

**STATE OF VERMONT
PUBLIC UTILITY COMMISSION**

**Petition of Chelsea Solar LLC pursuant to 30
V.S.A. § 248 for a Certificate of Public Good
authorizing the installation and operation of
the “Chelsea Solar Project,” a 2.00 MW solar
electric generation facility to be located off
Willow Road in Bennington, Vermont**

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Case No. 17-5024

PETITIONER’S POST-TECHNICAL HEARING BRIEF

Pursuant to the hearing officer’s instructions at the September 21, 2018, technical hearing in these proceedings, Petitioner hereby submits this brief in support of its Proposal for Decision and Order (the “PFD”) filed today with the Public Utility Commission (the “Commission” or “PUC”) for the 2.0MW Chelsea Solar Project (the “Project”).¹

I. Does the Project satisfy the requirements of 30 V.S.A. §248 for the issuance of a certificate of public good?

Short Answer: Yes.

The Project meets all of the criteria in § 248(b) for the issuance of a certificate of public good (“CPG”) as explained in the PFD submitted by Petitioner and as discussed herein. The Town of Bennington (the “Town”) has settled with the Petitioner so as to allow the Project to proceed. In the words of the Town Manager, Stuart Hurd, “these [*i.e.*, Chelsea and Apple Hill Solar] are well-positioned projects.”² The Agency of Natural Resources agrees that the Project satisfies the section 248(b)(5) natural resource criteria for issuance of a CPG. Similarly, the Agency of

¹ Capitalized terms used herein and not otherwise defined herein shall have the meanings ascribed to such terms in the PFD.

² See, <http://benningtonvt.org/town-managers-all-about-town-column-september-2015/>.

Agriculture, Food and Markets and the Vermont Division for Historic preservation agree that the Projects satisfies section 248(b)(5) with respect to potential impacts on primary agricultural soils and historic sites.

The only challenges to the Project were advanced by the Mount Anthony Country Club owners (“MACC”) and the Apple Hill Homeowners Association (“AHHA” and together with MACC, the “Intervenors”), which have raised various issues regarding orderly development, aesthetics, wind and noise, and PFOA, but have failed to provide any competent evidence on those topics to rebut the robust evidence provided by Petitioner.

The Department of Public Service (the “Department”) itself did not taken a position on the Project, but instead delegated its position to its hired aesthetics consultant, Mr. Raphael, who submitted testimony alleging that the Project would unduly interfere with the orderly development of the Bennington region and that the Project violated a clear community standard. These positions advanced on behalf of the Department directly contradict the Department’s position that the original, much larger, configuration of the Project in Docket 8302 (“Chelsea I”) satisfied all the criteria for issuance of a CPG. This complete and inexplicable reversal is not supported by any new evidence that would justify a different result. In fact, as explained in the Commission’s August 30, 2018 Order Affirming the Hearing Officer Order on the Application of the Vested Rights Doctrine (the “Vested Rights Order”) at page 6, this Project is “a significantly smaller project than Chelsea I and thus raises fewer concerns for neighbors and other interested parties.” The reversal also squarely contradicts the Department’s position that the similarly-situated Apple

Hill project (including in combination with the Chelsea Project) satisfied the criteria for a CPG in Docket 8454, which CPG has now been issued.³

The Department's inconsistency with its prior positions, the fact the smaller Project has fewer impacts, and the Department's statutory obligation under 30 V.S.A. §2(g) to "advance positions that are consistent with the statutory policies and goals set forth in 10 V.S.A. §§ 578, 580, and 581 and [30 V.S.A. §§] 202a, 8001, 8004, and 8005," completely undermine the credibility of Mr. Raphael's testimony and derivatively the Department's action.

Further, Raphael's testimony should be given no weight for a multitude of additional reasons, which are discussed in more detail *infra*. The entire foundation of Mr. Raphael's testimony has been eliminated by the Commission's final order in Docket 8454.⁴ The *sine qua non* of Mr. Raphael's testimony is his ill-founded conclusion that the Bennington Town Plan provides the source of a clear community standard with respect to development in the Bennington Rural Conservation District (the "RCON"), and that the Project does not satisfy the requirements for the RCON. His analysis fails, however, for at least two crucial reasons. *First*, the Commission has recently held that the Bennington Town Plan RCON standards are not a clear community standard.⁵ The basis of Raphael's testimony therefore crumbles, and with it his conclusion regarding orderly development. *Second*, the Project is not required to conform to the RCON standards. As discussed in the following section of this brief, the RCON is a zoning district and

³ Order re Proposal for Decision and Order Issuing Certificate of Public Good, September 26, 2018, Docket 8454 (the "AH Final Order").

⁴ *Petition of Apple Hill Solar LLC*, Docket No. 8454, Order of 9/26/18 (the "AH Final Order").

⁵ AH Final Order at 42.

the Town's RCON standards are zoning standards and are, therefore, preempted. As the Supreme Court held in the *Rutland* case:

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. See *Morin v. Essex Optical/The Hartford*, 2005 VT 15, ¶ 7, 178 Vt. 29, 868 A.2d 729 (“[W]e will not read terms into the statute unless necessary to make the statute effective.”).

In fact, the 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).⁶

II. Does the Project unduly interfere with the orderly development of the region [30 V.S.A. §248(b)(1)]?

Short Answer: No.

Section 248(b)(1) is clear—the orderly development of the Bennington region is the focus and not the Town.⁷ There are seventeen towns within the Bennington Region and this Project is located in only one of them. 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. As in *Rutland*, “there was very little evidence of the project's regional impacts; virtually all of the evidence and arguments

⁶ *In re Petition of Rutland Renewable Energy, LLC*, 2016 VT 50 (“*Rutland*”) at ¶¶ 35-36 (concurring opinion of Justice Robinson).

⁷ See *Rutland*, at ¶ 9 (“Under § 248(b)(1), a CPG may be issued for a facility if the [Commission] finds that the facility ‘will not unduly interfere with the orderly development of the region . . .’ We emphasize that the statutory requirement relates to the orderly development of the region, not to a particular municipality within the region.”).

concerned the impacts on and within the Town.”⁸ While localized impacts may in some instances 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 Project would rise to such a level. *Id.* The Bennington Country Regional Planning Commission (“BCRPC”) Regional Energy Committee’s comments on the Project, reinforced that from a regional perspective, the project site “was in an area of good solar resource potential, with no statewide environmental constraints.” Exhibit CS-BW-13 at 2. The BCRPC noted that given the smaller footprint, the Energy Committee recommended by consensus that its comments supporting the Project location be carried forward. *Id.* Mr. Raphael admitted he did not consider this in his report, notwithstanding that section 248(b)(1) explicitly calls for due consideration to the comments of the regional commission. *See* 2nd Tr. 34: 4-22. Notably, Mr. Raphael himself also offered testimony that “[t]he size and scale of the Chelsea Project is compatible with its surroundings on a regional scale”. Exhibit PSD-DR-2 at 8. All evidence supports the Project at the regional level.

The insistence of Mr. Raphael and Intervenors that the Town RCON standards proscribe development of the Project is entirely unpersuasive and incorrect as a matter of law. *First*, as already discussed, the Town “standards” are advisory only; they cannot be implemented as *de facto* zoning standards because Section 248 preempts municipal zoning.⁹ Town plans cannot “in any manner giving single municipalities the power to subvert utility projects statewide in scope

⁸ *Id.*, ¶ 12.

⁹ *See Rutland*, 2016 VT 50 at ¶ 36 (citing *City of South Burlington v. Vermont 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).

and broadly entrusted to a single planning and supervisory agency.”¹⁰ In fact, “[a]ny attempt at municipal regulation is pre-empted.”¹¹

Second, it has now been firmly established that commercial scale solar facilities, such as the Project, are a permitted use in the Bennington RCON district. The Town has also confirmed that no land use standards either in the Town Plan or any regulation is violated by the Project. Claims by the Intervenor and David Raphael that the Town Plan contains development standards are belied by the evidence and the Town’s admissions. The Town conceded through the sworn deposition testimony of Daniel Monks, that such claims of Raphael and the intervenors are not even credible.¹²

Finally, the RCON standards are too vague to be enforced as standards, even if they did apply. The Vermont Supreme Court has clearly stated that restrictions on land use development are contrary to the common law and must be narrowly construed. *In re Willey*, 120 Vt. 359, 365 (1958) (restrictions on development of real property “are in derogation of the common law”). And as such, planning documents must contain clear, written, specific objective criteria. *In Re Kiesel*, 172 VT 124, 130 (2000) (“*Kiesel*”).

¹⁰ *City of South Burlington*, 133 Vt. at 447-48, 344 A.2d at 25.

¹¹ *Id.*; *In re Amended Petition of UPC Wind, LLC*, 185 Vt. 296, 305, 969 A.2d 145, 151 (2009).

¹² *See also*, Exhibit CS-BW-12, Transcript, August 14, 2017, Select Board hearing at 21 (“the Town Plan [can]not [] credibly be construed to bar alternative energy projects in the rural [conservation] district because of the preceden[ts], because of the language of the plan, because of the way the zoning by-laws allow specific uses in that area and because of the planning that’s been underway for the future that includes a number of properties in that area for solar energy.”)

Indeed, the Town makes no secret of its lack of standards and its selective, *ad hoc* use of its purported goals and standards.¹³ The fact that Raphael needs to resort to what he perceives as the *intention* of the certain aspects of the Town Plan establishes that the purported orderly development constraints are not clear, not based on any objective standard, and thus cannot support a position adverse to development of the Project. But in any event, both the Town and the Commission¹⁴ have rejected both the Intervenor's and Raphael's position with regard to orderly development at the location of the Project, and it must be rejected here as well.

A. Does the Bennington Regional Plan (2007) support the development of the Project?

Short Answer: Yes.

The Bennington Regional Plan (2007) was developed by the Bennington County Regional Commission and provides broad objectives relative to growth and development in the region. The Project is supported by the Regional Plan in many ways, including development of locally based renewable energy, siting at the edge of developed highway infrastructure, compact design, and siting on land that is essentially an orphan parcel with no environmental constraints. There is no provision of the Regional Plan that is violated by the Project. See Exhibit CS-MK-2 at pages 38-41.

¹³ See, e.g., the Bennington 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.)

¹⁴ AH Final Order at 17.

In addition, the Bennington Regional Energy Plan has the express intention that the region “must transition from nonrenewable to renewable energy sources ... [and] much of that renewable energy will need to be derived from local sources.” Exhibit CS-BW-80 at 34. The Regional Energy Plan also expressly promotes development of solar generation “wherever possible”. (“Given the huge amount of solar energy striking the Earth’s surface (the cumulative solar energy irradiating the earth’s surface in a day is equal to the energy in billions of barrels of oil), there are compelling reason to implement solar technologies wherever possible”). *Id.*

B. Did the Petitioner consider the recommendations of the Bennington Select Board in developing the Project?

Short Answer: Yes.

Given that there is no actual evidence of any adverse regional impact of the Project in this docket, there is no need for the PUC to even consider the Petitioner’s response to the recommendations of the Town. That being said, the Petitioner has incorporated all of the Town’s recommendations into the Project’s site plan, resulting in a smaller footprint and a more robust screening due primarily to the vastly increased retained vegetation. Thus, not only were the Town’s recommendations concerning the Project “duly considered”, they were incorporated into the final plans. It is therefore not surprising that the Town has formally adopted the position not to oppose the Project, so as to allow the Project to proceed.

C. Is the Project consistent with the 2010 Town Plan and does the Project expressly promote the goals set forth in the Town’s Municipal Energy Plan?

Short Answer: Yes.

Given that (i) there is no actual evidence of a regional impact of the Project in this docket and (ii) a project’s conformance to the Town Plan is not the applicable standard in a §248

proceeding¹⁵, there is no need for the PUC to even consider the Project's adherence to the provisions of the Town Plan. That being said, the Project satisfies all of the standards of the Town Plan, including the RCON district's design standards. Perhaps most importantly, the Town agrees that commercial solar projects, such as the Project, are permitted in the RCON district, and the Town has specifically stated that it does not oppose the Project.¹⁶ The Town has also confirmed that commercial scale solar, such as the Project *at this specific location*, is consistent with the Town Plan. See, Exhibit CS-BW-12, Transcript of August 14, 2017 Select Board meeting, at 38.

Similarly, 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.

The Project also expressly promotes the policies and goals the Town has set forth in its Municipal Energy Plan, the purpose of which is to further the goals and recommendations in the Energy Section of Town Plan. Exhibit CS-BW-88 at 1. The Municipal Energy Plan, like the

¹⁵ 30 V.S.A. §248(b)(1) requires due considerations be given to the “recommendations of the municipal legislative bodies” and the “land conservation measures contained in the plan of any affected municipality”. Nothing in this provision requires adherence to or conformance with the provisions of a town plan in general.

¹⁶ Exhibit CS-BW-12 at 21 (in which the Town Attorney states: “the Town Plan I do not think can credibly be construed to bar alternative energy projects in the rural [conservation] district.”); *Id.* at 38 (“I never read the Town Plan as prohibiting all alternative energy everywhere in the district.”). *Id.*

Regional Energy Plan, emphasizes the need to stop importing energy derived from fossil fuels and instead moving to sustainable, local renewable energy resources. *Id.* Like the Regional Energy Plan, the Municipal Energy Plan emphasizes the compelling reasons to attempt to implement solar technologies wherever possible:

[T]here is significant potential for utility scale production of electricity from solar energy. Solar energy technologies are proven and continually being refined. They also have a relatively minor environmental impact and produce energy by capturing ambient sunlight (environmental costs and energy expenditures are primarily associated with production of solar panels and other equipment). Given the huge amount of solar energy striking the earth's surface (the cumulative solar energy irradiating the earth in a day is equal to the energy in billions of barrels of oil), there are compelling reasons to attempt to implement solar technologies wherever possible. Principal obstacles to development of solar energy facilities are cost and availability of critical materials (such as copper and cadmium-telluride used in photovoltaic cells).

Id. at 43. The Plan goes on to recommend: "Rising costs and uncertainties associated with future supplies of nonrenewable fossil fuels make it imperative that concerted efforts be made to conserve energy, modify the way we live and conduct business, and develop new sources of local renewable energy." *Id.* at 44,

Neither Mr. Raphael nor the Intervenors address these critical recommended actions or the fact that the Project is entirely consistent with them. The RCON standards in the Town Plan Land Use Section must be read in concert with the Town energy goals and recommended actions.¹⁷ Having established that there is no legal requirement to defer to the RCON standards, the next inquiry is what if any consideration is due under Section 248(b)(1). Petitioner asserts that none is

¹⁷ *Joint Petition of Green Mountain Power Corp. et al*, Docket No. 7628, Order of 5/31/11 ("Kingdom Community Wind") at 25 (notwithstanding that a wind project would be in a restricted development district under a town plan, because the plan also recommended the development of renewable energy resources the project was consistent with the plan).

due in this case, because the Town itself has made clear that the RCON standards do not apply to the Project site or this Project.

D. Does the Department's Proffering Of The Raphael Testimony Violate Chelsea's Rights To Due Process and Equal Protection?

Short Answer: Yes.

The Common Benefits Clause of the Vermont Constitution guarantees equal protection of the laws. "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). Here the Department's actions violate Chelsea's rights to equal protection, due process and property under both standards.

The Department, through Mr. Raphael, is discriminating against Chelsea as compared to other applicants for CPGs in the Bennington RCON District based on political pressure from neighbors. *See, Village of Willowbrook v. Olech*, 528 U.S. 562, 564 (2000) (per curiam) (recognizing a constitutional claim as a "class of one" by showing that plaintiff had "been intentionally treated differently from others similarly situated and that there is no rational basis for the difference in treatment."); *Del Monte Dunes at Monterey, Ltd v. City of Monterey*, 920 F.2d 1496, 1508 (9th Cir. 1990) (recognizing constitutional claim for denial of a permit "motivated, not by legitimate regulatory concerns, but by political pressure from neighbors and other residents.")

Here the Department's discrimination is manifest and is tantamount to unconstitutional selective enforcement. The Department's explanation for its different treatment of Chelsea as

compared to other electric facilities (including solar projects) it supported in the Bennington RCON zone is the opposition from the neighbors, the former opposition from the Town, and the alleged intention of the various changes in the Bennington Town Plan between 2015 and 2018, the last of which allegedly “interpret” the Town Plan as it existed *before* those changes. As the Vermont Supreme Court acknowledged in *In re G.T.*, 170 Vt. 507 (2000), such an explanation is the paradigm of unconstitutional discrimination. *See, id.* at 514 citing *People v. Acme Markets, Inc.*, 37 N.Y.2d 326, 334 N.E.2d 555, 558 (N.Y. 1975) (discriminatory enforcement found where Sunday sales law was unenforced, save upon complaint). The parallel between the *Acme Markets* case and the Department’s position is striking. In *Acme Markets* the Sunday sales law was enforced only upon complaint, which turned it into a tool for private purposes. The same was true here. This Project is the only project that the Department has singled out for adverse treatment in the RCON zone, attempting to turn the orderly criteria in section 248(b)(1) into a tool for private purposes.

Making matters worse, due process is violated by the Department, through Raphael, attempting to retroactively apply subsequent changes through Raphael’s preposterous notion that *ex post facto* changes evidence what the Town Plan meant all along. Such a use of after-the-fact changes violates Chelsea’s rights to due process, property and equal protection. *See, e.g.,* Aiken, “Ex Post Facto in the Civil Context: Unbridled Punishment,” 81 Ky. Law Journal, 323, 324 (1992) (“The drafters firmly believed that the power to create *ex post facto* laws was one of the hallmarks of tyranny. Such laws place the citizens at the mercy of the government, unable to know the consequences of their acts and constantly subject to the possibility of legislative vindictiveness.”) *See also, In re Programmatic Changes*, 2014 VT 29 at P16 (invalidating additional criteria

effectively imposed without prior notice.)

Chelsea's rights under the Common Benefits Clause are also being violated by the Department. Raphael's opposition is not based upon any legitimate regulatory concern but on political pressure from neighbors and the former opposition from the Town. The Raphael's opposition is also manifestly discriminatory in comparison to the Department's treatment of other commercial scale solar and electric projects in the RCON zone, which the Department supported. "[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." *W.V. Pangborne & Co. v. New Jersey Dep't of Transp.*, 116 N.J. 543, 561-562 (N.J. 1989) (internal citations and quotations omitted.) A reviewing court must not hesitate to examine the conduct of the government to ensure it "comports with the highest standard of fairness." *United States v. Vaval*, 404 F. 3d 144, 152 (2d Cir. 2005).

III. Will the Project have an undue adverse impact on aesthetics, historic sites, air and water purity, the natural environment or public health and safety [30 V.S.A. §248(b)(5)]?

A. Does the Project result in undue air pollution in terms of noise?

Short Answer: No.

The noise generated by the Project construction will be of limited duration and will be similar to the noise generated by typical light construction equipment. The construction activities for this Project using motorized construction machinery will be limited to between the hours of

8:00 AM and 5:00 PM Monday through Friday. Non-machinery construction activities will be limited to between the hours of 7:00 AM and 6:00 PM Monday through Friday and 8:00 AM to 5:00 PM on Saturdays (although generally work on Saturdays is not anticipated). No construction activities will occur on Sundays or state/federal holidays. See Jewkes pft at 6.

The noise producing equipment associated with the Project includes a pair of 1-MW central inverters and a 2000 kVA transformer. Maximum sound levels from the Project would occur during periods of maximum power generation. Sound levels reported by manufacturers correspond to full-load conditions and thus, these conditions were modeled in the analysis. The Project transformer will produce noise when energized and connected to the grid; the inverters only produce noise during the day when the PV array is producing power, resulting in diurnal operating conditions. The highest daytime sound emissions modeled at a residence (133 Russet Road) was 28 dBA during maximum production. Likewise, the highest sound level predicted at a residential property line during periods of maximum power production was 32 dBA. The corresponding modeled nighttime sound levels were 10 dBA at the residence at 14 dBA at the property line. The analysis did not consider any potential attenuation provided by the solar arrays. See Haac pft at 2-3.

Sound levels outside of the project parcel were modeled to be at least 10 dB below any applicable standard. Thus, the project as designed will not create an undue adverse impact on aesthetics with regard to noise. See Haac pft at 3. That conclusion does not change when one considers the combined Project and Apple Hill solar project. See, September 20, 2018 Hearing Transcript (“1st Tr.”) 65:8-15. Crucially, Haac confirmed that the potential cumulative effect of noise from the Project inverters and transformer would not add any further audible noise to

neighboring residences. The ambient traffic noise heard at the nearest residences effectively drowns out all noise from the Project equipment. Haac rebuttal at 4.

Claims by Leon and the AHHA that existing traffic noise should be a consideration should be rejected. The noise from the traffic on Route 7 is attributable to the highway and traffic from vehicles on Route 7, not the Petitioner, and is beyond the scope of Section 248. In a section 248 proceeding for a solar facility, the Commission evaluates the noise that directly emanates from the facility only and does not evaluate other existing noise sources. That rule has been consistently applied to all other CPG applications for solar facilities. The Bennington sound ordinance, like the Commission's approach, also only looks at the noise directly emanating from the Petitioner's equipment and does not review ambient noise.

Although not required, at the request of the neighbors, Petitioner hired Resource System Group ("RSG") to provide an assessment of the potential effects on highway noise sounds levels that could result from the removal of trees at the Site. The results show that the increase in sound levels generated by vehicles traveling on Route 7 and through the Route 7 interchange would (even under the most conservative assumptions (and without accounting for the attenuation benefit provided by the solar array)) be less than 3 dB at all residences in the area. A 3 dB change in broadband sound levels is just perceptible by most people and a 3 dB increase in sound levels is not considered substantial by the VTrans Noise Analysis and Abatement Policy. See Haac pft at 5.

B. Does the Project result in undue air pollution in terms of wind?

Short Answer: No.

Although wind is not a Section 248 criterion, the Petitioner engaged M/E Engineering, PC

(“M/E”) to assuage the Neighbors’ concerns by providing an assessment of the potential effects on wind levels that could result from the removal of trees at the Site.

M/E evaluated the potential change in wind speeds that may be experienced at the neighboring properties in the event that both the Apple Hill Solar Project and the adjacent Chelsea Solar Project are constructed as proposed. M/E concluded that only the residence of Libby Harris may experience a measurable difference in wind speeds, however that difference would be both minor and infrequent, and likely imperceptible to a person, and therefore an insignificant change. See Reynolds pft at 3. In addition, any other home in the Apple Hill neighborhood area would be further away from the solar projects and/or have more retained intermediate vegetation. Therefore, any possible effect at these other homes would be much weaker than any possible effect at Ms. Harris’ home. As such, the analysis demonstrates that there is no adverse effect at Ms. Harris’ home or others. *Id.*

C. Does the Project result in undue air or water pollution in terms of a potential for increase in PFOA levels in the ground water?

Short Answer: No.

Although PFOA is not a Section 248 criterion, the Petitioner engaged Waite-Heindel Environmental Management (“WH”) to assuage the Neighbors’ concerns by evaluating the potential that the construction or operation of the proposed Project could mobilize perfluorooctanoic acid (PFOA) and exacerbate the existing contamination of nearby drinking water wells.

Analytical testing reveals that PFOA concentrations in the soil at the Project Site fall well below the VT DEC Soil Screening Standard for Residential Soils, meaning that the Project Site soil does not contain PFOA at levels that could cause an impact to human health through exposure

to the soil and/or dust during the construction process or operation of the Project. See Waite rebuttal at 3. In addition, the combined impacts of both the Project and the Apple Hill solar project are very unlikely to have any material change to the level of PFOA in the drinking water in the Apple Hill wells. See 1st Tr. 41: 3-14. It was also noted that the homeowners in the Apple Hill neighborhood have water filtration systems that remove any PFOA from their drinking water, which further demonstrates that the Project would not have any effect of the PFOA in the water neighbors use. *Id.* 54:2

D. Will the Project result in any undue adverse effect on aesthetics?

Short Answer: No.

In determining whether a proposed project would have an undue adverse impact on aesthetics, the Commission has adopted the Environmental Board's *Quechee* test. The *Quechee* test first asks whether the project will have an adverse effect on scenic and natural beauty in the area in which it is located. It then asks whether the impact will be undue. An adverse impact is not undue if three conditions are met:

First, the project must not violate a clear, written community standard intended to preserve the aesthetics or scenic, natural beauty of the area. Second, it must not offend the sensibilities of the average person. Finally, the applicant . . . must take generally available mitigating steps that a reasonable person would take to improve the harmony of the proposed project with its surroundings.¹⁸

The [Commission] has adopted a modified version of the *Quechee* test for determining aesthetic impact. In addition to the *Quechee* analysis, the Commission's consideration of aesthetics

¹⁸ *Rutland*. at 50, ¶ 14 (citing *In re Petition of Cross Pollination*, 2012 VT 29, ¶ 10, 191 Vt. 631, 47 A.3d 1285 (mem)).

under Section 248 is "significantly informed by overall societal benefits of the project."¹⁹ The Court in *Rutland Renewable* held that the Commission's modification of the *Quechee* test was necessary "because the test was created for Act 250 review, and such review does not generally supplant local zoning regulation."²⁰

The Petitioner engaged SE Group to develop a site plan that would fully screen the Project from public views and the views of neighbors. The Petitioner also engaged T.J. Boyle Associates, LLC to perform an additional aesthetic analysis with respect to the Project's design. In addition, during the past two years the Petitioner has met with representatives of the Town to get the Town's input as the revised plans progressed.

While the development of the Project does require clearing, the design has taken considerable steps to effectively limit its visibility to the public nearby. The Project has provided large setbacks to the public roadways and nearby residential properties and, given its orientation and the low height of its components, does not materially impact the broader and longer-range views of the landscape. The level of anticipated impact is very low, and the Project introduces significant design features intended to lessen or eliminate its visual impacts on its surroundings. The Project's layering of mitigative strategies extends from the property line to the array and, as evidenced in the prepared visual simulations, promotes visual compatibility in all seasons. Given this, the Project would not create an adverse aesthetic impact on scenic resources. The Petitioner has addressed the Project's setting in a very balanced way. It has recognized its potential impacts and taken reasonable steps to improve its harmony with this setting. The Project does not create

¹⁹ *In Re Rutland Renewable Energy, LLC*, Case No. 8188, Order of at 45 (quoting *In Re: Northern Loop Project*, Docket 6792, Order of 7/17/03 at 28).

²⁰ *Rutland* at ¶18.

an adverse impact to aesthetics or scenic beauty of the area. See Kane pft at 3-4 and Exhibit CS-MB-2 at 15. Although both SE Group and TJ Boyle concluded that the Project does not create an adverse impact to aesthetics, each consultant took the additional step and conducted a full *Quechee* analysis.

1. Does the Project Violate a Clear, Written Community Standard Intended to Preserve the Aesthetics or Scenic Beauty of the Area?

Short Answer: No.

Unlike zoning ordinances that are subject to variances depending on the individual circumstances of the permit application, municipal and regional plans have been found to be a source of clear and consistent statements of a community's policies or standards. The Commission has found, therefore, that it is more appropriate to rely on town plans as the primary source of clear, written community standards.²¹ In this case, as the Commission held in the Final Order in Docket 8454, the Town Plan is being treated like a zoning ordinance and has been subject to varied application by the Town. For that reason, the Town Plan cannot serve as the source of a clear, written community standard as contemplated by the Commission's application of the *Quechee* test. This conclusion is supported by the Supreme Court's decision in *Rutland*. In that case, the Court rejected the notion that solar setback standards that the Town of Rutland attempted to apply to a solar project constituted a "clear community standard", stating:

We might adopt that view if we were dealing with Act 250, where state and local regulatory review coexist. Here, we are dealing with a situation where, under existing law, municipalities have a different role. The effect of the solar siting standards under the theory of the Town and neighbors is to enable the Town to control solar generation siting through the *Quechee* test. We agree with the Board

²¹ *Petition of New Cingular Wireless PCS, LLC*, Docket 8160, order of 12/5/13, at 8.

that a modification of the Quechee test is necessary to give the Board the necessary regulatory power.²²

In order for a municipal or regional plan 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 would be located and must apply to specific resources in the proposed project area.²³ “[T]he community standard element is intended to allow the municipality to identify designated areas and resources that need protection.”²⁴ A clear, written community standard must be more than simply “general in nature” and do more than seek “to promote good stewardship of scenic resources without identifying specific actionable standards.”²⁵

Here, the Town Plan has set aside the RCON district generally for certain uses but allows development of all kinds in the district on a case-by-case basis. Therefore, the Town Plan is akin to a zoning ordinance that is subject to a variance and is not a source for clear, written community standards.²⁶ Just as in Docket 8454, the Town's interpretation of its own Town Plan changed as it became more informed about the Project and its other decisions supporting commercial solar development in the RCON District. As a result of knowing more about the Project and participating in its amendment, the Selectboard voted to not to oppose the Project and to enter into a settlement with the Petitioner to allow the Project to be built.

The Intervenors and Mr. Raphael ignore this important fact and instead primarily rely on

²² *Rutland* at ¶18.

²³ *In re Rutland Renewable Energy*, Docket No. 8188, Order of 3/11/15 at 85, affirmed *Rutland*. See also *id.*, ¶ 19.

²⁴ *Id.* at 69.

²⁵ *Joint Petition of Green Mountain Power Corporation, et al*, Docket 7628, Order of 5/31/11, at 83.

²⁶ AH Final Order at 42-43.

vague, standard-less, general development statements in the Town Plan to support their claims regarding clear community standards, all of which have been discredited by the Town.

First, the Intervenors and Mr. Raphael claim that development in the RCON zone is limited to “limited residential development” and thus a commercial ground-mount solar project such as the Project were never intended. *Second*, they allege the Project allegedly violates the Town Plan criterion that prohibits development “in prominently visible locations on hillsides and ridgelines” in the RCON zone. *Third*, they allege the Project violates the Town Plan criteria that “any development must minimize the clearing of natural vegetation.”

The first basis has been discredited by the Town. The Town of Bennington’s counsel has publicly stated that the Intervenors’ and Raphael’s claims regarding commercial ground mounted solar projects being excluded from the RCON zone is *simply not credible*. See, CS-BW-12, Transcript of August 14, 2017, Select Board meeting, at 21:

the Town Plan I do not think can credibly be construed to bar alternative energy projects in the rural [conservation] district because of the preceden[ts], because of the language of the plan, because of the way the zoning by-laws allow specific uses in that area and because of the planning that’s been underway for the future that includes a number of properties in that area for solar energy.²⁷

In September 2017, the Town re-affirmed that position in its rule 30(b)(6) deposition in docket 8454. See 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.

²⁷ See also, Exh. CS-BW-12, Transcript of August 14, 2017, Select Board meeting, at 38 (Town of Bennington’s counsel, Rob Woolmington, stating: “I never read the Town Plan as prohibiting all alternative energy everywhere in the [rural conservation] district.”)

The Town has also discredited the Intervenor's and Mr. Raphael's claims with respect to the specific parcel on which the Chelsea Project sits. In statements regarding the similarly-situated neighboring Apple Hill Solar project, the Town's counsel made it perfectly clear that the placement of a solar project, such as the Project, at that location is consistent with the 2010 Town Plan. *See*, Exhibit CS-BW-12, Transcript of August 14, 2017 Select Board meeting, at 38.

The second claim—*i.e.*, being sited in a prominently visible location on a hillside or ridgeline— has also been discredited by the Town. When development on hillsides is to be restricted, clear standards must be set, and that must begin with defining hillside. *See In Re Kiesel*, 172 VT 124, 130 (2000). Here there is no objective standard to guide enforcement. The Vermont Supreme Court has held that a Town Plan restriction on construction on hillsides constituted a clear, written community standard only when a specific objective criteria regarding slope measurement was provided. *See In Re Green Peak Estates*, 154 Vt. 363, 368 (1990) (enforcing specific standard prohibiting development on slopes in excess of 20 percent). Here, however, there is no objective standard to guide either the determination of what is a "hillside" or what is a "prominently visible location" as the Town has conceded.

In its rule 30(b)(6) deposition in Docket 8454, *see* Exh. CS-BW-25 at 5-6, the Town confirmed there is no definition of hillside:

Q. Now, the sentence you just read talks about hillsides or ridge lines. Is there a definition in the town plan of a hill site [sic]?

A. Not to my knowledge, not a specific definition as a term of art or anything like that, no.

The Town also confirmed that the determination of what constitutes a "hillside" is an *ad hoc* standard-less from the gut determination:

Q. So how do you decide what's a hillside?

A. You just use the common understanding of what a hillside or a ridge line is.

Q. So based on the slope or is it not based on any kind of specific –

A. It's not based on any kind of specific criteria. Like I said, it's not defined, so it's not like if it's a twenty percent slope or a ten percent slope, and that's a hillside

Finally, the Town confirmed there is also no definition of “prominently visible location.”

Q. [] is there a definition in the town plan of "prominently visible location"?

A. No explicit definition, no.

The Town stated that the intention of the prominently visible hillside aspect is determined from the vantage point of “a valley or from a lower point,” *see, id.* at 7-8, not from an elevated position, such as the Southern Vermont College or the Bennington Battle Monument.

The Town’s concessions are fatal to the claim that “being sited in a prominently visible location on a hillside” constitutes a clear, written community standard. Without a definition, the terms are ambiguous and there is no meaningful way to have the term create a development standard. *See, Kisiel*, 172 VT at 130.²⁸

The third basis has also been discredited. The RCON guideline that development “must minimize clearing of natural vegetation” is on its face vague as there is no clear guidance as to what the requirements are. *Id.* The situation in *In Re Chaves A250 Permit*, 2014 VT 5 (2014) (“*Chaves*”) is similar to that presented here. In *Chaves*, the neighbors argued that the regional and

²⁸ During the rule 30(b)(6) deposition in docket 8454, the Town confirmed that the neighboring Apple Hill project is not prominently visible because it would not be “visible from the valley and does not break the height of the ridge line.” *See* Exh. CS-BW-25 at 18. The same is true here. Indeed, the simulations prepared by SE Group that were reviewed by the Town in its rule 30(b)(6) deposition were simulations that contained both the Chelsea Project and the Apple Hill project. Mr. Monks testified that they were not prominently visible within the meaning of the Town Plan.

town plans used mandatory language regarding “minimizing impacts” on historical sites. The Vermont Supreme Court held that the language was broad and nonregulatory, espousing general policies about maintaining features, protecting valuable areas, and minimizing impacts, but contained no specific requirements that were legally enforceable. *See, Chaves*, 2014 VT at 12. That is true here as well.

In the Town’s rule 30(b)(6) deposition, Dan Monks testified that the minimize clearing standard fluctuates depending upon the use. If the use, like the Project, reasonably requires a certain amount of clearing, then it is permitted. According to the Town, the Town Plan is intended only to address gratuitous clearing. However, even that guideline is vague and made on an *ad hoc* basis because there are no objective criteria against which to determine whether clearing is gratuitous or reasonably required.

The issues advanced by the Project’s challengers in *Chaves* were remarkably similar to those advanced here by the Intervenors and Raphael and rejected by the Supreme Court in *Chaves*. 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.) That is exactly the same argument used here with respect to the RCON District. 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.) The 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, 185 Vt. 201, 969 A.2d 47, 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.

The RCON goals are *not* clear, unambiguous written community standards for another independent reason—*other express goals in the Town and Regional Plans support the project*. Raphael, however, conceded that he *did not account* for other policies in the Town or Regional Plans:

Q. Okay. Your orderly development assessment does not discuss any renewable energy goals of the town or the region, isn't that correct?

A. That's correct.

[September 21, 2018 Hearing Transcript (the “2nd Tr.”) at 44:12-15]

Raphael also conceded that he did not review or take into account the Town energy plan:

Q. ...I'm going to refer you to the Bennington Municipal Energy Plan exhibit CS-BW-88. It's a 2012 town plan?

A. Yes.

Q. Do you have that?

A. Yes.

Q. Did you review that before writing your report?

A. I don't -- I think a member of my staff may have reviewed this. I did not specifically remember reviewing this. Again it was not -- I'm not sure it was a document that was part of this docket. I may be wrong, but I think it was reviewed. I did not review this specifically.

[2nd Tr. 53:4-17]

Raphael also conceded that he did not review the Town energy plan even though he knew it existed:

Q. So you made no inquiry as to whether or not the Town of Bennington had an energy plan?

A. I knew Bennington had an energy plan. Many communities do so --

Q. Okay. So I'm going to refer you to page 38.

HEARING OFFICER TOUSLEY: Of which document?

MS. HAYDEN: This is the Bennington Municipal Energy Plan.

BY MS. HAYDEN:

Q. Page 38 commercial renewable energy opportunities in Bennington. Did you -- were you aware that they had a plan document that addressed that issue?

A. I mean I understand that the community has addressed options in commercial renewable energy, yes.

Q. Okay, but you hadn't looked at this. I think you said that, correct?

A. Correct.

[2nd Tr. 53:18-25, 54:1-10]

The Vermont Supreme Court in *Chaves* faulted the challengers for not recognizing that the town and regional plans expressed other goals, thus ambiguity was *by definition* created. The Court held that the town plan's language did "not express unambiguous standards in that *both the town and regional plans* also express other goals." *Id.*, 2014 VT at P42. (emphasis added.) Specifically, the Court noted that the town plan recognized the importance of the project's proposed operations. *Id.* at P42. That is also the case here.

The Town Plan includes a *multitude* of statements and goals promoting local distributed solar resources, such as the Project. See Exh. CS-BW-23 (pages 3, 7, 12, 14, 55, 83, 94, 95, 96). Moreover, the Bennington Town energy plan describes various goals encouraging solar resources, such as the Project. See CS-BW-88 (pages 2, 38, 43, 45, 47). Indeed, municipal plans must “encourage the development of renewable resources.” 24 V.S.A. §4302(a). Similarly, the Bennington regional plan describes various goals which recognize the importance of solar energy resources, such as the Project. See Exh. CS-BW-14 (pages 6 and 65). All of those goals support the Chelsea Project. As the Supreme Court stated in *Chaves* these other specific priorities must be considered and are enough to debunk the Intervenor’s and Raphael’s claims.

Raphael, however, tries to do an end-run around clear Supreme Court precedent by his own version of Johnny Carson’s Carnac the Magnificent where he “divines” the purported “clear intent” of the 2010 Town Plan. Calling the distinction between regional development and municipal development as “mincing words,”²⁹ labeling the Commission’s Vested Rights Order a mere “technicality,”³⁰ and acknowledging he is too busy making money to pay attention to Supreme

²⁹ [Q.] do you agree that the project does not unduly interfere with orderly development of the region?
A. Well I mean we’re going to mince words here, ... the statute says orderly development of the region, correct, but in looking at the region you also have to look at the host community and the town itself which is an intrinsic part of the region, and in that regard there’s a difference in terms of how the fit might look overall in the region versus how the fit and compatibility with orderly development works within the municipality. 2nd Tr. 29:24-25, 30:1-12.

³⁰ See, Raphael Rep. at 30. (“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 changes are a reflection of community intent and its position with regard to solar developments such as Chelsea Solar.”)

Court opinions on orderly development,³¹ render Mr. Raphael's unique and groundless interpretations simply not credible.

2. Has the Applicant Failed to Take Generally Available Mitigating Steps that Reasonable Person Would Take to Improve the Harmony of the Proposed Project with Its Surroundings?

Short Answer: No

As discussed above, there is sufficient evidence to conclude that Chelsea has taken generally available mitigating steps in proposing to site the Project at this location. The final amended form of the Project reflects the Petitioner's reasonable efforts to mitigate the impacts of the Project and to reduce its visibility within the viewshed. Moreover, if a CPG is issued for the Project, the landowner of the adjoining apple orchard parcel has agreed with the Town to not develop that parcel into a different use. That concession in and of itself is substantial as the price paid for the apple orchard was \$85,000. Furthermore, Chelsea has agreed to do a post-construction review and adhere to PUC rule 5.800.

³¹ Q. Are you familiar with the Rutland Renewable Energy decision -- the Supreme Court decision? ***

A. I am not familiar with this one to be honest with you. [2nd Tr. 19:7-14] ***

Q. The second to the last sentence the Court emphasizes that the statutory requirement in Section 248 (B)(1) relates to the orderly development of the region and not to a particular municipality within the region, correct?

A. Correct.

Q. Did you -- were you aware that the court -- when they issued this decision were you aware of their interpretation that this is the standard? It's focused on the region and not a particular municipality, and I should say were you aware at the time you wrote your report?

A. I was not. [2nd Tr. 31:2-13.] ***

[Q.] why it is that you were not familiar with this decision?

A. The easy answer is that at any given time in my office I have upwards of 20 to 30 different projects where I am involved in developing testimony, review, and reports. I cannot keep track of, you know, the decisions of the Supreme Court and for that matter all the cases before the Public Utility Commission.

[2nd Tr.22:24-25, 23:1-6]:

3. Does the Project Offend the Sensibilities of the, Average Person? Is it Offensive or Shocking Because It Is Out of Character with Its Surroundings or Significantly Diminishes the Scenic Qualities of the Area?

Short Answer: No

When determining whether a project would be considered shocking or offensive, the Commission has concluded that the scenic qualities of an area are “important to its residents and that there would always be some resistance to any change in the landscape . . . however . . . the *Quechee* test [does] not guarantee that the aesthetic qualities of an area would not change.”³² Additionally, the Commission has concluded that the greater the distance a viewer is from a project the less overwhelming the project and consequently the less likely “an average viewer would find its observation shocking or offensive” even if the project “may be seen as 'out of character' with the surrounding area.”³³

The Project site is also at the edge of the RCON District but is bordered by extensive and high-speed highway infrastructure, beyond which lies commercial and residential development that is part of Bennington's urban core. The Project will be new but not be out of context with the electric infrastructure elements otherwise located in the RCON District, including the neighboring Apple Hill solar projects and other similarly situated solar projects.

While the Project site is located near the Vermont Welcome Center, it will be screened from nearby views from the Welcome Center, the highways, and the dispersed residences above the Project. The Petitioner is enhancing that screening by adding mitigation planting and conducting a post-construction aesthetics review to allow for additional screening from nearby

³² *In re UPC Vermont Wind*, 185 Vt. 296,309 (2009).

³³ *Id.* at 311.

views if necessary. Although the Department's witness Raphael disagrees with the Petitioner's aesthetics experts concerning their findings of no undue adverse effect, even he concedes that the post-construction mitigation procedures set forth in Commission Rule 8.500 would satisfy his concerns regarding mitigation and avoid an undue adverse determination with respect to aesthetics. 2nd Tr. 139: 14-22.

The Project site will also be visible from more than a mile away across the valley at the Mt. Anthony Country Club and nearby residences along Monument Drive. But that view will not shock or offend the average person. From these locations the Project to the extent any of could be seen would appear as an opaque rectangle of several acres that will be part of the broader vista of highway and developed urban landscape otherwise visible from these distant viewpoints. The Project is not a new type of development in Bennington, or in the Apple Hill neighborhood, and the Town has not challenged other commercial solar projects in the RCON District or elected to oppose this Project. The *Quechee* test does not guarantee that the aesthetic qualities of an area will not change. Even to the extent partially visible during certain times of the year, the Project will not be a dominant element in the landscape, but rather, will come to be seen as a land use consistent with the other urban, highway, and electric infrastructure development that dominates the region. Further, in its amendment to the Project, the Petitioner has considerably mitigated the adverse impact of the Project on scenic views by reducing its size and visibility through new technology and enhanced landscaping buffers. As such, an average person observing the Project from the nearby residences and longer-range views will not be shocked or offended.

Moreover, many residents and area visitors may, to the extent they recognize what is there, like the view. The Commission may take administrative notice of a portion of the transcript from

the public hearing in the Sudbury Solar docket 8225 in which local resident Jeannie Albert states:

I want to support solar projects. I happen to think that when I see them that they make me feel good I want it to be on record that when I drive by and see a large blanket of solar panels, I'm thinking nobody died to produce that energy. And that's really important to me. So what do we get out of it? We get energy that's clean, we get energy that no one has to like go overseas and die so that we could have it.

Docket 8225, Public Hearing May 20, 2014 Tr. at 35-36.

Given the urgent necessity to combat climate change, Petitioner submits that the sensibilities of the average person would not be shocked or offended with seeing solar modules at the Chelsea site, even if completely unscreened.

IV. Do The Societal Benefits From the Project Far Outweigh Any Potential Adverse Effects?

Short Answer: Yes.

Although Petitioner asserts that there are no potential adverse effects from the Project, to the extent that there might be any, those are far outweighed by the societal benefits from the Project.



Last week the Washington Post reported: “The world has just over a decade to get climate change under control, U.N. scientists say.”³⁴

The world stands on the brink of failure when it comes to holding global warming to moderate levels, and nations will need to take “unprecedented” actions to cut their carbon emissions over the next decade, according to a landmark report by the top scientific body studying climate change.

The Commission has recognized the substantial and immediate public interest involved in deploying renewable energy, *see* Order, July 10, 2018, 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 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.

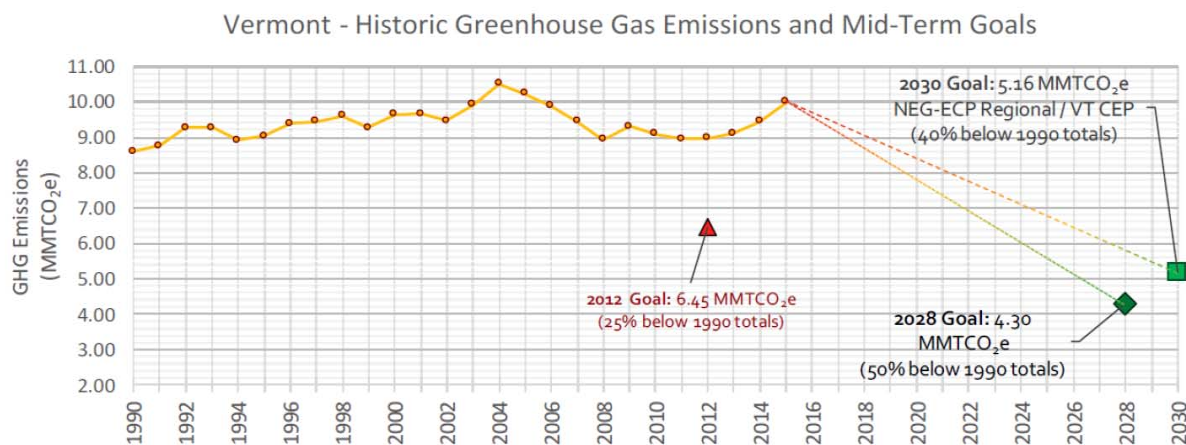
(internal footnotes omitted.)

Vermont’s greenhouse gas statute, 10 V.S.A. § 578 – calls for a 50% reduction of GHG emissions from 1990 baselines by January 1, 2028 and a 75% reduction by January 1, 2050.

³⁴ https://www.washingtonpost.com/energy-environment/2018/10/08/world-has-only-years-get-climate-change-under-control-un-scientists-say/?noredirect=on&utm_term=.8aa65dd81535.

However, the Agency of Natural Resources and the Vermont Commission on Climate Change recently announced that emissions have increased 16% above 1990 baseline levels, and that we are significantly off track from meeting our climate goals³⁵:

Figure 1: Vermont Greenhouse Gas Emissions and Mid-Term Goals¹



The Climate Commission warned:

Based on this new information, the Commission urges that, ***unless there is significant progress in greenhouse gas emission reductions, Vermont should institute additional, wide scale measures to reduce greenhouse gas emissions***, informed by the Joint Fiscal Office's analysis of decarbonization methods in Vermont and other emergent information.³⁶

Furthermore, even at the current pace of RPS mandates, ISO-NE is forecasting an increase in fossil fuel use. Coal, oil and gas resources represent approximately 71% of ISO-NE's fuel capacity, and that is expected to rise to 76% by 2025 (see: <https://www.iso-ne.com/about/key-stats/resource-mix>). *That 76% number is shocking.*

³⁵ Vermont Climate Commission 2018 Final Report at 2.

³⁶ Vermont Climate Commission 2018 Final Report at 5-6.

The social cost of carbon continues to rise with each new storm, each new heatwave, each new flood. 1,000-year storm events are now happening every year. Last week we saw the destruction from Hurricane Michael, the most powerful hurricane to ever hit the Florida gulf coast. This week catastrophic flooding caused the Llano river in Texas to rise an unprecedented 35 feet in Texas and wipe out entire communities and infrastructure that has been intact for decades. Vermont is still recovering from Tropical Storm Irene.

The Chelsea project has already been delayed by nearly five years—a delay triggered by false information provided by neighbors and the succeeding cascade of events, as the Petitioner has previously explained to the Commission in numerous filings. It should not be delayed any more.

V. Should the Raphael Testimony Be Given Any Weight?

Short Answer: No.

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. 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 unabashedly 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.

The deficiencies in Raphael’s testimony are manifest and numerous.

A. Raphael’s Testimony On Orderly Development Is Entitled To No Weight Because It Is Immaterial and Irrelevant.

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 of Exhibit PSD-DR-2 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 neighbors and the former position of 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. A report on Town orderly development is immaterial. *See, e.g., Rutland*, 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, Rutland*, 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.)

B. Raphael’s Testimony Is Entitled To No Weight Because It Is Based Upon An Unreliable, Unaccepted And Constitutionally Impermissible Methodology.

David Raphael offers testimony on two criteria—aesthetics and orderly development. As to aesthetics, he agrees with the Petitioner’s experts that the Project meets the aesthetics criteria under section 248(b)(5). Raphael disagrees, however, with the Petitioner’s experts 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.³⁷ 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. Exhibit PSD-DR-2 at 24.

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 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, and therefore should be provided no weight.

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

³⁷ Raphael's methodology here is contradicted by, for example, his methodology in the Thomas Dairy Solar report on file with the Commission in docket 18-2233-NMP, *Petition of Thomas Dairy Solar I LLC*, <https://epuc.vermont.gov/?q=downloadfile/276713/133521>, 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.

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, Rutland*, 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, and entitled to no weight.

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.*

Exhibit PSD-DR-2 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.

Exhibit PSD-DR-2 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.” Exhibit PSD-DR-2 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.

Exhibit PSD-DR-2 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.

Exhibit PSD-DR-2 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.³⁸ The statute says nothing about the “intent” of

³⁸ See, e.g., *Rutland*, 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 *Rutland* at ¶ 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

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 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 which existed year earlier 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 changes are a reflection of community intent and its position with regard to solar developments such as Chelsea Solar.

Exhibit PSD-DR-2 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.

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).

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”.

Exhibit PSD-DR-2 at 31

The Report concedes that the goals and statements in the regional plan are “broad.” Exhibit PSD-DR-2 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., Kisiel 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 neighbors, and formerly of the Town:

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.

Exhibit PSD-DR-2 at 34.

Raphael dons the ambiguous, standard-less town plan goals adorned by *post hoc* neighbor opposition and former Town 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.³⁹ 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, resulting in testimony that should be accorded no weight.

³⁹ Raphael concedes that the town plan does not have any clear community standards applicable to the project. See, e.g., Exhibit PSD-DR-2 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 testimony at the technical hearing further confirmed that he has no standard against which development could be judged. As one peruses the prefiled and live testimony of Raphael, no standard can be discerned. On cross-examination Raphael admitted that there are no standards or policies or goals with respect to the Project site:

[Q.] So you said there are no policies or goals with respect to this project site and there are no standards that apply with respect to this project site, correct?

A. Correct.

[2nd Tr. 14:22-24, 15:1]

The lack of a clear development standard was on display as Raphael attempted, but could not, explain a standard by which caused him to reach his conclusions. Rather Raphael acknowledged his approach is *ad-hoc*, impenetrable and evolving (2nd Tr. 13:9-23):

[Raphael]: as I said earlier upon, you know, your opinion and your sense of a project the more time you spend with it evolves, and I think while I would not say here that the ultimate conclusion changes here, I would say I'm not retracting the conclusion in that sense except to say I believe that this is at a threshold, and that upon further review and consideration of the gateway area, even though it does not specifically identify this site, that will not necessarily be the nature of a gateway identification. You would generalize the area of the gateway and you wouldn't necessarily identify every single parcel or every single site within that, but I now certainly -- and I think there has been testimony to this effect that this project is part of that area and as such should be considered within the parameters of those standards.

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 (which is the correct scenario), 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 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.

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

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*, Exhibit PSD-DR-2 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 often describing their neighborhood as living in a wind tunnel, 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. But PFOA contamination, like so many other things, do not support Raphael’s strained narrative, so he omits it, further illustrating the unreliability of his methodology.

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.

Q. Was the reference to the current town sentiment in regard to changes made to the town plan in 2015 and 2016 and 2018? Were you referring to efforts -- you said efforts in changing the town plan. Are you referring to --

A. I was referring to that in part, that process, yes.

Q. So you're referring to documents that are not relevant to this case. Are you aware that the Hearing Officer has issued a ruling on vested rights?

A. I am.

Q. Okay, and so the plan that governs this proceeding is the 2010 town plan?

A. I understand that.

Q. Okay, and so why would sentiment regarding changing that plan and as it relates to the more current town plans be relevant?

A. I think it's relevant in as far as the review and consideration of solar projects not just in Bennington but throughout Vermont is a work in progress and communities are struggling in part to get their arms around the impacts and the changes that this rapid development of solar projects is creating in communities.

[2nd Tr. 43:9-25, 44:1-6]

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 under the current Town Plan because of the retained screening. See Wilson pft at 17 and 39-40. He also fails to address the Town screening ordinance's focus on screening at the ground level, not from an elevated long-range position. Both of those criteria look to whether the project is screened. If it is screened at the ground level, 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, Wilson rebuttal at 13 and Figure 1 *infra*.

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

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 of Exhibit PSD-DR-2 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, Rutland*, 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.” Exhibit PSD-DR-2 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*, Exh. CS-BW-23 (pages 3, 7, 12, 14, 55, 83, 94, 95, 96), CS-BW-88 (pages 2, 38, 43, 45, 47) and Exh. CS-BW-14 (pages 6 and 65). 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).

Exhibit PSD-DR-2 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.

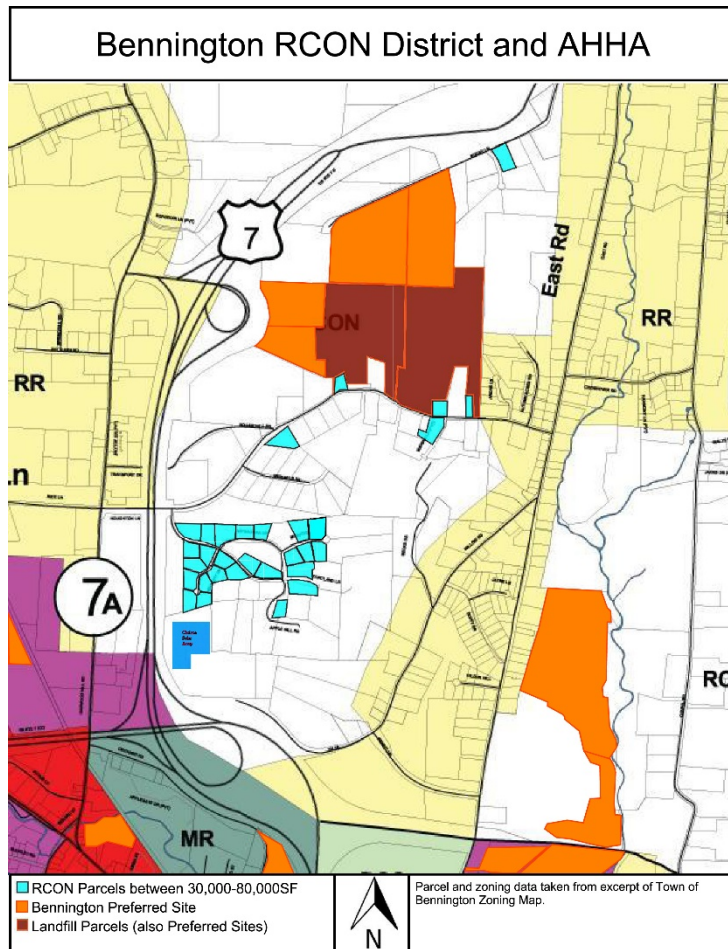


Figure 1 also illustrates that:

- i. The RCON continues to the westerly side of Route 7, as shown on Figure 1.
- ii. 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.
- iii. 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 preferred 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.

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

8. Raphael's Methodology Is Unreliable And His Conclusions Entitled To No Weight For An Additional Laundry List Of Reasons.

i. *Failure to consider the Town's treatment of other commercial scale solar.* While claiming that the "intent" of the Town is clear, Raphael failed to consider how the Town treated other commercial scale ground mounted solar project in the RCON and on land clearly identified in the Town Scenic Resource Inventory.

Q. Are you familiar with the -- where the ER Bennington solar project is which is Route 7 near the police?

A. No.

Q. You didn't review that?

A. No.

Q. Okay.

A. That was not my charge to review those projects. My charge was to review this project.

Q. But you didn't consider how the town -- the town's position with respect to other solar development in the rural conservation district and how that may impact the town's view as to orderly development? You just -- you don't think that's a relevant inquiry to see how other like projects have been -- have been considered by the town with respect to orderly development?

A. I mean it certainly could be considered.

[2nd Tr. 40:7-23.]

ii. *The Commission Has Already Determined That The Project Site Is Not In A Gateway.* Notwithstanding the Town's non-opposition to the Project, Raphael has taken the position that the Project is located within a "gateway area" which in turn purports to be a clear, written community standard. However, the Project is neither located within a "gateway area" nor

is the “gateway” area language in question a clear, written community standard. Within Raphael’s overall conclusion in his report concerning the Project he writes: “A number of issues have been raised previously and the decision of the Public Utilities Commission on the previous application (Docket 8302) cannot be overlooked for its precedent and rationale.” Exhibit PSD-DR-2 at 28. Despite that statement, Raphael deliberately ignores his own advice and overlooks the fact that the Commission has already held that the “gateway” language in question is not a clear, written community standard.⁴⁰

Equally important, Raphael conceded that even if the gateway standard as to the Project site were a clear community standard, the Project does not violate any such standard:

BY MS. HAYDEN:

Q. Page 23.

A. Yes.

Q. And I'm looking at the last paragraph. You concluded there that the intent of the scenic resources inventory is distinct. You note in the second sentence that there are many illustrative photos of pretty views along roads and across -- going on to page 24, across meadows, but the project area is not specifically identified on the scenic resources overview map and there is no list that distinctly calls out the project site. Moreover, there are no specific goals or policies that would specifically apply to the project or standards that detail how the project should be developed to meet those goals or policies. So you conclude there that it does not violate a specific community standard outlined in the scenic resources inventory. That is the last sentence of that first paragraph on page 24.

A. That's correct...

[2d Tr. 12: 16-25; 26:2-8]

[Q.] there are no specific goals or policies that would specifically apply to the project, correct?

A. Within the scenic resource inventory.

⁴⁰ Petition of Chelsea Solar, Docket 8302, Final Order at 59 (The “visual gateway” language is not an example of a clear, written community standard.)

Q. Right.

A. Yeah.

Q. Okay. Nor are there specific standards that detail how the project should be developed to meet any goals or policies to the extent they existed. So you said there are no policies or goals with respect to this project site and there are no standards that apply with respect to this project site, correct?

A. Correct.

[2d Tr. at 14: 15-25; 15: 1]

The term “gateway” as articulated in the 2004 Scenic Resource Inventory (SRI) (Exhibit CS-BW-24) for the Town of Bennington, as well as in the Town Plan (Exhibit CS-BW-81), is not described as an “area”, but rather a “point.” The SRI, which was included by reference into the Town Plan, defines gateways as “as a point along a public highway where it becomes evident that the traveler is arriving at a unique place. Very often gateways are located at a point of transition between the rural countryside and a more developed historic town or village center. In other places they are found where a view that includes locally significant visual elements first appears. Gateways offer an important first visual impression to a town.” (Page 20). Two “gateway” locations are identified in the SRI; a point along the southbound lane of Route 7 and north of the Project site, and a point along Route 279 heading east to the west of the Project site. As characterized in the SRI, the primary visual foci from both gateways are regional terrain features such as Mount Anthony and the Green Mountains. The SRI acknowledges that from the Route 7 southbound gateway the “commercial buildings adjacent to the intersection at the bottom of the hill are not particularly attractive, although they do create an abrupt change from the rural to the developed landscape of Town.” (Page 21). The Project does nothing to change this visual context from this gateway, owing to its orientation on the Project site, the buffering towards the Route 7 corridor and preservation of intervening terrain. The Project does not impede or intercede in any

observation of the Green Mountains, Mount Anthony or other regional terrain features. See Kane Rebuttal at 2-3. Most importantly, however, the Project is simply not in a “gateway” at all. A text search of the SRI document indicated no mention or reference to Apple Hill. *Id.*

iii. *Raphael Mischaracterizes The “Sense Of Place” Reference From A 1999 Environmental Board Decision.* Raphael also misses the mark with respect to his general approach concerning the *Quechee* analysis. On page 1 of his report he quotes the Environmental Board regarding “overall perception” and “sense of place” and “quality of life” as typically used to guide aesthetics analysis in Act 250 or Section 248 proceedings. While these terms and phrases are sometimes used in the description of a setting or context, they do not have any specific or universally-understood meaning and are highly subjective. *Id.* The quote that Raphael cites related to “sense of place” is from a 1999 Environmental Board decision that involved review of impacts from the proposed significant increase of large truck traffic through Brandon Village associated with a nearby mining operation - the increase of 170, 18-wheel, 22 or 24-ton truck trips per day, six days per week, beginning at 6:00 in the morning. In that case, the Environmental Board concluded that this dramatic increase in heavy truck traffic would “significantly diminish the scenic qualities of Brandon Village.”⁴¹ The situation described in that case is not in any way comparable to the proposed passive solar project being reviewed here.

iv. *Departing From His Standard Practice, Raphael Omits Any Reference To The Societal Benefits From The Project.* Lastly, Raphael mysteriously omits any analysis of the societal benefits of the Project even though that is an integral aspect of whether a proposed project

⁴¹ *Re: Omya Inc. and Foster Brothers Inc. #9A0107-2B* (Vt. Env’t Bd. 10 1999) at 22, finding 108.

would have an “undue” adverse effect on aesthetics and scenic or natural beauty.⁴² Although it was “standard operating procedure” within his firm at one time to include such societal benefit analyses, apparently Raphael no longer thinks it is important. See 2nd Tr. 135: 15-16; 136: 1-5. In any case, the societal benefits of a renewable energy generating facility are numerous and, as discussed above, are highlighted throughout the Town and Regional Plans and Energy Plans.

9. 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 (the “TDS Report”)⁴³ 500kw project. See Docket No. 18-2233-NMP. The Thomas Dairy 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 Thomas Dairy project.

Raphael describes the Thomas Dairy 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 Report at

⁴² *Petition of Vermont Electric Power Company, Inc. (VELCO), Vermont Transco*, Docket No. 6860, Vt. Pub. Serv. Bd. (Jan. 28, 2005) at 79-80.

⁴³ <https://epuc.vermont.gov/?q=downloadfile/276713/133521>.

6. He geographically looks 2500 feet to the south for examples of warehouses, a car dealership and other commercial uses. Then 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 the TDS Report 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 Thomas Dairy 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.

TDS Report at 9.

With respect to the Chelsea Project, Raphael abandons the methodology used for Thomas Dairy solar vividly illustrating that his methodologies are not reliable but merely result oriented. The methodology used in the TDS Report—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 Thomas Dairy project to justify his conclusions there.

Raphael also includes another factor in the TDS Report 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 Report at 15.

Raphael's TDS Report methodology then reaches his ultimate conclusion by focusing on among other things the "limited visibility,"—a factor he discounts in the Chelsea methodology. TDS Report 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.*

CONCLUSION

Potential increases to wind, noise and PFOA from the clearing of the trees at the Site are not properly before the PUC under a Section 248 analysis. Nonetheless, the Petitioner spent tens of thousands of dollars hiring experts to analyze these potential impacts and each study showed that the possible impacts would be negligible and not perceptible (wind and noise) or very unlikely (PFOA). Petitioner has spent years addressing the concerns of the Town and the neighbors with respect to a renewable energy facility that will be remain virtually invisible to all except those specifically hunting for it. The Petitioner has so dramatically reduced the Project's footprint and impact through its discussions with the Town that even the Town, once a staunch opponent of the Project, has settled with the Petitioner as to allow the Project to be built.

Despite the Town's and the BCRC's position with respect to the Project, Raphael still reached a conclusion of an undue interference on the orderly development of the region. As explained above, however, the manner in which Raphael reached that conclusion is fraught with

errors, material omissions and the misapplication (and in some instance ignorance of) applicable law. As such, his conclusion on orderly development should be discarded wholesale.

In Docket 8454, the Commission found that the Apple Hill solar project satisfied the applicable Section 248 criteria. The vast majority of the petitioner's evidence in the Apple Hill docket reflected the combined impacts of both the Apple Hill project and the Chelsea project. As such and based on the additional evidence submitted to the Commission in these proceedings and at the technical hearing, the Commission should find that the Project satisfies the applicable Section 248 criteria and issue a CPG with all deliberate speed.

Respectfully submitted,

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