve them. Furthermore, the Plan provides general guidance for projects that have an impact on visual or scenic resources such as "locat[ing projects] at a distance from the road to lessen visual

impacts" and implementing measures like berming or reduction of lighting, to reduce visual impact, but does not provide specific guidance on what constitutes a visual impact or what impacts need to be lessened. (p.49) As such, while there are general guidelines for development, none are specific enough to be considered a clearly written community standard specific to the preservation and protection of resources in this area in accordance with the Quechee test.

The Town of Rutland also has 2014 Solar Facilities Siting Standards, which pre-date the Public Utility Commission Rule 5.100 (effective July 1, 2017) and the Regional and Municipal Energy Planning Standards of Act 174 (effective June 13, 2016), that are "intended to avoid and mitigate potential impacts of solar facility development, while promoting new installations in appropriate locations, and achieving proportionality in Rutland Town's contribution to renewable energy solutions."(p.2) The general standards include support for appropriately sited types of energy development, small-scale renewable energy systems serving individual users in appropriate, context-sensitive locations, upgrades of existing facilities, and new community-scale solar designed to meet the needs of the community. The siting standards contain a number of examples on how to achieve proper siting of a solar facility, such as using appropriate materials, screening from adjoining residential properties, and maintaining similar setbacks to other buildings or facilities within the area, and the Project meets most of these standards. The only standard the Project conflicts with is regard to agricultural land, which states that solar projects shall not be located on primary agricultural soils in order to preserve them for active agricultural use. However, the land where the Project is proposed is the least impactful to the overall farming operation, irrespective of what the soil survey indicates, and has the least impact on visibility i.e. there are other areas of the farm that could have been used but were farther away from the main farm complex and have more impact on visibility. Furthermore, the Rutland Town Selectboard, Rutland Town Planning Commission, and Rutland Regional Planning Commission have signed a letter of joint support to the Vermont Public Utility Commission to designate the Project site as a "preferred site", in accordance with Net Meter Rule 5.100, indicating their understanding of the inadequacy of the soils and supporting a solar facility in this area. The letter states, "we have collectively discussed the proposed use with the Developer, reviewed numerous materials for the preferred sites (including ANR mapping data), and, in some cases, physically inspected the property to evaluate aesthetic and other potential impacts." Also, "in anticipation of revisions to the Rutland Town Plan, including the Energy Plan, which will further identify sites that would be preferred for use for renewable energy facilities, we find the proposed Thomas Dairy Farm sites to be consistent with these goals." As such, it can be concluded that the Project does not violate a standard of the town's Solar Siting rules given the Town and Region's acceptance.

In summary, it is concluded that there is no violation of a community standard that would create an undue, adverse impact on the aesthetics of the area. The site has been designated

a "preferred site" for net-metering facilities by the town and regional planning commissions and selectboard through a thorough review process. The applicable Regional and Town plans also do not contain relevant "clear, written community standards intended to preserve the aesthetics or scenic beauty of the area" because there are no mandatory provisions or language that could be considered a clear guide for protecting scenic values in the proposed Project area under Step 2 of the Quechee analysis. Finally, although the Project is proposed on prime agricultural soils, the town and region have agreed that their usability is less than ideal for future active agricultural use, and the benefit to the dairy operation in constructing solar as an accessory use far outweighs any perceived impacts to agricultural soils.

2.2.B Does the Project offend the sensibilities of the average person? Is the Project, when viewed as a whole, offensive or shocking, because it is out of character with its surroundings, or does it significantly diminish the scenic qualities of the area?

The Project will not be shocking or offensive to the average person due primarily to its extremely limited visibility and limited impacts to the site itself. The Project will not be visible to people driving along Prospect Hill Road, Sugarwood Hill Road, or other roads identified as scenic in the Town Plan, nor will it be visible from important tourist attractions like the Hathaway Farm. It also will not be visible, highly prominent, or interrupt a primary focal point from identified scenic viewsheds. The Project will be visible for a short stretch on Route 7, but even that view will be a very limited view duration, maybe 10 seconds, and distance, topography, intermittent vegetation and roadside structures will mitigate visibility even more. The Project will not be prominent or so out of character with the area that it would be offensive – it will appear as an extension of the existing dairy complex; nor would it diminish or distract from the scenic qualities of the broader landscape.

It is recognized that the aesthetic effect of a project may have a greater impact on some neighboring property owners than on the general public, but the PUC has found that the focus of the aesthetic analysis is not "in contemplation of protecting private property, but rather a mechanism for protecting members of the public from exposure to aesthetic degradation."[6] Furthermore, while the Vermont Supreme Court has instructed that the PUC "should consider all vantage points, including private property," it must do so "from an objective, as opposed to subjective and neighborly, perspective."[7] When considered from this perspective, the presence of a passive solar system at a commercial dairy farm would

[6] *Petition of Rutland Renewable Energy, LLC*, Docket No. 8188, Order of 3/11/2015 at 54-55 ("in reviewing the aesthetic impacts of a project under Section 248, the Board must determine whether a project's visual impacts will be shocking or offensive to the average person. As interested landowners, the [n]eighbors are most likely to be impacted by the view of the Project, and therefore have an individualized perspective which, by definition, is different from the viewpoint of the average person.")(citing See e.g., Petition of Green Mountain Power Corporation, Docket 5823, Order of 5/16/96 at 26).
[7] *In re Rutland Renewable Energy, LLC*, 2016 VT 50, ¶¶21-22.

not be shocking or offensive to the average person – the overall visual impact and exposure to the public at large will be very limited, and there will be no visibility from nearby off-site residences like those on Prospect Hill Road.

A solar project on this portion of the property would make good use of the land, utilizing a portion of the fields immediately adjacent to a portion of the farm that is unused due to its ledge outcroppings and slope making it less than ideal for farming. This siting will also take development pressures off meaningful open spaces, active agricultural lands and other significant cultural and aesthetic resources on the property and in the area. It may also help to maintain and enhance the economic vibrancy of the dairy operation, which is a key economic driver and cultural resource in the town. In this respect a renewable energy generation project would not be out of place, unusual, or undesirable here.

The Project, when completed, will only occupy a small portion of the 181-acre farm with very little site disturbance or impervious construction. The landowners will continue to reside on and cultivate the remaining portions of their property, so it would not be shocking or out of ordinary for a fraction of the parcel to be diversified and used in a manner that would help benefit the overall production and worth of the property. The Project site is not specifically identified by the town as a scenic resource, so there is not an expectation of high scenic quality i.e. while views from Route 7 have been identified as being scenic, the farm (or Thomas Dairy) has not been specifically identified as a scenic resource, nor has the context or elements of those views been clearly identified. Renewable energy projects like solar or wind as an accessory use to an agricultural operation are also becoming a more common and necessary sight and would not be out of the ordinary or unusual here.

Finally, there is more public awareness and acceptance for net-metered solar projects of this sort, and people understand that they represent a "green" or renewable energy source. Solar projects are indeed becoming a recognized land use option in Vermont as a means of providing renewable energy to the state and its citizens. They are rapidly becoming a common site along major highways and at the edge of villages and towns, and as reuse options for fallow agricultural lands, defunct gravel pits and brownfields. Many of the sites being employed for solar are in or adjacent to villages or residential neighborhoods. These considerations add to the acceptability of the Project and lessen the potential that the facility will be shocking or offensive to the average person in this location.

2.2.C Has the applicant taken generally available mitigating steps which a reasonable person would take to improve the harmony of the proposed Project with its surrounding?

The applicant has planned, and will take, the generally available mitigating steps a reasonable person would take to reduce the aesthetic impacts of this Project, most notably, selecting a site with limited visibility in the region, and one that has been designated a

"preferred site" by town and regional planning commissions and the select board, which the State of Vermont and Solar Siting Task Force is recommending for new projects. The layout of the panels and the selection of the panels and their support structures are such that the solar project will have a very low profile in the landscape, allowing the surrounding vegetation, topography and intervening structures to suitably block and/or absorb the Project. It is also near to an electric distribution system, which allows for easy tie in to the grid (i.e. a new transmission corridor is not necessary). The size and scale are compatible with its surroundings given primarily that it will be co-located on a large commercial dairy operation and will appear as an extension of the main dairy complex. There is an existing driveway and farm access road on site that will require only minor upgrades, and no grading and clearing of the site are necessary. The Project will only occupy a fraction of the property and is proposed on an already disturbed portion of the parcel. Diversification of portions of this property will help improve its value and allow other high-quality areas and open spaces to remain actively farmed and maintained. The Project cannot be seen from nearby off-site residences, important scenic viewsheds and tourist destinations like Prospect Hill Road, Sugarwood Hill Road or the Hathaway Farm.

However, in order to mitigate and soften views from Route 7 and nearby residences of the Thomas family, a landscape mitigation plan has been prepared for the Project (see Figure 1. Landscape Mitigation Plan). Plantings are proposed along the fence line on the south and west side of the solar array. The plant species specified in this plan are *Cornus sericea*, Redtwig Dogwood and Viburnum opulus var. americanum, American cranberrybush viburnum. Both are native to Vermont and are often found in and near farms and fields or along woodlands. Redtwig Dogwoods have a fast growth rate and reach an average height of 6-9 feet tall but can be 12 feet in some circumstances. For the spread/width, Redtwig Dogwoods have a suckering habit and spread by underground stolons[8], which means they will grow to form dense thickets. They feature medium to dark green leaves that turn interesting shades of red to orange eventually fading to purple in autumn. Reddish stems turn bright red in winter and are particularly showy against a snowy backdrop. Tiny, fragrant, white flowers appear in flat-topped clusters in late spring, with sparse, intermittent, additional flowering sometimes continuing into summer. Flowers give way to clusters of whitish (sometimes with a bluish tinge) stone fruits in summer. The American Cranberrybush Viburnum has a medium growth rate and grows to about 8-12 feet tall and wide. It has a dense branching habit with white flowers in the spring and drooping clusters of edible cranberry-like red berries in fall. Both plant species provide food and habitat for native birds, butterflies, and insects. Once established, these plants should require little to no maintenance and will provide a natural hedgerow if/when the solar arrays are removed.

[8] A creeping horizontal plant stem or runner that takes root at points along its length to form new plants

American cranberrybush in late summer/fall

Redtwig dogwood in late winter/spring

2.3 Overall Conclusion

Based on our analysis, as described in the narrative above, we conclude that the Project would not result in an undue adverse impact to the aesthetics and scenic beauty of the area. The Project's impacts will not be unduly adverse because: 1) the Project will not be shocking or offensive to the average person; 2) the Project does not violate any clearly written community standard; and 3) the applicant has taken reasonably available mitigating steps to reduce the Project's visual and aesthetic impacts.

EXHIBIT C

LandWorks

Landscape Architecture

Planning

Graphic Design

228 Maple St., Suite 32

Middlebury, VT 05753

phone: 802.388.3011

fax: 802.388.1950

info@landworksvt.com

www.landworksvt.com

October 24, 2012

Executive Office of Governor Peter Shumlin
109 State Street, Pavilion
Montpelier, VT 05609

Commissioner Elizabeth Miller
VT Department of Public Service
112 State Street, Drawer 20
Montpelier, VT 05620-2601

RE: Governor's Energy Generation Siting Policy Commission

Dear Governor Shumlin and Commissioner Miller;

As one who supports your administration's policies with regard to renewable energy, I was heartened to see that you have appointed a commission to further study the state of renewable energy development in Vermont as well as the Public Service Board's role in the permitting of grid scale projects and related energy development and transmission infrastructure. This is a recommendation I actually forwarded to the Commissioner during the outreach process for the development of the state's energy plan; I am also on record before the PSB as stating that I did not believe the Quechee Analysis, as currently employed, anticipated these types of projects and therefore provides an imperfect platform for their review.

As Principal of LandWorks I have been professionally involved in a wide range of energy related projects throughout New England. We were the aesthetic consultants working for the Department in the successful effort to bury the PV20 line adjacent to the Route 2 Causeway in Milton/South Hero (In a meeting with Governor Dean in his office during that time he looked me straight in the eye and said "you will see that the line is buried, right David?". Needless to say I was relieved that the PSB affirmed our arguments!) We were also the Department of Public Service's consultants in the review and permitting of projects such as the Searsburg Wind Farm and the Northwest Reliability Project. Currently we have been working for the State of Maine in developing protocols for the review of cumulative impacts from wind energy projects and in the review and permitting of individual wind projects. We have and are working for state utilities (Green Mountain Power - Kingdom Community Wind) and regional utilities (Northeast Utilities - ongoing projects) in visual and environmental impact assessment. We recently assisted the Town of Shelburne in developing protocols for the review and protection of scenic and historic resources, in anticipation of energy and utility projects, and the Town of Charlotte in their review of a proposed solar farm on Charlotte-Hinesburg Road. As such, we have extensive experience studying the inter-relationships of energy development, community character, visual and aesthetic impacts and the costs and benefits associated with these types of proj-

ects.

A number of key considerations that I would forward to you and the Commission include:

• The testimony of the Conservation Law Foundation's expert on the viability of grid scale wind energy is as cogent an argument for this form of renewable energy that I have heard. I will email a copy to the Commissioner;

• Concerns with regard to the requirement of town approval for an energy project to go forward - it strikes me that this is the very reason these decisions are rightfully in the province of a state regulatory body - most towns, when given the opportunity, will listen to the vocal and passionate opposition that exists for almost every proposed project - and will not support the implementation of such projects. I would wager that the NRP would never have been built for example, if individual towns had veto power. There does need to be, however, a viable and meaningful participation opportunity for towns;

• The need to take a long distance view of where grid scale wind energy can be built with minimal aesthetic impact - a statewide viewshed and land use analysis might be a starting point for addressing this overarching question of where?;

• The need to strengthen town plans and documents to address where energy projects can and where energy projects cannot be suitably developed. This will require a concerted and defensible basis by which to identify and protect valued scenic and cultural resources from potential impacts. Town plan prohibition of renewable energy types is a dangerous precedent - there is a reason why towns cannot prohibit telecommunications facilities, although they can and should provide standards and guidance as to siting and mitigation;

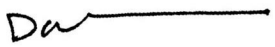
• The value of an impartial presentation and understanding of the actual impacts of wind, solar biomass, hydro and transmission projects - there is so much hyperbole and unsubstantiated information about impacts that we truly need to establish an objective baseline- with regard to effects on tourism, property values, health and recreation - and these should be based on actual studies and evaluations - perhaps of the projects already built in Vermont;

• A robust examination of mitigation options, examples and their application and efficacy - to include everything from purchase of conservation lands and private homes - to education - to landscape plantings and restoration; and

• It will be important to consider an advisory group to the Commission - the Commission is comprised primarily of former public sector officials - a broader perspective is necessary, one that includes the input of utility representatives, developers, local officials, environmental organizations, experts, and perhaps even, in the parlance of the Quechee Test, the "average person".

Finally, I would welcome an opportunity to share with the Commission our experiences in Vermont, Maine, Massachusetts, New York and New Hampshire with regard to energy, aesthetics and community character. I believe I can provide a unique perspective that will help to advance both the discussions and the solutions. I do hope I will have that opportunity.

Respectfully,



David Raphael MLA, ASLA
Registered Landscape Architect
Planner

Lecturer
Rubenstein School of Environment and Natural Resources
University of Vermont

Chair
Planning Commission and Development Review Board
Town of Panton

cc: Ms. Sarah Hofmann, Deputy Commissioner