

STATE OF VERMONT  
PUBLIC SERVICE BOARD

Docket No. 8188

Petition of Rutland Renewable Energy, LLC for a )  
certificate of public good, pursuant to 30 V.S.A. § 248, )  
authorizing the construction and operation of the "Cold )  
River Project," consisting of up to a 2.3 MW solar electric )  
generation facility located at the intersection of Cold River )  
Road and Stratton Road in Rutland, Vermont )

Hearings at  
Montpelier, Vermont  
August 20-22 & 27, 2014

Order entered: 3/11/2015

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## **I. INTRODUCTION**

This case involves a petition filed by Rutland Renewable Energy, LLC ("RRE" or "Petitioner") requesting a certificate of public good ("CPG") under 30 V.S.A. § 248 for the proposed construction and operation of up to a 2.3 MW AC solar electric generation facility to be located in the Town of Rutland, Vermont (the proposed "Project"). In this proposal for decision, I recommend that the Vermont Public Service Board ("Board") approve the Project subject to the conditions described below.

## **II. PROCEDURAL HISTORY**

On December 20, 2013, RRE filed a petition and direct testimony with the Board requesting a CPG under 30 V.S.A. § 248 to install and operate up to a 2.3 MW AC solar electric generating facility to be located southwest of the intersection of Cold River Road and Stratton Road in the Town of Rutland, Vermont.

On February 7, 2014, RRE prefiled supplemental testimony and exhibits.

On February 13, 2014, a prehearing conference was held. Appearances were entered by: Kimberly K. Hayden, Esq., and Danielle M. Changala, Esq., of Downs Rachlin Martin PLLC, for RRE; Aaron Kisicki, Esq., for the Vermont Department of Public Service ("Department" or "DPS"); Donald Einhorn, Esq., for the Vermont Agency of Natural Resources ("ANR"); Kevin Brown, Esq., of Langrock Sperry & Wool, LLP, for the Town of Rutland ("Rutland" or "Town"), and Alan George, Esq., on behalf of five adjoining property owners and Vermonters for Responsible Solar, Inc.

On February 14, 2014, the Prehearing Conference Memorandum and First Procedural Order was issued. The Order directed the parties to submit proposed schedules no later than February 20, 2014, granted a Motion to Withdraw filed by counsel for the Vermont Agency of Agriculture, Food and Markets, and granted a motion for attorney Changala to appear *pro hac vice* in this proceeding.

On February 20, 2014, the Department filed a proposed schedule for this proceeding.

On February 21, 2014, RRE filed a proposed schedule for this proceeding.

On February 24, 2014, RRE filed an additional round of supplemental testimony and exhibits.

On March 3, 2014, the Second Procedural Order re: Motions to Intervene and Scheduling was issued, granting in part an intervention motion filed by Joseph Romeo, Charles Flanders, Ted Hubbard, Robert Carrara, Jr. as Trustee of the Robert Carrara, Jr. Trust and David Fucci (the "Neighbors"), denying the intervention motion filed by Vermonters for Responsible Solar, Inc., and establishing a schedule for this proceeding.

On March 14, 2014, RRE filed a third round of supplemental testimony and exhibits.

On March 26, 2014, a public hearing was held with twenty-one individuals providing comments on the proposed Project. The comments received at the public hearing are summarized later in this proposed decision.

On March 27, 2014, the Third Procedural Order re: Motion to Intervene and Schedule was issued, granting the Town's Motion to Intervene and amending the previously established schedule.

On April 3, 2014, the Fourth Procedural Order re: Motion to Intervene was issued granting Green Mountain Power Corporation's ("GMP") Motion to Intervene.

On April 17, 2014, RRE filed with the Board a request for SPEED<sup>1</sup> certification for the Project.

On April 18, 2014, a site visit was conducted to view the Project's proposed location.

On May 20, 2014, a status conference was held to discuss the schedule for this proceeding.

On May 20, 2014, RRE filed a new proposed schedule, and on May 22, 2014, RRE filed a modified proposed schedule.

On May 30, 2014, the Fifth Procedural Order re: Scheduling was issued establishing the schedule for the remainder of this proceeding.

During this time frame, the parties served discovery requests on RRE, and RRE served responses to discovery, consistent with the schedule in effect at the time.

On June 18, 2014, the Neighbors and Rutland each prefiled direct testimony.

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1. Sustainably Priced Energy Enterprise Development ("SPEED") Program.

On June 19, 2014, the Department prefiled direct testimony.

On June 20, 2014, RRE again prefiled additional supplemental testimony and exhibits.

On June 24, 2014, RRE served discovery requests on the Neighbors and on Rutland.

On July 8, 2014, the Neighbors and Rutland each served responses to RRE's discovery requests.

On July 15, 2014, RRE prefiled rebuttal testimony and exhibits.

On August 12, 2014, a Procedural Order was issued establishing the order of witnesses for the technical hearings.

On August 18, 2014, a second site visit was conducted. Also on August 18, 2014, RRE filed a Memorandum of Understanding between itself and ANR (the "ANR MOU").<sup>2</sup>

Technical hearings were held in this matter on August 20-22 and 27, 2014, in the Board's hearing room in Montpelier, Vermont.

On September 29, 2014, RRE filed a final round of supplemental testimony and exhibits responsive to questions issued by the Hearing Officer by memorandum dated August 12, 2014, and record requests from the bench on August 21, 2014.<sup>3</sup>

On September 29, 2014, RRE, the Neighbors, the Town of Rutland and the Department all filed direct briefs in this matter.

On October 8, 2014, RRE, the Neighbors, and the Town filed reply briefs.

#### Summary of Public Comments Received During the Public Hearing

Twenty-one individuals commented on the proposed Project during the March 26<sup>th</sup> public hearing at the Rutland Town Municipal Office Building. Speakers opposing the Project expressed concerns about impacts of the Project on individual property values, glare, aesthetic and wildlife impacts, and the loss of open space. Others expressed concern over what they see as the rapid deployment of solar projects throughout Vermont and the lack of local control over

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2. The ANR MOU was admitted into the evidentiary record as exhibit Pet. Joint-1.

3. The September 29, 2014, supplemental filing consists of Supplemental Testimony of Rod Viens and exhibits Pet. Supp. RV-7 and Pet. Supp. RV-8. Given that these documents were provided post-hearing in response to questions from Board staff, I am admitting them into the evidentiary record. Parties objecting to the admission of these documents must file their objections and the reasons therefor when they file their comments on this proposal for decision. In the event any objections are filed, the Board will rule upon them in its final order.

their siting. Many of those that spoke in opposition to the Project stated that they were supportive of renewable energy generally, but believeGd that this Project was simply proposed for the wrong location. Speakers supporting the Project pointed to expected economic benefits, the benefits of using clean, renewable power, and the inclusion of the Project in Rutland's tax base.

### **III. FINDINGS**

Based on the evidence of record, I hereby report the following findings to the Board in accordance with 30 V.S.A. § 8(c).

#### **Background and Project Description**

1. RRE is a Vermont manager-managed limited liability corporation. Global Resources Options, Inc., d/b/a groSolar, is the sole member and manager of RRE. groSolar develops, constructs and operates solar photovoltaic systems and is headquartered in White River Junction, Vermont. Petition at 1.

2. RRE proposes to develop and operate a photovoltaic ("PV") electric generating facility of up to 2.3 MW AC to be located on approximately 15 acres of a larger parcel of land – approximately 24 acres – under contract for purchase by RRE and located to the southwest of the intersection of Stratton Road and Cold River Road in the Town of Rutland, Vermont. Rod Viens, RRE ("Viens") pf. at 3; tr. 8/20/14 at 19 (Viens); exh. Pet. MK-2 at Figure 1.

3. The Project site sits within a transitional land use area within Rutland Town. To the north and west of the proposed array location are increasing commercial and industrial uses along with some residential areas. The northwestern boundary of the Project site effectively forms the transition point between this more highly developed landscape and the relatively undeveloped lands further east and south. Exh. Pet. MK-2 at 4.

4. The north and east sides of the Project site are bordered by Cold River Road. South and west of the Project site is a vacant wooded parcel, and to the southeast, abutting the Project, there is one home separated from the site by a mature hedgerow. Viens pf. at 4.

5. Three additional residential structures are located along the east side of Cold River Road. The closest of these is located near the intersection of Cold River Road and Stratton Road, approximately 150 feet from the Project site. The second is about 280 feet away, near the



midpoint of the Project's frontage on Cold River Road. The third has a driveway near the southernmost corner of the Project, but the residential structure is set over 500 feet away and up a hillside. Exh. Pet. MK-2 at 5-6.

6. The terrain within the Project site has a slight rise from south to north along its length. A small "hill" near the northern edge of the Project site and along the Cold River Road frontage rises up about eight feet from ambient grade, and then begins to flatten out. From east to west within the Project site the terrain is slightly downward trending. Exh. Pet. MK-2 at 5.

7. The total Project area, including tree clearing and access and conduit construction, is approximately 15 acres. Currently, the parcel is an undeveloped open meadow, with some shrubs and immature trees. Viens pf. at 3.

8. The Project area includes sections of a Class II wetland and four small Class III wetlands. The solar panels would be installed in two distinct arrays in order to avoid impacts to the Class II wetland. Jeffrey Severson, RRE ("Severson") pf. at 10; exh. Pet. MK-2 at 2; Viens pf. at 4; exh. Pet. NSK-5.

9. The Project parcel is designated as "Industrial/Commercial" on the Town's future land use map, which map has been incorporated into the current Rutland Town Plan. Viens pf. at 3; exh. Pet. Reb. RV-1 at 49 and attachment.

10. Principal Project components would include: (1) approximately 542 solar racks located in northern and southern array areas supporting approximately 10,000 individual panels;<sup>4</sup> (2) underground electrical lines connecting the arrays to combiner boxes and then to the inverters; (3) two inverters, each approximately 1,150 kW, with an aggregate nameplate capacity of up to 2.3 MW AC; (4) two 1500 kVA step-up transformers or one 2500 kVA step-up transformer (actual size to be based on market price and availability and coordination with GMP); (5) a perimeter fence; and (6) an access area and new curb cut along Cold River Road to service the northern array and inverters, as well as an extension to the existing access area along Cold River Road to service the southern array. Viens pf. at 4-5; tr. 8/20/14 at 34 (Viens).

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4. The exact numbers will be determined during final design and optimization of the array configuration, and based on analysis of snow and wind loads. Exact wattage, number of panels, and panel configuration will be determined at the time of final design and procurement. Viens pf. at 4, n.1.

11. The panels will be attached to a fixed mounting system and grounded. The arrays will be arranged in rows running directly east-to-west, with the modules facing directly south. The design calls for support for the poles of the array mounting system to be driven or screwed into the ground. Viens pf. at 5; exh. Pet. RV-1.

12. The inverters and transformer(s) will be located centrally on the site, will sit on concrete foundations, and will be locked. Underground conductors will connect the arrays to the inverters. The inverters will be housed in pavilion-type structures with an approximate size of 12 feet high by 20 feet wide by 25 feet long. The structures will be painted in neutral earth tones such as green or tan. Viens pf. at 5; exh. Pet. NSK-5.

13. The transformer(s) will use a vegetable oil-based insulating fluid (Envirotemp FR-3 or equivalent) and will have a secondary containment system capable of retaining 150% of the transformer fluid volume. Viens pf. at 5; exh. Pet. Joint-1 at ¶ 12.

14. The Project's northern array and inverters will be accessed via a curb cut off of Cold River Road South. The southern array will be accessed via an extension and upgrade of a current access drive located at the southeast corner of the parcel. These access drives will be of crushed stone to allow for use by construction and maintenance vehicles and for transportation of major equipment to the array location. Viens pf. at 6; exh. Pet. NSK-5.

15. Temporary staging areas will be located in the central part of the site in the area of the inverter locations and also at open areas around the arrays. Viens pf. at 8; exh. Pet. NSK-4.

16. Limited excavation and backfill will be required, principally in the area of the inverter/transformer vault(s). There is an old barn foundation on the upland portion of the Project site that will be removed and grading will be used to level that area. Viens pf. at 8; exh. Pet. NSK-6.

17. Trees will be removed to the property line at the southwest portion of the Project parcel to mitigate shading of the Project arrays. Stumps will not be removed. Trees to the east of the arrays in excess of 12 feet above ground level, as opposed to the level of Cold River Road, will very likely also be removed in their entirety, rather than being cut back to no higher than 12 feet. Viens pf. at 8; exh. Pet. NSK-5; tr. 8/20/14 at 202-03 (Kane).

18. Following construction, the site would be mowed or brush hogged over the summer months, subject to the terms and conditions of the ANR MOU, and cleared of snow as needed during the winter months. RRE would periodically inspect the facility and provide ongoing maintenance as required. Viens pf. at 8; exh. Pet. Joint-1 at ¶ 5.

19. The Project would interconnect with GMP's distribution network via GMP's South Rutland Substation, 73 Circuit, Line 71, Pole 30-3. Three new utility poles are proposed for placement on the northern edge of the Project site for this purpose. Viens pf. at 11; exh. Pet. Supp. RV-1; exh. Pet. NSK-5.

### **SPEED Certification**

On April 17, 2014, RRE filed a request with the Board for certification of the Project as a SPEED project. Pursuant to Board Rule 4.304, SPEED projects are generation projects that are located in Vermont, come into service after December 31, 2004, and produce renewable energy. The Project meets these criteria and accordingly, I recommend that the Board certify the Project as a SPEED Project.

### **Review of Project Under the Section 248 Criteria**

#### **Orderly Development of the Region**

[30 V.S.A. § 248(b)(1)]

### **Findings**

20. The Project will not unduly interfere with the orderly development of the region, with due consideration having been given to the recommendations of the municipal and regional planning commissions, the recommendations of the municipal legislative bodies, and the land conservation measures contained in the plan of any affected municipality. This finding is supported by findings 21 through 38, below.

21. The Rutland Town Plan (the "Plan") contains three energy objectives, one of which is to "Encourage the development of renewable energy resources." Exh. Pet. Reb. RV-1 at 32.

22. The Plan contains energy strategies which include support for new development of renewable energy sources and a recommendation for "zoning/subdivision/building regulations that encourage solar and/or other alternate energy sources." Exh. Pet. Reb. RV-1 at 32.

23. On October 22, 2013, the Town of Rutland Selectboard adopted Solar Facility Siting Standards (the "Standards") in support of the implementation of the Plan. Mary Ashcroft, Rutland ("Ashcroft") pf. at 2.

24. On December 19, 2013, the Town of Rutland Planning Commission completed work on a proposed amendment to the Plan and forwarded the proposed amendment to the Selectboard. Ashcroft pf. at 2.

25. As of August 22, 2014, the Town Plan amendment process had not been completed and the Standards had not been incorporated into the Plan. Tr. 8/22/14 at 34 (Ashcroft).

26. For ground-mounted solar facilities with capacities of 1.5 kW or greater, the Standards require a 200-foot setback from any property line or public highway, and a 500-foot setback from any designated historical structure. Exh. Town-1 at 6, 7.

27. The Project as proposed would have an approximately 64-foot setback from the edge of Cold River Road to the nearest panels. The Project fence would be approximately 15 feet closer to the edge of the road than the nearest panels. Tr. 8/20/14 at 146 (Kane).

28. The Project as proposed would be located less than 500 feet, and be visible from, two of the Town's designated historic structures. Ashcroft pf. at 5.

29. The Project would not comply with the property line, roadway, and historic structure setback requirements contained in the Standards. *See* findings 26 through 28, above.

30. The Plan describes the Town's Industrial/Commercial Land Use District as, "Existing industrial commercial developments that have favorable site conditions, are serviced by public sewer and have access to arterial highways and/or rail facilities." Exh. Pet. Reb. RV-1 at 52.

31. The Plan states that the purpose of the Town's Industrial/Commercial Land Use District is to "Accommodate the expanding retail and industrial sectors of the town," and to provide for "employment opportunities in manufacturing, warehousing, research and development, and commercial uses which specifically serve the industries of their employees in areas serviced by good transportation facilities and public utilities." Exh. Pet. Reb. RV-1 at 52.

32. Under the Plan, Industrial/Commercial lots must be a minimum of 40,000 square feet when sewer service is present, or 80,000 square feet when no sewer service is present. Exh. Pet. Reb. RV-1 at 52.

33. The Project parcel is designated as "Industrial/Commercial" on the Town of Rutland's future land use map, which map has been expressly incorporated into the current Plan. Viens pf. at 3; exh. Pet. Reb. RV-1 at 49 and attachment.

34. The Plan discourages development on lands that consist of high quality, or "prime" soils, so that they can be preserved for future agricultural use. Exh. Pet. Reb. RV-1 at 33-34.

35. The Standards prohibit the installation of ground-mounted solar arrays on parcels with primary agricultural soils. Exh. Town-1 at 7.

36. The Project site contains a variety of primary agricultural soils. Nicole Kesselring, RRE ("Kesselring") pf. at 6.

37. The Project site has not been used for agricultural production for approximately 15 to 20 years. Viens pf. reb. at 5; exh. Pet. Reb. RV-5; exhs. Pet. Cross Hubbard 3 and Cross Hubbard 4.

38. No single utility-scale solar project is likely to have a regional impact, although numerous such projects throughout a town or region could. Benjamin P. Luce, Neighbors ("Luce") pf. at 3.

### **Discussion**

I recommend that the Board find that the Project will not result in undue interference with the orderly development of the region because the Project is largely consistent with the Rutland Town Plan, and the Project's impacts are primarily local, rather than regional in nature.

RRE asserts that the Project would not unduly interfere with orderly development because the Standards have not been incorporated into the Plan, do not constitute a land conservation measure, and are not controlling in this proceeding.<sup>5</sup>

Both the Neighbors and the Town contend the Project would unduly interfere with orderly development, citing to certain portions of both the Plan and the Standards with which they assert the Project would not comply.<sup>6</sup>

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5. RRE Brief at 9-13.

6. Neighbors Brief at 1-8; Town Brief at 2-8.

The Plan contains a number of sections that are relevant for consideration under this criterion. First, the Plan supports the expansion of renewable energy facilities in both the objectives and strategies set forth in the Plan's section on energy.

Second, the Plan expressly incorporates a future land use map, and that map identifies the Project parcel as "Industrial/Commercial."

The Neighbors argue that the Project runs counter to language in the Plan that describes the Industrial/Commercial District as, "Existing industrial commercial developments that have favorable site conditions, are serviced by public sewer and have access to arterial highways and/or rail facilities." They argue that the Project would run afoul of this language because the Project is not yet in existence, and the parcel where it would be located is not served by public sewer nor does it have access to an arterial highway.<sup>7</sup>

I disagree. The Neighbors' interpretation of this language as a restriction of allowable commercial and industrial uses to those already in existence with sewer service is misplaced and overlooks additional language that calls their position into question. First, to qualify as an "Industrial/Commercial" lot under the Plan, a lot must have a minimum size of 40,000 square feet when sewer service is present, or 80,000 square feet when no sewer service is present.<sup>8</sup> Thus, the Plan expressly envisions future "Industrial/Commercial" development on lots that do not have sewer service. Additionally, the Plan states that the purpose of the Town's Industrial/Commercial Land Use District is to, in part, "Accommodate the expanding retail and industrial sectors of the town. Provides for employment opportunities in manufacturing, warehousing, research and development, and commercial uses which specifically serve the industries of their employees in areas serviced by good transportation facilities and public utilities."<sup>9</sup> The Plan's use of the words "expanding" and "opportunities" indicates that it does not restrict commercial or industrial uses to those currently in existence.

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7. Neighbors Brief at 4.

8. Exh. Pet. Reb. RV-1 at 52.

9. Exh. Pet. Reb. RV-1 at 52.

The Plan language cited by the Neighbors can be read in harmony with these other provisions if it is understood to describe the existing commercial or industrial uses in the Town, but not in a manner intended to prevent any and all future commercial or industrial growth within the Town.

Lastly, the Project parcel is identified as "Industrial/Commercial" in the future land use map that is expressly incorporated into the Plan.<sup>10</sup> For these reasons, I recommend the Board find that the Project is consistent with these basic provisions of the Plan.

Both the Neighbors and the Town point out that the Project would be inconsistent with provisions in the Plan that discourage development on lands with high quality agricultural soils, as well as a prohibition in the Standards against ground-mounted solar installations on lands containing primary agricultural soils, a provision that is designed to preserve those lands for future agricultural uses.<sup>11</sup> However, for two reasons I recommend the Board find that this asserted inconsistency does not support a finding that the Project would unduly interfere with regional development.

First, the Plan and Standards are inconsistent because the Plan "discourages" development on lands with primary agricultural soils, while the Standards would prohibit the placement of ground-mounted solar arrays on those same lands. Additionally, the parcel in question has not been used for agricultural production for approximately 15 to 20 years. If the Plan and the Standards could be read to prohibit all development on lots with primary agricultural soils, it is possible that such lands would both remain undeveloped and out of agricultural use indefinitely. I conclude that this is why the Plan "discourages" but does not prohibit all development on lands with primary agricultural soils. In conjunction with the Plan's support for renewable energy facilities, this use of the word "discourages" indicates that the development of renewable energy facilities on lands with primary agricultural soils can be acceptable in certain instances.

Second, development of the Project would have a more benign effect on agricultural soils than other potential development. The volume of soil to be disturbed is modest, and, as

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10. Exh. Pet. Reb. RV-1 at 49 and attachment.

11. The legal effect of the Standards is discussed later in this proposal for decision at pages 45, *et seq.*

discussed later in this proposal for decision, disturbed soils will be reclaimed at the time the Project is decommissioned. The Town states that the highest and best use of the Project parcel is residential development.<sup>12</sup> However, the Town does not explain why the potentially permanent impacts to the parcel's primary agricultural soils that would result from residential development would be acceptable, while the modest, temporary, and reversible impacts to those soils from installation of the Project would not be acceptable. Additionally, because the Standards do not prohibit any type of development on primary agricultural soils other than ground-mounted solar arrays, the Town's concerns about these soils appear to be heavily focused on limiting solar development, as opposed to development generally, without reasoned explanation. Assuming there were no other impediments to development, a residential subdivision could be constructed with a potentially permanent impact on the primary agricultural soils on this parcel, thereby indefinitely rendering them unavailable for agricultural purposes. If the level of impact that could be expected to these soils from residential development is acceptable, then I recommend the Board find that the temporary and modest impacts to these same soils from the Project are also acceptable, and do not rise to the level of undue interference with regional development.

Both the Neighbors and the Town also point to the Project's failure to comply with the Standards' setback requirements in support of their position that the Project would unduly interfere with the orderly development of the region. After due consideration, I recommend that the Board find that the Project would not unduly interfere with the orderly development of the region in spite of its failure to conform to the setback requirements in the Standards.

The Town states that the Standards "make clear the Town supports the development of solar energy facilities when sited appropriately when the project's impacts upon the surrounding area are taken into consideration."<sup>13</sup> The Town describes the multi-tiered setback regime adopted by the Standards as "eminently reasonable" because it "ensures that the impact upon surrounding properties by larger solar projects is mitigated by setbacks which get [sic] increase

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12. Howard Burgess, Town ("Burgess") pf. at 2.

13. Town Brief at 3.



along with the size of the solar energy facility."<sup>14</sup> The goal of the Standards is to "channel[s] large solar projects to parcels of sufficient size to provide a progressively larger buffer zone as the complex of solar equipment and arrays increases."<sup>15</sup> According to the Town, these Standards were adopted in support of implementation of the Plan.<sup>16</sup>

While the Town characterizes the setbacks in the Standards as reasonable because they increase with the size of a project, I conclude that the setbacks would place significant hurdles in the development of even smaller projects, thus frustrating the express intent of the Plan to support the development of new renewable energy sources. For example, the 200-foot setback that would be applicable to this 2.3 MW proposal would also apply to facilities as small as 1.5 kW, which by any measure would be a small, residential facility.<sup>17</sup>

Pursuant to statute, the proponent of a solar net-metered system of up to 15 kW need only file a registration form with the Board, with copies provided only to the Department and the interconnecting utility. The interconnecting utility may file comments with respect to any interconnection issues presented by the registration form, but must do so within 10 days or a certificate of public good is deemed issued on the 11<sup>th</sup> day following submission of the registration form.<sup>18</sup> If the Standards were to be given controlling effect, then small residential net-metered projects of 1.5 kW or higher, which are entitled to be processed under these statutorily-mandated streamlined procedures, would be subject to setbacks of at least 200 feet from property lines and public roads, and 500 feet from historic structures. Imposition of such siting restrictions would impede the legislated policy of Vermont that supports the deployment of

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14. Town Brief at 3.

15. Town Brief at 3.

16. Ashcroft pf. at 2.

17. The Standards would impose property line and public road setbacks for ground-mounted solar projects of at least 50 feet for projects as small as 0.1 kW, at least 100 feet for projects as small as 0.5 kW, and at least 150 feet for projects as small as 1 kW. The 500-foot setback from historic structures applies regardless of how small a project is. Exh. Town-1 at 5-6, 7.

18. 30 V.S.A. § 219a(c)(1); PSB Rule 5.110(A).

in-state renewable generation facilities.<sup>19</sup> Given the significant hurdles the Standards would impose on the deployment of ground-mounted solar facilities, and with due regard for the legislated policy of Vermont supporting the deployment of such facilities, I recommend that the Board find that the Project would not unduly interfere with the orderly development of the region notwithstanding the Project's failure to comply with the setback requirements in the Standards.

Lastly, I recommend that the Board find that the Project would not unduly interfere with the orderly development of the region, because the Project's impacts are largely localized in nature. Criterion (b)(1) is concerned with impacts to the orderly development of the region from a specific project. And, 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.

The Neighbors argue that the Project's impacts must be viewed in light of numerous poorly sited projects because one poorly sited project will lessen expectations of what is acceptable, eventually leading to blight.<sup>20</sup> The Town takes a similar position, contending that approval of the Project would lower property values and steer future development away from the pleasant historic and upscale newer homes in the vicinity, and result in "mish-mash of incompatible uses." According to the Town this causes an adverse impact on orderly development in the area around the Project site.<sup>21</sup> The Town also states that the Standards function to minimize the impacts of a solar facility on surrounding properties so that orderly development may be achieved, and contends that the Project as proposed cannot be "adequately screened" from the adjoining properties.<sup>22</sup>

The Neighbors' argument fails to account for the plain language of criterion (b)(1) that requires the Board to assess whether a particular project would unduly interfere with orderly

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19. *See e.g.* 30 V.S.A. §§ 202a (state energy policy); 8001 (renewable energy goals); 8004 (renewable portfolio standards; and 8005 (SPEED program).

20. Neighbors Brief at 2-3.

21. Town Brief at 6.

22. Town Brief at 4-5. The Standards state that solar projects should be screened from view. Exh. Town-1 at 5.

development of the region. The Neighbors' position would require the Board to assume a future of additional projects, each poorly sited, and to also assume that approval of this Project would somehow be the causal factor in this future chain of events. The Board should reject this argument as both speculative and unsupported by the plain language of (b)(1). Absent consideration of the speculative events assumed by the Neighbors' argument, even the Neighbors concede that the Project's impacts would not be regional in nature, describing the (b)(1) criterion as "an empty standard if each solar project is considered only in light of its impacts on an entire region and arguably, even only an entire town."<sup>23</sup>

The Town's argument fails for similar reasons. First, the Town's arguments are premised on Project impacts to the immediate surrounding properties, and not the overall region. Second, the Town also asks the Board to speculate on a chain of future events based on unsupported statements by its witnesses. The Board should therefore reject the Town's argument.

For the foregoing reasons, I recommend the Board find that the Project will not unduly interfere with the orderly development of the region.

### **Need for Present and Future Demand for Services**

[30 V.S.A. § 248(b)(2)]

#### **Findings**

39. The Project will meet a need for present and future demand for service which could not otherwise be provided in a more cost-effective manner through energy conservation programs and measures and energy efficiency and load management measures, including but not limited to those developed pursuant to the provisions of subsection 209(d), section 218c, and subsection 218(b) of Title 30. This finding is supported by findings 40 and 41, below.

40. The Project would be a photovoltaic electric generating facility with construction commencing approximately one month after the issuance of a CPG. Viens pf. at 3, 9.

41. The Project will sell its output to GMP pursuant to a 25-year purchase power agreement. Viens pf. at 3.

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23. Neighbors Brief at 2. *See also* the prefiled testimony of Benjamin Luce, the Neighbors' expert witness on orderly development conceding that no single utility-scale solar project is likely to have a regional impact, although numerous such projects throughout a town or region could. Luce pf. at 3.

**Discussion**

Both RRE and the Department contend that if the Project qualifies as a SPEED project, then it need not demonstrate compliance with this criterion. This is incorrect.

PSB Rule 4.312(A) provides that, "A facility that had been certified as a SPEED project, and that is not financed directly or indirectly through investments backed by ratepayers of a Vermont utility other than power contracts, need not demonstrate compliance with 30 V.S.A. § 248(b)(2)." In order to qualify for the waiver of criterion (b)(2), RRE must demonstrate both that the Project is a SPEED project and that it will not be financed directly or indirectly through investments backed by ratepayers of a Vermont utility, other than through a power contract.

Earlier in this proposal for decision I recommended that the Board certify the Project as a SPEED project because it is a renewable energy project that will come into service subsequent to December 31, 2004. Additionally, there is evidence in the record that the Project will be financed, at least in part, by a power contract with GMP, which is acceptable under PSB Rule 4.312(A). However, there is no affirmative evidence in the record – i.e., testimony from any RRE witness – that allows me to conclude that there is no other source of ratepayer financing for the Project. Therefore, I conclude that the Project must meet this criterion to receive approval, and I find that it does.

The Vermont Legislature has established renewable energy goals for the State of Vermont whereby each Vermont retail electricity provider's annual electric sales during the year beginning January 1, 2017, will be 55% renewable energy.<sup>24</sup> Additionally, the Legislature has established a state goal that 20% of total statewide electric retail sales during the year commencing January 1, 2017, be generated by SPEED resources<sup>25</sup> that constitute new renewable energy.

The Project will constitute a new renewable energy facility in the State of Vermont and qualifies as a SPEED project under PSB Rule 4.304. It will therefore assist the state in meeting its renewable energy goals. Because the Project has a contract with GMP, it will also assist in

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24. 30 V.S.A. § 8005(d)(4)(A). This amount increases by an additional four percent each third January 1 thereafter, until reaching 75 percent on and after January 1, 2032. *Id.*

25. A SPEED resource is a contract with a SPEED project. 30 V.S.A. § 8002(21). The Project has such a contract with GMP. *See* finding 41.

meeting the state's 2017 SPEED resource goal. Neither of these goals can be met with additional conservation, efficiency or load management measures. I therefore recommend that the Board find that the Project meets this criterion.

### **System Stability and Reliability**

[30 V.S.A. § 248(b)(3)]

#### **Findings**

42. The Project will not have an adverse impact on system stability and reliability. This finding is supported by findings 43 through 45, below.

43. On August 8, 2013, RRE submitted a Rule 5.500 application to GMP to interconnect the Project. Viens pf. at 11; exh. Pet. Supp. RV-1.

44. On October 16, 2013, GMP completed its analysis and determined that there are no adverse impacts associated with the interconnection of the Project provided certain interconnection facilities are installed. Viens pf. at 11; exh. Pet. Supp. RV-1.

45. To interconnect the Project, GMP will undertake a three-phase conductor line upgrade and will install three new 50-foot class three line extension poles across from the point of interconnection on the northern edge of the Project site. A recloser and cutouts will also be installed on the Project site. Viens pf. at 11; exh. Pet. NSK-5; tr. 8/20/14 at 111 (Viens).

#### **Discussion**

Pursuant to Public Service Board Rule 5.500, I recommend that the Board require that, prior to commencing operation of the Project, RRE must: (1) enter into an Interconnection Agreement with GMP that conforms to the requirements of Public Service Board Rule 5.500; and (2) be responsible for the cost of GMP's electrical system upgrades reasonably necessary to implement interconnection for the Project, including those identified in exhibit Pet. Supp. RV-1, and such other costs appropriately submitted to RRE. Subject to these conditions, I recommend that the Board conclude that the Project will not adversely affect system stability and reliability.

**Economic Benefit to the State**

[30 V.S.A. §248(b)(4)]

**Findings**

46. The Project will result in an economic benefit to the state and its residents. This finding is supported by findings 47 through 49, below.

47. The Project will create jobs during Project construction, as well as during the ongoing maintenance and operation of the facility. Viens pf. at 11.

48. During construction, job creation will be on the order of about 35 full-time employees for approximately 16 to 20 weeks. Installation of the Project will also result in local economic activity from fuel purchases, lodging, and meals. Viens pf. at 11.

49. The Project will generate tax revenue for the Town of Rutland and the state. Viens pf. at 11.

50.

**Aesthetics, Historic Sites and Water Purity, the Natural Environment  
and Public Health and Safety**

[30 V.S.A. § 248(b)(5)]

**Findings**

51. Subject to the conditions described below, the proposed Project will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment, the use of natural resources, and public health and safety, with due consideration having been given to the criteria specified in 10 V.S.A. §§ 1424a(d) and 6086(a)(1) through (8) and (9)(K), and greenhouse gas impacts. This finding is supported by findings 51 through 221, below, which give due consideration to the criteria specified in 10 V.S.A. § 1424a(d) and 10 V.S.A. §§ 6086(a)(1) through (8) and (9)(K).

**Outstanding Resource Waters**

[10 V.S.A. § 1424a(d)]

**Findings**

51. The Project will not result in an undue adverse effect on any Outstanding Resource Water as defined by 10 V.S.A. § 1424a(d), as the Project is not located on or in the vicinity of any segment of such waters. Severson pf. at 5.

**Water Pollution**

[10 V.S.A. § 6086(a)(1)]

**Findings**

52. The Project will not result in undue water pollution. This finding is supported by findings 53 through 70, below, and the findings under criteria 10 V.S.A. §§ 6086(a)(1)(B)–(a)(4).

53. No herbicides will be used to control vegetation. Severson pf. at 7.

54. The Project does not require an Operational Stormwater Discharge Permit as the cumulative new impervious surface created by the Project will be less than 1 acre. Kesselring pf. at 3; exh. Pet. NSK-2.

55. The Project applied for a Moderate Risk Construction General Stormwater Discharge Permit ("CGP"), GP 3-9020. Kesselring pf. at 3-4.

56. RRE will comply with the terms and conditions of the authorization to discharge stormwater Notice of Intent No. 7151-9020 issued under CGP 3-9020 on March 13, 2014, for construction-related soil disturbance and for the discharge of stormwater runoff from construction activities. All Project construction and operation, where applicable, will be performed in accordance with such permit. Exh. Pet. Joint-1 at ¶ 3.

57. The Project will be constructed in accordance with the site specific Erosion Prevention and Sediment Control ("EPSC") Plan that has been prepared in general conformance with the Vermont Standards and Specifications for Erosion Prevention and Sediment Control. Kesselring pf. at 4; exh. Pet. NSK-6.

58. The Project's transformer(s) will use Envirotemp FR3, a bio-based coolant (or an equivalent), and will have a secondary oil containment system with a capacity of slightly more

than 150% of the transformer fluid volume. Vault detail is depicted in exhibit Pet. NSK-6, Sheet S-500. Viens pf. at 5; Viens pf. supp. (3/13/14) at 6, 9.

59. The transformer vault has been designed to prevent transformer oil from penetrating the vault. In the event of a spill, oil would travel from the vault cover slab over the edge, and into the oil containment moat. Viens pf. supp. (3/13/14) at 5.

60. The moat has been designed to an oil containment capacity of 733 gallons. The transformer contains 450 gallons of oil, therefore, the containment volume provides greater than 150% containment volume. Viens pf. supp. (3/13/14) at 5, 9.

61. The oil containment moat contains products manufactured by C.I.Agent Solutions which are specifically designed to react with oil and prevent its transfer outside of the containment area (the moat). Viens pf. supp. (3/13/14) at 6.

62. The bottom of the moat will be lined with a polyvinyl blanket that is impervious to water and oil. As an added safety measure, the bottom of the moat will be lined with a single layer of geotextile matting to prevent punctures during the stone backfill installation. Viens pf. supp. (3/13/14) at 6.

63. The exterior sidewall of the containment moat will be constructed using C.I.Agent Barrier Boom sidewalls. This product is designed to allow water to pass, but reacts with oil and solidifies it. Water that enters the moat from rainfall will therefore pass through the sidewalls and into the stone outside of the moat and infiltrate into the native soils. Viens pf. supp. (3/13/14) at 6; exh. Pet. Supp. NSK-9.

64. Micrograding is proposed in the vicinity of the transformer vault and the driveway area to minimize the potential for surface water runoff entering the containment moat. Viens pf. supp. (3/13/14) at 6; exh. Pet. NSK-6, Sheet C-5.

65. A sealed coverplate with sealed conduit is proposed to be added to the wire chase opening that comes standard with the concrete vault cover that the transformer would be installed on. *See* exh. Pet. NSK-6, Sheet S-500, Section Detail B-B; Viens pf. supp. (3/13/14) at 7.

66. An additional smaller vault cover is provided for vault access next to the transformer. An angle iron is proposed to be installed on the larger vault cover to prevent oil from entering the space between the two vault covers and into the vault. Therefore, a spill would run off the cover



of the vault and into the containment moat around the perimeter. *See* exh. Pet. NSK-5, Sheet S-500, Section Detail C-C; Viens pf. supp. (3/13/14) at 7.

67. The vault has been designed with a standard 12" diameter drain hole at the bottom. However, because the transformer vault has been designed to prevent oil from entering it, no measures are proposed to manage oil from leaking out of the vault. Viens pf. supp. (3/13/14) at 7; exh. Pet. NSK-6, Sheet S-550.

68. Soils in the area of the transformer containment system are identified as Enosburg loamy fine sand, and described by the Natural Resource Conservation Service as poorly drained soil, that can have depth to groundwater between 0 and 12 inches. Due to the potentially poor drainage characteristics, the transformer vault and inverters would be raised above ground so that the oil containment moat would be constructed above existing ground to allow for free drainage out of the oil containment area. Viens pf. supp. (3/13/14) at 9.

69. The containment system is anticipated to outlast the transformer unless it is disturbed. If the C.I.Agent comes into contact with oil, it will no longer be permeable to water and requires replacement. In the event of a spill, a portion of, or the entire, moat would require reconstruction. Viens pf. supp. (3/13/14) at 9.

70. The system owner or a contracted maintenance company will be responsible for operations and maintenance services related to the oil containment moat. Viens pf. supp. (3/13/14) at 9-10.

### **Air Pollution and Greenhouse Gas Impacts**

[30 V.S.A. § 248(b)(5); 10 V.S.A. § 6086(a)(1)]

### **Findings**

71. The Project will not result in undue air pollution, noise or greenhouse gas emissions. This finding is supported by findings 72 through 84, below.

72. The only air emissions from the Project will be related to limited vehicle and equipment emissions and dust, and will be present mostly during construction of the Project. Severson pf. at 4.

73. Vehicle and equipment emissions and dust during construction will be minimal, of limited duration, and will not be out of character with the surrounding area, where commercial and private vehicle emissions are common. Severson pf. at 4.

74. Dust generated during construction will be controlled through the application of water. Severson pf. at 4.

75. Air emissions during the operation of the solar facility will be limited to those associated with occasional mowing and site visits for ongoing maintenance and inspection. Severson pf. at 4-5.

76. Noise generated by construction of the Project will be of limited duration, and will be no louder than the noise generated by light construction equipment. Viens pf. at 12.

77. RRE proposes hours of construction between 7:00 A.M. and 6:00 P.M. Monday through Friday and on Saturdays, as needed. RRE will not construct on state and federal holidays or Sundays. Viens pf. at 12; tr. 8/20/14 at 119 (Viens).

78. The highest modeled sound pressure level from the Project is 27 dBA at a residence located on the corner of Cold River Road and Stratton Road and approximately 755 feet from the Project's inverters and transformers. Exh. Pet. RV-3.

79. The second highest modeled sound pressure level from the Project is 25 dBA at a residence located approximately 918 feet away from the inverters and transformers southeast on Cold River Road. Exh. Pet. RV-3.

80. The closest property line receiver is approximately 459 feet to the east-southeast of the inverters and transformers and has a modeled sound pressure level of 30 dBA. Exh. Pet. RV-3.

81. The inverters will not generate noise at night. Viens pf. at 12.

82. From Cold River Road, the Project noise will be comparable to the noise generated by regular traffic. Tr. 8/20/14 at 50 (Viens).

83. The Project is a solar project and will not produce greenhouse gas ("GHG") emissions. Viens pf. supp. (3/13/14) at 2.

84. From a lifecycle perspective, the Project will produce significantly lower GHG emissions per kWh than conventional electric generation. Viens pf. supp. (3/13/14) at 2-3; exhs. Pet. Supp. RV-5 and RV-6.

85. RRE agrees to provide ANR with the following Project "as-built" information within 60 days of the commissioning date of the Project to assist the Agency with compiling and analyzing greenhouse gas impacts:

- a. Solar panel manufacturer and model;
- b. Solar panel cell technology (e.g., mono-Si, multi-Si, CdTe, etc.);
- c. Rated solar panel output (in watts);
- d. Number of solar panels installed;
- e. Array mounting type (fixed, 1-axis tracking, 2-axis tracking, ground, roof, other);
- f. For fixed or 1-axis tracking, panel orientation and mounting angle;
- g. Rack system manufacturer and model;
- h. Rack system components, including the number of aluminum rails, steel mounting posts, etc.;
- i. Number and type of any other mounting components (e.g., concrete ballasts and foundation blocks);
- j. Manufacturer, model, and number of inverters;
- k. Manufacturer, model, and number of transformers;
- l. Mass of concrete used (for ballasts, foundations, mounting pads, etc.);
- m. Percent of Portland cement composition of concrete;
- n. Description, quantity, and source of any recycled materials used (e.g., recycled content concrete, recycled aluminum racking, etc.);
- o. Amount (length) and gauge of wiring used for project;
- p. Components for connection to grid (circuit boxes, circuit breaker panels, metering equipment, etc.);
- q. Distance (e.g., truck miles traveled) for transport of system components to site;  
and
- r. Distance to grid connection.

Exh. Pet. Joint-1 at ¶ 8.

86. By January 30 of each year, ANR may request that RRE provide an annual report for the previous calendar year of operations to ANR which will contain the information set out below

that will be used to assist the Agency with compiling and analyzing greenhouse gas impacts; RRE will have 60 days from the date of ANR's request to supply the information. Should ANR not request the information set out below by January 30, RRE will not have any obligation to provide an annual report from the previous year of operations. The information to be provided includes the following:

- a. Electric generation in kWh for the prior year, broken down by month; and
- b. Any information about the replacement of PV panels, inverters, transformers, or a complete racking system. In instances of failure and replacement of equipment (e.g., PV panels, inverters, etc.), RRE will provide descriptions of both the failed and replacement components at the same level of detail as required by the "as-built" reporting requirements of finding 85, above. This provision does not require RRE to provide information about *de minimis* replacement of system components (e.g., replacement of racking system hardware), or information regarding regular maintenance activities.

Exh. Pet. Joint-1 at ¶ 9.

87. Should ANR not request the information in finding 86, above, in any two consecutive years after Project commissioning, RRE's reporting obligations will automatically cease. Exh. Pet. Joint-1 at ¶ 10.

88. ANR and RRE, by mutual agreement, may cancel RRE's reporting obligations at any time. Exh. Pet. Joint-1 at ¶ 11.

### **Discussion**

RRE proposes that construction be allowed between 7:00 A.M. and 6:00 P.M. Monday through Friday and on Saturdays, as needed, with no construction allowed on state and federal holidays or Sundays. The Board as a matter of practice restricts construction activities for Section 248 projects to the hours between 7:00 A.M. and 5:00 P.M. Monday through Friday, and between 8:00 A.M. and 5:00 P.M. on Saturdays in order to respect the schedules of surrounding residents. RRE has not presented any reason why the Board should depart from this practice and allow construction to extend beyond the time at which many residents will be arriving home for the day and evening, or allow it to commence on Saturday as early as 7:00 A.M., when many

residents might reasonably expect to not yet be disturbed by construction noises. Accordingly, I recommend that the Board restrict construction activities and related deliveries to the hours between 7:00 A.M. and 5:00 P.M. Monday through Friday, and between 8:00 A.M. and 5:00 P.M. on Saturdays, with no construction activities or deliveries allowed on Sundays or state and federal holidays.

### **Headwaters**

[10 V.S.A. § 6086(a)(1)(A)]

### **Findings**

89. The Project will not result in an undue, adverse impact to any of Vermont's headwaters. This finding is based on findings 90 through 93, below.

90. The Project site is located in a headwater as defined by 10 V.S.A. § 6086(a)(1)(A), as the Project site is located in a drainage area of less than 20 square miles. The Project site, however, is not characterized by other features that define headwaters as set forth in 10 V.S.A. § 6086(a)(1)(A). It is not characterized by steep slopes and shallow soils, is not above 1,500 feet in elevation, is not in a watershed of a public water supply as designated by ANR, nor is it in an area that supplies significant amounts of recharge water to aquifers. Severson pf. at 5.

91. The Project will meet any Health and Environmental Conservation Department regulations regarding the reduction of the quality of ground or surface waters flowing through or upon lands defined as headwaters that are not devoted to intensive development. Severson pf. at 5-6.

92. The Project will be covered under a Moderate Risk CGP, and contractors for the Project will be responsible for complying with the CGP and its conditions. Severson pf. at 6.

93. The Project's transformer(s) will use Envirotemp FR3, a bio-based coolant (or an equivalent), and will be constructed with a secondary spill containment system capable of containing at least 150 percent of the transformer(s) coolant volume. Severson pf. at 6; *see also* findings 58 through 70, above.

**Waste Disposal**

[10 V.S.A. § 6086(a)(1)(B)]

**Findings**

94. The Project will meet applicable health and Vermont Department of Environmental Conservation regulations regarding the disposal of wastes and will not involve the injection of waste materials into groundwater or wells. This finding is supported by findings 95 through 98, below.

95. All stormwater management is anticipated to be by surface runoff. Kesselring pf. at 2.

96. No retention/detention/injection facilities are proposed for the Project and there are no onsite sanitary wastewater systems. Therefore, there is no injection of sanitary wastewater into the ground associated with the Project. Kesselring pf. at 2-3.

97. The Project does not involve any discharges or injections into groundwater or wells. The operation of the solar farm will not generate any solid wastes and any waste generated during construction will be disposed of at approved waste disposal sites. Severson pf. at 7.

98. No herbicides will be used to control vegetation. Severson pf. at 7.

**Water Conservation**

[10 V.S.A. § 6086(a)(1)(C)]

**Findings**

99. The Project has considered water conservation and there is sufficient water available for the needs of the Project. This finding is supported by finding 100, below.

100. The Project will not require the use of much water. To the extent that water is required for dust control purposes during construction, or to clean the panels post-construction, the water is to be trucked in. Severson pf. supp. (2/7/14) at 6.

**Floodways**

[10 V.S.A. § 6086(a)(1)(D)]

**Findings**

101. The Project will have no undue adverse effects on floodways. This finding is supported by finding 102, below.

102. The Project is not located within a floodway or a floodway fringe based on an inspection of the National Flood Insurance Program Rate Map for the Project site. Severson pf. at 7.

**Streams**

[10 V.S.A. § 6086(a)(1)(E)]

**Findings**

103. The Project will not result in an undue, adverse impact to any streams. This finding is supported by findings 104 through 110, below, and the findings under the criteria of 10 V.S.A. § 6086(a)(1)(G) and 10 V.S.A. § 6086(a)(4).

104. An intermittent stream arises in a westerly-trending swale in the southeastern section of the property. The stream is shown on USGS 1:24,000 quadrangle that includes the Project site and is included in the ANR Natural Resources Atlas. Severson pf. at 7-8.

105. A flow rate of approximately two gallons per minute was observed in this location during a site visit on November 15, 2013. Severson pf. at 8.

106. Based on a visual inspection of the property, the Project site does not include a perennial stream. Severson pf. at 8.

107. The nearest perennial stream flows northward through the Class II wetland located generally to the west of the Project. The intermittent stream identified in the southeastern section of the property is a tributary to the perennial stream. The inverters and transformer(s) will be located approximately 288 feet from the perennial stream at its nearest point. Severson pf. at 8; exh. Pet. NSK-5.

108. The buried conduit connecting the southern and northern solar arrays will be installed under the stream and the Class II wetland and buffer zones by using a directional boring technique to avoid disturbance to these resources. Exh. Pet. Joint-1 at ¶ 6.

109. The entry and exit points for the directional boring will be located outside of the wetland and buffer zone. Exh. Pet. Joint-1 at ¶ 6.

110. The use of directional boring to install the buried conduit section results in no impacts to the intermittent stream and its banks. The nearest Project impacts are greater than 53 feet from the intermittent stream. Severson pf. supp. (2/20/14) at 3.

### **Shorelines**

[10 V.S.A. § 6086(a)(1)(F)]

### **Findings**

111. The Project will not have an undue adverse impact on shorelines, as the Project components are not on, or in the vicinity of, a shoreline of a lake, pond, reservoir, or river based on a review of the ANR Environmental Interest Locator GIS database (11/09/13) and a visual inspection of the property. Severson pf. at 9.

### **Wetlands**

[10 V.S.A. § 6086(a)(1)(G)]

### **Findings**

112. The Project will not have an undue adverse effect on wetlands. This finding is supported by findings 113 through 138, below.

113. A Vermont wetland permit application was filed on February 25, 2014. A U.S. Army Corps of Engineers permit application was filed on March 5, 2014. RRE has received both permits. Viens pf. supp. (3/13/14) at 4; tr. 8/21/14 at 40-41 (Severson).

114. The Project area includes sections of a Class II wetland and four small Class III wetlands. Severson pf. at 10; exh. Pet. NSK-5.

115. The Class II wetland is shown on the Vermont Significant Wetland Inventory ("VSWI") map that includes the Project site. The overall wetland complex is approximately twenty acres and consists predominantly of forested wetlands in the area to the southeast of the Project site. The wetland complex also includes shrub swamp, marsh, and wet meadow communities in locations proximal to the Project site. Severson pf. at 10.



116. The four Class III wetlands are relatively small wet meadow areas that cumulatively total approximately 0.5 acres of the open field at the Project site. The Class III wetlands do not possess significant wetland functions, based on an assessment of the functions in accordance with the criteria outlined in the Vermont Wetland Rules. Severson pf. at 10.

117. The Class III wetlands are not shown on the VSWI map for the site, are not contiguous to a VSWI-mapped Class II wetland, and do not meet any of the additional criteria outlined in Section 4.6 of the Vermont Wetland Rules that create a presumption of a Class II wetland. Severson pf. at 10.

118. At the October 11, 2013, site visit, members of the Project team and ANR staff confirmed that the four small wetlands are not characterized by significant wetland functions and are classified as Class III wetlands. Severson pf. at 10.

119. The wetland boundaries within or proximal to the Project area were delineated in July and August of 2013 in accordance with the Corps of Engineers Wetland Delineation Manual, 2009 Interim Regional Supplement, and the Vermont Wetland Rules. They were also subsequently surveyed by Enman-Kesselring Consulting Engineers using an Electronic Total Station. Severson pf. at 11; exhs. Pet. NSK-3 and NSK-5.

120. The Project has been designed to avoid adverse impacts to all significant wetland functions, and will not result in any permanent impacts to Class II wetlands. Severson pf. at 11.

121. The buried conduit connecting the southern and northern solar arrays will be installed under the stream and the Class II wetland and buffer zone by utilizing a directional boring technique to avoid disturbance of these resources. The entry and exit points for the directional boring will be located outside of the wetland and buffer zone. At the time of decommissioning, the conductors will be pulled out of the conduit and all conduit deeper than one foot below grade will be abandoned in place. Exh. Pet. Joint-1 at ¶ 6.

122. As a result of using a directional boring technique to install the underground conduit, there will be no temporary wetland or wetland buffer impacts associated with the Project. Severson pf. supp. (2/20/14) at 2-3.

123. Overall buffer zone impacts from the Project will be limited to the 1,983 square-foot section of a permanent access road that will be constructed in the open field in the southeastern corner of the property. Severson pf. supp. (2/20/14) at 3; exh. Pet. NSK-5.

124. All other Project elements will be located outside of the Class II wetland and associated wetland buffer zone, including the entry and exit points for the directional boring. Severson pf. at 11; exh. Pet. Joint-1 at ¶ 6; exh. Pet. NSK-5.

125. To prevent erosion and control sedimentation in the wetland, the installation contractor will be required to comply with the Moderate Risk CGP and its conditions. Severson pf. at 12.

126. Prior to construction, construction fencing will be installed to define the limits of the Project work area, and silt fencing will be installed down-gradient from work areas. Severson pf. at 12; exh. Pet. NSK-6.

127. Stabilized construction entrances for the work areas will be established in the locations shown on the Erosion Control Plan, exhibit Pet. NSK-6. Severson pf. at 11.

128. Construction mats for equipment access will be utilized as needed to minimize impacts to wetlands if the construction schedule requires work to be performed when the ground is unfrozen and wet. Prior to using construction mats, the contractor will first look for opportunities to complete the work in the wetland when the ground is frozen or dry. Severson pf. at 12; exh. Pet. NSK-6.

129. Upon completion of the Project, the wetland will function identically to its preconstruction performance. The significant wetland functions of the overall Class II wetland complex – water storage, surface and groundwater protection, wildlife habitat, and erosion control – will remain unchanged. Severson pf. at 13-14.

130. There will be no secondary impacts to Class II wetlands associated with the Project. Severson pf. at 14.

131. Permanent Class III wetland impacts are restricted to the approximately 8-square-foot combined footprint of 62 driven posts or, alternatively, the 17-square-foot combined footprint of 124 five-inch diameter screw posts. Severson pf. at 14; exh. Pet. NSK-5.

132. The driven posts will be installed in the Class III wetlands using a tracked vehicle approximately the size of a Bobcat loader with a pneumatic hammer attachment. If screw posts

are utilized, they will be installed using a similar tracked vehicle with a screw foundation attachment. Severson pf. at 14.

133. Construction mats will be used in all Class III wetland areas if the construction schedule requires work to be performed when the ground is unfrozen and wet. Severson pf. at 14; exh. Pet. NSK-6.

134. Decommissioning activities associated with the removal of the conductor and portions of the buried conduit will be staged outside of the wetland and wetland buffer, and appropriate erosion controls will be implemented as needed. Exh. Pet. Joint-1 at ¶ 6.

135. The driven posts or screw posts will be removed from the Class III wetlands in accordance with the reclamation plan that is part of the proposed decommissioning plan for the Project. Severson pf. at 14; exh. Pet. RV-2 (Revised 8/22/14).<sup>26</sup>

136. A portion of the Class II wetland buffer is located within the Project's perimeter fence and is identified as the "vegetation management area" shown on exhibit Pet. NSK-5. Mowing within this area will be limited to one time annually during dry conditions. In addition, there will be no removal of woody vegetation from this area. There will be no other mowing or vegetation removal within the Class II wetland or buffer areas without the prior approval of the Vermont Wetlands Program. Exh. Pet. Joint-1 at ¶ 5; Severson pf. supp. (2/20/14) at 3.

137. RRE will obtain and comply with the terms of an individual Vermont Wetland Permit prior to performing any site preparation or construction activities within the area designated as wetland on the Project site. All work performed in the wetland area will be done in accordance with the terms and conditions of the Vermont Wetland Permit. Exh. Pet. Joint-1 at ¶ 3.

138. At least six months in advance of the Project's decommissioning, RRE will contact the Vermont Wetlands Program for a jurisdictional determination as to whether the decommissioning activities require a Vermont Wetland Permit, in which case RRE will obtain such permit prior to performing any decommissioning activities and comply with that permit's terms and conditions. If a Vermont Wetland Permit is not required, RRE will submit to ANR, sufficiently in advance of decommissioning, a wetlands restoration plan for approval as an

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26. At the technical hearings held on August 27, 2014, I instructed all parties to indicate in their initial briefs whether they had any objection to the admission of the revised exhibit Petitioner RV-2 (Revised 8/22/14). No party raised an objection to the admission of that document and I therefore admit it into the evidentiary record.

allowed use (see current Section 6.23 of the Vermont Wetland Rules) for the removal of Project infrastructure. Decommissioning will not occur without approval of the restoration plan. The restoration plan will, at a minimum, contain the following elements:

- a. Identification of phasing and staging areas;
- b. Utilization of methods that prevent rutting in the wetland, including removal of structures during frozen or dry conditions, or use of swamp mats or similar techniques;
- c. Revegetation of all disturbed areas within the wetland and buffer zone with appropriate conservation seed mix(es); and
- d. Provisions for ANR inspection prior to and following site restoration.

Exh. Pet. Joint-1 at ¶ 4.

### **Discussion**

Provided that RRE complies with the terms and conditions of the U.S. Army Corps of Engineers wetland permit, the Vermont Individual Wetland Permit, and the terms and conditions of the ANR MOU respecting Project construction, operation, maintenance, and decommissioning, the Project will not result in an undue adverse impact to Vermont wetlands. Accordingly, I recommend the Board condition any approval of the Project on compliance with the requirements of these permits and the ANR MOU.

### **Sufficiency of Water and Burden on Existing Water Supply**

[10 V.S.A. §§ 6086(a)(2) & (3)]

### **Findings**

139. There is sufficient water available for the needs of the Project, and the Project will not cause an unreasonable burden on an existing water supply. This finding is supported by finding 140, below.

140. The Project will not require the use of much water. To the extent that water is required for dust control purposes during construction, or to clean the panels post-construction, the water is to be trucked in. Severson pf. supp. (2/7/14) at 6.

**Soil Erosion**

[10 V.S.A. § 6086(a)(4)]

**Findings**

141. The Project will not cause unreasonable soil erosion or a reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result. This finding is supported by findings 142 through 147, below.

142. The onsite soils in the Project area are mapped as Sudbury Fine Sandy Loam (0 to 3 percent slope), Enosburg Loamy Fine Sand, Ninigret Fine Sandy Loam (0 to 4 percent slope), Eldridge Fine Sandy Loam (0 to 3 percent slope), Paxton Fine Sandy Loam (8 to 15 percent slope), Georgia and Amenia Soils (0 to 3 percent slope), and Deerfield Loamy Sandy Sand (0 to 3 percent slope). All soils, with the exception of Deerfield soils, have a moderate erosion rating. Deerfield soils have a low erosion rating. Kesselring pf. at 4.

143. Less than 2 acres of disturbance is anticipated as a result of access drive construction, inverter pads and transformer vault(s) construction, tree clearing, removal of an old foundation, conduit installation, and general grading of the area in the vicinity of the old foundation. Kesselring pf. at 4.

144. Disturbed areas (other than the access drives) will be raked, planted in grass as a permanent land cover, and mulched to provide erosion protection. Kesselring pf. at 4.

145. Through the implementation of proper construction and stabilization practices as outlined in the Project specific EPSC Plan and developed in general accordance with the Vermont Standards and Specifications for Erosion Prevention and Sediment Control, the Project is not anticipated to cause unreasonable soil erosion or a reduction in the capacity of the land to hold water. Kesselring pf. at 5.

146. RRE applied for a Moderate Risk CGP. This permit contains conditions that help to minimize the potential for soil erosion during construction by limiting the area that may be disturbed, and by limiting the amount of time that an area may be disturbed. Kesselring pf. at 5.

147. Erosion control measures proposed during construction include limit of disturbance fencing, a stabilized construction entrance, silt fencing or its equivalent around the down gradient perimeter of the site, limiting disturbance to the extent practical, temporary and permanent

seeding and mulching, limiting the amount of disturbed areas to 5 acres at a time, and limiting the time for soils to be disturbed to a maximum of 14 days. Kesselring pf. at 5-6; exh. Pet. NSK-6.

### **Transportation Systems**

[10 V.S.A. § 6086(a)(5)]

#### **Findings**

148. The Project will not cause unreasonable congestion or unsafe conditions with respect to transportation systems. This finding is supported by findings 149 through 152, below.

149. There will be no long-term traffic impacts from the Project, and only minor short-term impacts due to deliveries of Project equipment to the site during Project construction. Deliveries will be made using existing roads with vehicles that are commonly used on public roads. Viens pf. at 13.

150. All deliveries will be conducted in accordance with applicable permits and requirements. Viens pf. at 13.

151. The sight distance at the intersection of Stratton and Cold River Roads in the southerly direction is in excess of 600 feet. In the northerly direction, a driver has approximately 440 feet of available sight line. Tr. 8/21/14 at 60-61 (Kesselring).

152. The AASHTO<sup>27</sup> design standard for roadways with posted speed limits of 35 miles per hour is a stopping sight distance of 250 feet. Tr. 8/21/14 at 60 (Kesselring).

#### **Discussion**

RRE has demonstrated that Project activities, including deliveries during construction, will not cause unreasonable congestion or unsafe conditions with respect to transportation systems, in part by its representation that all deliveries would be conducted in accordance with applicable permits and requirements. Accordingly, I recommend the Board condition any approval of the Project on the requirement that RRE obtain any necessary transportation permits, including from the Vermont Agency of Transportation, and that RRE shall conform to all permit

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27. AASHTO stands for American Association of State Highway and Transportation Officials.

conditions related to the delivery of materials and truck traffic associated with the construction of the Project.

**Educational Services**

[10 V.S.A. § 6086(a)(6)]

**Findings**

153. The Project will not place an unreasonable burden on the ability of the Town of Rutland to provide educational services. Viens pf. at 13-14.

**Municipal Services**

[10 V.S.A. § 6086(a)(7)]

**Findings**

154. The Project will not place an unreasonable burden on the ability of the affected municipality to provide municipal or government services. This finding is supported by findings 155 and 156, below.

155. The Project will not place an unreasonable burden on the ability of the Town of Rutland to provide municipal services because it will not require any municipal water or sewer, or any unique fire, police, or rescue services. Viens pf. at 13.

156. Access keys for the locked gate and the inverter structures will be provided to the local fire and emergency services. Viens pf. at 13.

**Aesthetics, Historic Sites, and Rare and Irreplaceable Natural Areas**

[10 V.S.A. § 6086(a)(8)]

**Findings**

157. The Project will not have an undue adverse effect on aesthetics or on the scenic or natural beauty of the area, nor will the Project have an undue adverse effect on historic sites or rare and irreplaceable natural areas. This finding is supported by findings 158 through 206, below.

Aesthetics

158. The Project is proposed to be located on an approximately 24-acre parcel of land along Cold River Road in the Town of Rutland. Kane pf. at 4.

159. The current land uses in the vicinity of the Project site include a mix of residential, commercial, and industrial uses. Kane pf. at 4.

160. The area immediately surrounding the Project site is currently characterized by a mix of agricultural use, low density residential and forested land. Michael J. Buscher, DPS ("Buscher") pf. at 2.

161. To the west and within one-half mile of the Project site is a significant commercial/industrial area, a major north-south rail line, U.S. Route 7, and the Diamond Run Mall. Within one-fourth mile are developed commercial/light industrial uses along Quality Lane. Kane pf. reb. at 3.

162. While there is significant commercial and industrial development to the west of the Project site, this existing development is not visible from the Project site itself, or from the viewshed immediately surrounding the Project site, due in large part to the existence of a mature hedgerow to the west of the Project site, and mature forestland to the south and west of the Project site. Buscher pf. at 2; exh. Pet. MK-2 at Figure 1.

163. The Project site is mostly open with some areas of low second growth vegetation, a wetland complex, and some existing roadside shrubs. Kane pf. at 4.

164. The Project's infrastructure would be located on an open meadow that constitutes approximately 15 acres of the approximately 24-acre parcel of land at the southwest corner of the intersection of Cold River Road and Stratton Road, occupying a significant majority of the open space on the Project site. Viens pf. at 3; Jean Vissering, Neighbors ("Vissering") pf. at 4; exh. Pet. MK-2 at 3.

165. The Project's colors and materials, its proximity to adjacent roads, its visual magnitude, and its placement on an as yet undeveloped and mostly open parcel would result in an adverse effect on the aesthetics of the area. Buscher pf. at 2-3; Kane pf. at 5; Vissering pf. at 3.

166. The Project site has not been designated as a scenic resource or valued open space. Buscher pf. at 6-7; tr. 8/21/14 at 137 (Vissering).



167. Neither the Rutland Regional Plan nor the Town of Rutland Town Plan contain any standard intended to preserve the scenic beauty of the Project site. Buscher pf. at 7; exh. JV-2 at 4, 5.

168. The Project would not comply with the setback requirements established by the Standards. See Findings 26 through 29, above.

169. Public vantage points with visibility to Project components would be from Cold River Road and a short stretch of Stratton Road. These views would be in close proximity from approximately a half mile of public roadway. Exh. JV-2 at 2; Buscher pf. at 2; exh. Pet. MK-2 at 8-9.

170. Cold River Road is a class 2 town highway and Stratton Road is a class 3 town highway, and use of these roads is primarily limited to local traffic. Neither road has any scenic or other designations which would increase its sensitivity to potential aesthetic impacts. Buscher pf. at 10.

171. The Project is proposed to be set on a site which does not require extensive clearing, slopes gently away from adjacent public areas and would not permanently degrade or diminish areas of noted or high scenic qualities. The Project's relatively low profile would allow continued visibility of the regional landscape forms beyond the Project site. The relatively low profile of the Project will allow existing and planned roadside vegetation to partially screen views from the traveling public. Kane pf. at 7; Buscher pf. at 10.

172. When viewed from these public vantage points, the Project would not be shocking or offensive to the average viewer. Kane pf. at 7; Buscher pf. at 10; Vissering pf. at 4.

173. Several residential properties are within the immediate viewshed of the Project site along Cold River Road, which runs both along the eastern and northern edges of the Project site. Ashcroft pf. at 3; Viens pf. at 4; exh. Pet. MK-2 at Figure 1.

174. One residential structure is located near the southeast corner of the Project site with some limited screening provided by a mature hedgerow. Exh. Pet. MK-2 at 5; exh. JV-2 at 3, Figures 9 and 10.

175. Three additional residential structures are found along the east side of Cold River Road across from the Project site. The first and most proximate of these is located near the intersection

of Cold River Road and Stratton Roads, approximately 150 feet from the nearest Project components. The second is approximately 280 feet away, near the midpoint of the Project's north to south frontage. The third has a driveway near the southernmost corner of the Project, but the residential structure is set over 500 feet away across the road from the Project and up the hillside. Exh. Pet. MK-2 at 5-6.

176. Three additional residences would have views of the Project, one located on Stratton Road just to the north of the intersection of Cold River and Stratton Roads, one located on a rise north of the east-west leg of Cold River Road and one located near the northwest corner of the Project site. Exh. JV-2 at 3.

177. The Project site sits at a lower elevation than most of the surrounding residential properties and therefore cannot be fully screened from views from those properties. Ashcroft pf. at 3.

178. RRE proposes to undertake measures to mitigate the impacts of views of the Project, including:

- choosing a south-facing site which slopes away from public rights-of-way, helping to limit the overall visibility of the entire mass of the array;
- the use of slim mounting brackets, neutral gray in color, that would follow the natural terrain of the land to minimize its profile;
- burial of all of the Project's electrical collection lines within the Project site;
- selection of neutral "earth" tones for supporting structures, such as the inverter sheds, to minimize their appearance;
- use of photovoltaic panels that are non-reflective and do not create glare;
- retention of segments of the existing roadside vegetation along the northern and eastern boundaries to soften views into the site from adjacent areas;
- the selection of PVC coated galvanized black-mesh fence with a minimal visual profile to secure the site;
- placing the inverters within enclosures and more than 500 feet away from the nearest adjacent residential structure. The inverter structures and associated pad-mounted

transformers would be located on the south and in the center of the array, providing additional screening from area views.

Exh. Pet. MK-2 at 25-26.

179. RRE also proposes additional plantings along both the eastern and northern boundaries of the Project site to further soften views of the Project from Cold River and Stratton Roads, as well as views from a subset of the surrounding residences. These plantings will not entirely hide the Project from view. Exh. Pet. MK-2 at 26-27.

180. Based on recommendations from the Department's aesthetics expert, RRE has modified its original vegetative screening proposal by increasing the number of proposed shrubs, including evergreen cedars, from 277 to 528, increasing the number of Shadblow Serviceberry trees from 44 to 72, and by installing vegetative screening closer to the intersection of Cold River and Stratton Roads, while still preserving necessary sight distances. Buscher pf. at 8-9; Kane pf. reb. at 8-9; exhs. Pet. MK-2 at Figure 5 and Reb. MK-5.

181. The plantings along the eastern edge of the Project site would be maintained at a height of approximately 12 feet above ground level. The taller plantings along the northern edge of the Project sight would be allowed to grow to approximately 8-10 feet. Exh. Pet. MK-2 at Figures 6-8.

182. The three new poles proposed for the southern edge of Cold River Road for interconnection purposes could be rendered unnecessary by undergrounding the interconnection facilities from the existing pole on the northern edge of Cold River Road. Pursuing this option would result in the placement of a primary meter, a recloser and a communications cabinet mounted on a stub pole in the area where the new poles are proposed to go. Viens pf. supp. (9/29/14) at 2; exh. Pet. Supp. RV-7.

183. Pursuing this option would require RRE to obtain a permit from the Town of Rutland to place the interconnection cable underneath Cold River Road. Viens pf. supp. (9/29/14) at 2.

184. The undergrounding option would add approximately \$5,450 to the cost of the Project. Viens pf. supp. (9/29/14) at 2-3.

185. A utility pole not associated with the Project is planned for installation at the southwest corner of the intersection of Cold River and Stratton Roads. Tr. 8/21/14 at 14 (Kane).

**Discussion**

RRE and the Department both assert that the Project would result in an adverse, but not undue, aesthetic impact.<sup>28</sup>

The Neighbors and the Town contend that the Project's aesthetic impacts would be both adverse and undue.<sup>29</sup>

In determining whether a proposed project would have an undue adverse impact on aesthetics, the Board has adopted the Environmental Board's Quechee test. The Board has previously summarized the Quechee analysis:

In order to reach a determination as to whether the project will have an undue adverse effect on the aesthetics of the area, the Board employs the two-part test first outlined by the Vermont Environmental Board in Quechee, and further defined in numerous other decisions.

Pursuant to this procedure, first a determination must be made as to whether a project will have an adverse impact on aesthetics and the scenic and natural beauty. In order to find that it will have an adverse impact, a project must be out of character with its surroundings. Specific factors used in making this evaluation include the nature of the project's surroundings, the compatibility of the project's design with those surroundings, the suitability of the project's colors and materials with the immediate environment, the visibility of the project, and the impact of the project on open space.

The next step in the two-part test, once a conclusion as to the adverse effect of the project has been reached, is to determine whether the adverse effect of the project is "undue." The adverse effect is considered undue when a positive finding is reached regarding any one of the following factors:

1. Does the project violate a clear, written community standard intended to preserve the aesthetics or scenic beauty of the area?
2. Have the applicants failed to take generally available mitigating steps which a reasonable person would take to improve the harmony of the project with its surroundings?

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28. RRE Brief at 39-42; Department Brief at 5-7.

29. Neighbors Brief at 8-12; Town Brief at 8-12.

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?<sup>30</sup>

In addition to the Quechee analysis, the Board's consideration of aesthetics under Section 248 is "significantly informed by overall societal benefits of the project."<sup>31</sup>

In the current proceeding, no party disputes that the Project would result in an adverse aesthetic impact. I agree that there would be an adverse impact due to the Project's scale, proximity to public roadways, and its proposed placement in an open and undeveloped meadow with an immediately surrounding viewshed that can be characterized as rural and low-density residential. Accordingly, an analysis of whether that adverse impact would also be undue must be performed under the second part of the Quechee test.

The first step in evaluating whether the Project would have an undue adverse aesthetic impact is to determine whether the Project would violate a clear, written community standard intended to preserve the aesthetics or scenic beauty of the area. The three aesthetics experts that testified in this proceeding agree that the Rutland Town Plan does not contain any written standard intended to preserve the scenic beauty of the proposed Project site, an analysis with which I also agree after reviewing the Plan. According to the experts for RRE and the Department, the Rutland Regional Plan also does not contain any such standard, a conclusion I also agree with.

The central dispute in this proceeding regarding the existence of a clear, written community standard focuses on the nature and applicability of the Solar Facility Siting Standards adopted by the Town of Rutland in October of 2013 for application to the siting of solar generation facilities within the Town. The Standards contain a setback requirement of 200 feet from property lines and public roadways for a ground-mounted solar facility the size of this Project.<sup>32</sup> While there is some uncertainty whether the setback refers to the distance to the

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30. *Amended Petition of UPC Vermont Wind*, Docket 7156, Order of 8/8/07 at 64–65.

31. *In Re: Northern Loop Project*, Docket 6792, Order of 7/17/03 at 28.

32. The Standards also contain a 500-foot setback from historical structures. The 500-foot setback will be addressed separately in the section below on impacts to historic and archaeological resources.

surrounding fence or to the nearest panels,<sup>33</sup> it is clear that the Project would not comply with these setback requirements regardless. Therefore, if the Standards are deemed to be a clear, written community standard applicable to the Project, the Project, as proposed, would violate the setback requirements and therefore fail this prong of the Quechee test.

According to RRE and the Department, the Standards do not constitute a clear written community standard applicable to the Project, and the Project therefore passes this prong of the second step of the Quechee test.

RRE states that the Standards do not apply to the Project because they have not yet been lawfully incorporated into the Plan. According to RRE, the fact that the Town intends to eventually incorporate the Standards into the Plan means that they have no legal significance until that event occurs. RRE also asserts that the Standards do not apply because they were adopted "for consideration" by the Board, and that under Act 250 precedent, language of "consideration" does not amount to a clear written community standard. RRE further contends that the Standards contain several internal inconsistencies and lack sufficient clarity to be considered a "clear" standard. Lastly, RRE contends that the Standards are not "community" standards because they were hastily adopted and have been undergoing a review and revision process since the time they were initially adopted.<sup>34</sup>

According to the Department, the Standards do not apply because they "have not undergone a thorough, open, and transparent process of adoption by the Town." Because the Standards have not been formally adopted into the Plan, the Department considers them analogous to zoning regulations, which the Board has historically rejected as a source of clear written community standards. The Department also states that the Standards do not apply to the Project because they are in a preliminary stage and do not reflect a final set of operating guidelines.<sup>35</sup>

The Town believes that the Standards do constitute a clear, written community standard for the purpose of assessing the Project's aesthetic impacts. The Town argues that the Quechee

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33. See tr. 8/20/14 at 187 (Kane).

34. RRE Brief at 40-41.

35. Department Brief at 6-7.

test does not require that clear, written community standards be contained within municipal plans, and because the Standards were duly enacted by the legislative body of the Town of Rutland, they constitute a written community standard. The Town also contends that the setback requirements are clear and that the Project violates them and therefore fails Quechee. According to the Town, RRE's and the Department's position that the Standards must be incorporated into the Plan before they are given effect would render 24 V.S.A. § 4432, the statute authorizing both the adoption of supporting plans and their incorporation into town plans, a nullity.<sup>36</sup>

The Neighbors agree with the Town and contend that the Standards are applicable in this proceeding because they were duly adopted by the Town's selectboard and provide clear setback requirements for ground-mounted solar facilities. The Neighbors also argue that supporting plans such as the Standards need not be incorporated into town plans to have effect.<sup>37</sup>

I recommend to the Board that it find that the setback requirements established by the Standards do not constitute a clear, written community standard for the purposes of aesthetics review under Section 248, because the setback requirements found in the Standards constitute a *de facto* zoning bylaw, and because projects reviewed under Section 248 are exempt from zoning bylaws.<sup>38</sup>

Under Vermont law, municipalities are authorized to adopt zoning bylaws "to govern the use of land and the placement, spacing, and size of structures and other factors . . . ." Zoning bylaws can be used to regulate "[a]reas and dimensions of land to be occupied by uses and structures, as well as areas, courts, yards, and other open spaces and distances to be left unoccupied by uses and structures."<sup>39</sup> The imposition of setback requirements falls squarely within this zoning authority and I believe the Board should therefore view the solar facility setback requirements in the Standards for what they are in substance, if not in form, a zoning bylaw.

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36. Town Reply Brief at 3-4.

37. Neighbors Brief at 10-11.

38. I will also address the other arguments made by the parties with respect to the applicability of the Standards to the Board's aesthetics review of the Project.

39. 24 V.S.A. § 4411(a)(3).

The Neighbors argue that the Standards are not analogous to a zoning bylaw because they are not subject to a variance procedure and are not expressly limited by statute.<sup>40</sup> The Neighbors' argument misses the point. The Project, like all projects reviewed under Section 248, is exempt from municipal zoning.<sup>41</sup> This alone is sufficient for the Board to decline to look at zoning bylaws as clear, written community standards. The fact that zoning bylaws are subject to variances under certain circumstances provides additional support for the Board's past decisions with respect to the inapplicability of zoning bylaws in Section 248 aesthetics reviews.

In the instant case, recognizing the setback requirements in the Standards as a clear written community standard would be tantamount to taking what is in substance a zoning bylaw, and by simply calling it something else, facilitating the circumvention of Section 248's zoning bylaw exemption. In turn, this would amount to effectively condoning a mechanism that would frustrate the legislated policy behind exempting Section 248 projects from local zoning in the first instance. Accordingly, I recommend that the Board not construe the setback requirements established by the Standards as a clear, written community standard for the purpose of aesthetics review in this proceeding. Additionally, even if I were not recommending that the Board treat the setbacks established by the Standards as zoning bylaws for purposes of this Section 248 review, I would recommend that the Board give the Standards effect only to the extent that they are not inconsistent with any provisions in the Rutland Town Plan. I make this recommendation because town plans undergo a more rigorous process of adoption than supporting plans do, and unless and until the Standards are incorporated into the Plan, I recommend that their provisions give way when in conflict with the Plan. In this case, I recommend that the Board find that the setbacks established by the Standards are contrary to specific provisions in the Rutland Town Plan regarding support for renewable energy installations in the Town, and the Plan's identification of the Project parcel as Industrial/Commercial through the Plan's incorporation of the future land use map.

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40. Neighbors Reply Brief at 2. Presumably when the Neighbors state that the Standards are "not expressly limited by statute" they are referring to the statutory exemption from municipal zoning for projects reviewed under Section 248.

41. 24 V.S.A. § 4413(b).



I do, however, disagree with the other grounds put forth by RRE and the Department for why the Standards should not be applicable in this proceeding. First, according to the Town, the Standards were adopted as a supporting plan pursuant to 24 V.S.A. § 4432 with the intention of eventually incorporating the Standards into the Plan. However, RRE is incorrect that the Standards have no legal significance or effect until that occurs. Supporting plans are authorized by statute, and while they may be incorporated into town plans, nothing in the statutory scheme requires such incorporation. "A municipality may adopt a plan or plans that support the municipal plan and may incorporate such supporting plan or plans into the municipal plan in the same manner as adoption of the municipal plan set forth in section 4385 of this title. ***In this event, the supporting plan shall become a part of the municipal plan.***"<sup>42</sup> Not only is the language of both adoption and incorporation permissive, the second sentence clearly contemplates times when supporting plans will not be made part of municipal plans. Additionally, RRE's reading of the statute would render supporting plans a nullity because the process for incorporating them into town plans is the same process that must be followed in adopting or amending a town plan under 24 V.S.A. § 4385. If incorporation were required, towns would simply amend their plans rather than go through a two-step process for adopting a supporting plan and then subsequently having to amend their town plan to give effect to the supporting plan.

I also disagree with RRE's argument that the Standards do not apply because they were adopted "for consideration" by the Board. Section 248(b)(5) requires the Board to give due consideration to the aesthetics criterion of Act 250, which the Board has done through application of a modified version of the Environmental Board's Quechee test, which includes examination of written standards. The case cited by RRE in support of its position was discussing language in a regional plan that stated, "Consideration should be made with respect to the proposed development's effect on aesthetics, open spaces, and the scenic and historic integrity of the area affected."<sup>43</sup> This general language does not constitute a standard and is far different

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42. 24 V.S.A. § 4432.

43. Re: *Barre Granite Quarries, LLC and William and Margaret Dyott*, Land Use Permit Application, #7C1079(Revised)-EB, Docket No. 739 at 81 (Vt. Env. Board Dec. 8, 2000).

from the specific setback requirements contained in the Standards. The Standards' use of the word "consideration" in no way resembles its use in the regional plan being examined in the case cited by RRE.

I also find RRE's contention that the Standards are not clear to be without merit. RRE states that the Standards are unclear because they do not establish what part of a project the setbacks are measured to or from, are missing a referenced attachment, and state that the Town will consider zoning bylaws, when in fact the Town has not adopted any zoning bylaws. None of these issues render the setbacks established in the Standards unclear. A reasonable reading of the setback requirements would require that the Project's infrastructure closest to a public roadway or property line meet the required minimum distance, in this case the perimeter fence. However, even if one were to read the setbacks as establishing the minimum distance to the nearest panels, the Project would still not meet the setback requirement; therefore it is not necessary for the Board to render a determination on whether the setback should be measured to the fence or the outermost panels. The other two issues raised by RRE simply do not render the actual setback requirements at issue in this matter unclear.

RRE's argument that the Standards do not apply because they do not list the Project parcel as an area subject to conservation is similarly without merit. The setbacks established by the Standards apply to any parcel within the Town where a ground-mounted solar array is being proposed. Therefore, by definition the Project parcel is identified as subject to the setback requirements.

Lastly, I disagree with both RRE's and the Department's contentions that the Standards are somehow faulty because they have not undergone an adoption process equivalent to that of a town plan and may be subject to future amendments. The Standards were adopted as a supporting plan by the legislative body of the Town in a public meeting, and supporting plans are expressly authorized by statute.<sup>44</sup> There is nothing in the record beyond speculation by the Department's and RRE's aesthetics witnesses that something less than valid occurred during the adoption of the Standards. The only witness with direct personal knowledge testified that the

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44. 24 V.S.A. §§ 4403 & 4432.

Standards were duly adopted by the Town selectboard on October 22, 2013.<sup>45</sup> Additionally, the fact that amendments to the Standards were being discussed between the time of their initial adoption and the dates of the technical hearings in this matter is of no moment. Amendments to statutes are regularly under consideration, but unless and until they are passed and become effective, the unamended statute remains in place. In this instance, the Standards were adopted and in effect, and remained so in spite of discussions regarding their potential amendment.

The second step in evaluating whether the Project would have an undue adverse aesthetic impact is to determine whether RRE has taken generally available mitigating steps which a reasonable person would take to improve the harmony of the Project with its surroundings. Subject to one condition, I conclude that RRE meets this requirement.

RRE asserts that the placement, design, and low profile of the Project, in conjunction with the vegetative screening plan as revised in response to recommendations made by the Department's aesthetics expert, constitute appropriate mitigation for the Project's visual impacts. RRE also contends that compliance with the setbacks established by the Standards would render the Project non-viable.<sup>46</sup>

The Town contends that compliance with the setbacks established in the Standards constitutes an appropriate mitigating measure that RRE should be required to undertake.<sup>47</sup>

The Neighbors assert that RRE has failed to design mitigation sufficient to screen the Project from view by the adjacent neighbors, and that any inability to reduce the size of the Project to meet the setback requirements is the result of poor site selection.<sup>48</sup>

Subject to the condition described below, I recommend the Board find that RRE has proposed to undertake reasonable steps to mitigate the visual impacts from the Project. RRE, consistent with prior solar facilities approved by the Board, has proposed undergrounding Project

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45. Ashcroft pf. at 2.

46. RRE Brief at 36, 42. At page 42 of its brief, RRE states that Mr. Viens testified about the economic impact to the Project if it were required to comply with the setbacks established by the Standards. However, the cite RRE provides is a cite to Mr. Kane's testimony, not to Mr. Viens' testimony.

47. Town Brief at 10-11.

48. Neighbors Brief at 11-12.

wiring and has selected neutral tones for Project infrastructure to the extent possible. Additionally, the proposed revised vegetative screening plan is robust and includes the planting of 528 shrubs and 72 trees along the eastern and northern edges of the Project parcel. While these plantings will not eliminate all views of the Project from the public vantage points along Stratton and Cold River Roads, the Board has never required that a Project be completely screened from public view to obtain approval. Additionally, a review of Figures 6 through 8 in exhibit Pet. MK-2 indicates that the vegetative plantings will provide a significant amount of screening to those traveling along these roads, especially when mature.

I agree with RRE that imposition of the setbacks established by the Standards would not be a reasonable mitigating measure. For a mitigating measure to be reasonable, it must be "reasonably feasible" and "not frustrate the project's purpose."<sup>49</sup> In this case, the only way for the Project to adhere to the setback requirements in the Standards is to reduce the size of the array to the point where the Project infrastructure would be at least 200 feet from any property line or public roadway, and at least 500 feet from any historic structure. Looking at exhibit Pet. NSK-5, the proposed site layout plan, it becomes immediately clear that adhering to these setbacks would require a very significant reduction in the size and capacity of the array, especially given the presence of two historic structures on the east side of Cold River Road.<sup>50</sup> While I believe it is appropriate for the Board to consider reductions in the size of project footprints as potential aesthetic mitigation when reviewing projects under Section 248, a reduction of the magnitude that would be required if the setbacks in the Standards were to be adhered to would undoubtedly "frustrate the project's purpose" by converting it into a different project entirely. Accordingly, I recommend the Board find that requiring compliance with the setbacks established by the Standards would not be reasonable.

With respect to surrounding properties that are at an elevation higher than the Project site, there does not appear to be any reasonable way to provide effective screening to block views from these properties, and therefore no generally available mitigation option exists. As the Board

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49. *Petition of Charlotte Solar, LLC*, Docket 7844, Order of 1/22/13 at 27 (citing *In re Stokes Communications Corp.*, 164 Vt. 30, 39 (1995)).

50. See findings 196 and 197, below.

has stated, "Criterion 8 of Act 250 does not guarantee that views of the landscape will not change. It does, however, require that as development does occur, reasonable consideration will be given to the visual impacts on neighboring landowners, the local community, and on the specific scenic resources of Vermont."<sup>51</sup> RRE considered the visual impacts from the Project and has taken steps to screen views of the Project to a reasonable extent. The fact that a small number of residences in the immediate vicinity will have views of the Project from either their homes or their property does not render RRE's mitigation efforts inadequate, particularly in light of the legislature's emphasis on the importance of deploying renewable energy generating facilities in the State of Vermont.

I do, however, recommend the Board impose one condition to further mitigate visual impacts should the Board approve the Project. I recommend that the Board require RRE to pursue the undergrounding option for the Project's interconnection to GMP's distribution network. The increased cost of approximately \$5,450 is reasonable in the context of the overall costs for a project of this size and would result in the elimination of three utility poles along the northern edge of the Project site. I understand that there is already a pole planned for placement at the southwest corner of Cold River and Stratton Roads that is unrelated to the Project. However, elimination of the three Project-related poles will provide some measure of incremental benefit, especially to travelers on the east/west leg of Cold River Road, at a small cost to RRE. I am also cognizant of the fact that RRE will need to obtain a permit from the Town of Rutland to locate the cable underneath the road, and that the Town of Rutland is opposed to the Project. Accordingly, the condition should be waived if the Town of Rutland denies RRE a permit for this purpose.

I recommend the following condition:

RRE shall install the interconnection cable for the Project underground from the point of interconnection at GMP's pole on the north side of Cold River Road as depicted in exhibit Pet. Supp. RV-7 and described in the supplemental prefiled testimony of Rod Viens dated September 29, 2014. In the event the Town of Rutland denies RRE's application for a Title 19 permit to install the cable underneath Cold River Road, then this condition is waived. In that event, RRE

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51. *Petitions of Vermont Electric Power Company, Inc. (VELCO) et al.*, Docket 6860, Order of 1/28/05 at 140 (citations omitted).

must file a copy of the permit denial with the Board before proceeding with the above-ground interconnection work.

The final step under the Quechee analysis is to determine whether the Project would be shocking or offensive to the average person. In this case, all three aesthetics experts agreed that the average persons viewing the Project would be those traveling on Stratton or Cold River Road, and that they would not find the Project shocking or offensive. Given the limited duration of these views and the proposed vegetative screening along these roadsides, I accept the consensus view of the three experts on this point.

The Town contends that RRE has failed to meet its burden to demonstrate that the average person would not be shocked or offended, suggesting that RRE's aesthetics witness should have conducted a poll to reach his conclusion.<sup>52</sup> I disagree. The Vermont Supreme Court has held that determinations under Act 250 on whether a proposed project would shock or offend the average person are not made by polling "the populace . . . in order to conclude that an average person would consider the project to be offensive."<sup>53</sup> Accordingly, RRE's failure to conduct a public poll does not render its conclusions unsupported. RRE's aesthetics witness, as well as those for the Department and the Neighbors, concluded that the average person would not find the Project shocking or offensive due to numerous factors such as the limited number of public vantage points, the limited duration of views from these vantage points, the effectiveness of the proposed vegetative screening and the low profile of the Project.<sup>54</sup> Accordingly, I recommend the Board find that RRE has met its burden on this question.

The Neighbors assert that if the immediately surrounding property owners would be shocked and offended by the Project, then the Project should be found to fail this portion of the Quechee test.<sup>55</sup> I disagree. Board precedent is clear on this point. I do not dispute the Neighbors' perspective with respect to the visual impacts of the Project from the vantage point of

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52. Town Brief at 12.

53. *In re McShinsky*, 153 Vt. 586, 592 (1990).

54. *See Kane* pf. at 7; *Vissering* pf. at 4; *exh. JV-2* at 5; *Buscher* pf. at 10.

55. Neighbors Brief at 11-12.

adjacent landowners. However, in reviewing the aesthetic impacts of a project under Section 248, the Board must determine whether a project's visual impacts will be shocking or offensive to the average person. As interested landowners, the Neighbors are most likely to be impacted by the view of the Project, and therefore have an individualized perspective which, by definition, is different from the viewpoint of the average person.<sup>56</sup> Absent a compelling reason, I see no basis to recommend to the Board that it reverse its long-standing precedent on this issue.

For the foregoing reasons, I recommend that the Board find that the Project would not have an undue adverse effect on aesthetics or on the scenic or natural beauty of the area.

### Historic Sites

#### **Findings**

186. The Project will not result in an undue adverse impact upon historic or cultural resources. This finding is supported by findings 187 through 204, below.

187. The University of Vermont Consulting Archeology Program ("UVM CAP") was retained to assess the potential impacts of the Project upon historic and cultural resources. Charles Knight, RRE ("Knight") pf. at 2.

188. UVM CAP conducted an archaeological Phase I site identification survey within the proposed Project site. The Phase I survey included the visual surface inspection of the proposed solar array area which had been plowed and harrowed prior to inspection. Knight pf. at 2; exh. Pet. CK-3.

189. No precontact era Native American sites were identified; therefore, the construction of the proposed Project will have no effect on archaeological resources. Knight pf. at 2; exh. Pet. CK-3.

190. UVM CAP recommends that no further archaeological study is warranted for the Project. Knight pf. at 2; exh. Pet. CK-3.

191. UVM CAP also performed an evaluation of the Project's potential effects on historic properties. Knight pf. at 2; exh. Pet. CK-4.

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<sup>56</sup>. See e.g., *Petition of Green Mountain Power Corporation*, Docket 5823, Order of 5/16/96, finding 128 at p. 26.

192. UVM CAP reviewed historic maps, the State of Vermont Historic Sites and Structures Surveys, and the National Register of Places files, and conducted a site visit on November 21, 2013. Knight pf. at 2-3.

193. UVM CAP concluded that there are no standing historic resources directly within the proposed Project areas. Knight pf. at 3; exh. Pet. CK-4.

194. Three historic properties included on the Vermont State Register of Historic Places (#41, #40, and #39), which are near the proposed solar installation, were identified as having the potential to be indirectly affected by the Project. Additional State Register-listed properties (#44, #43, #42, #61, and #38) along Cold River Road do not have the potential to be affected by the Project, given the landform and their distance from the Project location. Knight pf. at 3; exh. Pet. CK-4.

195. The house and barn at 2450 Cold River Road (#41) will likely have no, or very little, view of the Project given the property's location around a bend in the road, and fencing around the plantings already in place in front of the house. Knight pf. at 3.

196. The historic property at 2240 Cold River Road (#40) will have a view of the Project, given its location directly across from the proposed solar installation and the absence of vegetation in front of the house. Knight pf. at 3.

197. The historic house at 2112 Cold River Road (#39) will also have a view of the Project, especially given its higher elevation. Knight pf. at 3.

198. The impact of the views will be lessened for these two properties by the proposed landscape mitigation, which includes plantings along the west side of Cold River Road. Knight pf. at 4; exh. Pet. CK-4.

199. While the Project's effect is adverse based on the fact that it alters the setting of the two properties, its presence will not prevent the interpretation and/or appreciation of the historic character and qualities of either property, and will not alter their historic significance. Knight pf. at 4; exh. Pet. CK-4.

200. Further, because the Project will be relatively temporary and will be decommissioned after its useful life, any visual impacts will not be lasting. The Project will not permanently



change any historic resources and its impacts are entirely reversible. Knight pf. at 4; exh. Pet. CK-4.

201. The presence of the three proposed utility poles has no impact on UVM CAP's opinion of the proposed Project. Tr. 8/27/14 at 29-30 (Quinn).

201. Based on its review, UVM CAP has concluded that the Project will not have an undue adverse indirect/visual effect on standing historic resources, including the three historic properties identified along Cold River Road closest to the proposed site. Knight pf. at 4; exh. Pet. CK-4.

203. UVM CAP recommended to the Vermont Division for Historic Preservation a determination of No Undue Adverse Effect and that no further historic resources review was warranted. Knight pf. at 4; exh. Pet. CK-4.

204. The Vermont Division for Historic Preservation has concluded that the Project will not have an undue adverse effect on any historic sites that are listed or eligible for inclusion on the State or National Register of Historic Places. Viens pf. supp. (3/13/14) at 5; exh. Pet. Supp. RV-4.

### **Discussion**

The Town contends that the Project would have an undue adverse impact on the historic structures located nearest to the Project site because the Project would not comply with the 500-foot setback established by the Standards when siting solar facilities in the vicinity of historic properties. I disagree.

The Board utilizes the three-part test articulated by the Environmental Board in its *Middlebury College* decision<sup>57</sup> to evaluate impacts on historic sites.<sup>58</sup> The first issue is whether any resources, including the proposed Project site, are historic sites. Pursuant to 10 V.S.A. § 6001(9), an "historic site" includes resources placed on the National or State Registers of Historic Places ("Registers"). In this case, the proposed Project site itself does not include any

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57. *In re Middlebury College*, No. 9A0177-EB (V.E.B. Jan 26, 1990).

58. *Petition of Green Mountain Power Corp. et al.*, Docket 7628, Order of 5/31/11 at 107 (citing *Petition of Georgia Mountain Community Wind*, Docket 7508, Order of 6/11/10 at 62; *Amended Petition of UPC Vermont Wind, LLC*, Docket 7156, Order of 8/8/07 at 78).

resources listed on the Registers. However, a number of residences adjacent to or nearby the Project site are considered historic.

The second issue is whether the proposed Project will adversely impact the historic sites. Adverse impacts include effects on the setting and landscape, "which are incongruous or incompatible with the site's historic qualities, including but not limited to . . . new visual, audible or atmospheric elements."<sup>59</sup> RRE concluded that the Project would have an adverse impact to two of the historic properties located on the east side of Cold River Road because it would alter the setting of these two properties. I agree.

The final issue is whether the proposed Project's adverse impacts on the historic sites are undue. Adverse impacts are considered undue when one of the following conditions is met:

- (a) The failure of an applicant to take generally available mitigating steps which a reasonable person would take to preserve the character of the historic site;
- (b) Interference on the part of the proposed project with the ability of the public to interpret or appreciate the historic qualities of the site;
- (c) Cumulative effects on the historic qualities of the site by the various components of a proposed project which, when taken together, are so significant that they create an unacceptable impact; and
- (d) Violation of a clear, written community standard which is intended to preserve the historic qualities of the site.<sup>60</sup>

The evidence of record supports a finding that the Project passes muster under (a) through (c) above. The aesthetics mitigation is sufficient to meet the requirements under (a), and the study performed by UVM CAP and the concurrence in its conclusions by the Division for Historic Preservation support a finding that the Project meets the requirements of (b) and (c).

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59. Docket 7628, Order of 5/31/11 at 107 (citing *Amended Petition of UPC Vermont Wind, LLC*, Docket 7156, Order of 8/8/07 at 78 (citing *In re Middlebury College*, No. 9A0177-EB (V.E.B. Jan 26, 1990)).

60. Docket 7628, Order of 5/31/11 at 108 (citing *Petition of Georgia Mountain Community Wind*, Docket 7508, Order of 6/11/10 at 62; *Amended Petition of UPC Vermont Wind, LLC*, Docket 7156, Order of 8/8/07 at 79).

As with the aesthetics analysis, I recommend the Board find that the Standards do not constitute a clear, written community standard applicable to the Project, and the Project therefore does not run afoul of (d).

#### Rare and Irreplaceable Natural Areas

##### **Findings**

205. The Project will not have an undue adverse effect on rare and irreplaceable natural areas because the solar panels, inverter and transformer foundations, and permanent access roads would be located in an open, mowed field that does not meet the definition of a Natural Area. Severson pf. at 15.

206. Based on a review of the ANR Natural Resources Atlas and Mr. Severson's professional opinion, the Project area does include any Rare or Irreplaceable Natural Areas. Severson pf. at 15.

#### **Wildlife, Including Necessary Wildlife Habitat and Endangered Species**

[10 V.S.A. § 6086(a)(8)(A)]

##### **Findings**

207. The Project will not destroy or significantly imperil any necessary wildlife habitat or any endangered species. This finding is supported by findings 208 through 214, below.

208. Based on a review of the ANR Natural Resources Atlas, and in Mr. Severson's professional opinion, the Project area does not include Necessary Wildlife Habitat. Severson pf. at 16.

209. Based on a review of the ANR Natural Resource Atlas, there are no known rare, threatened, or endangered ("RT&E") species at or in the vicinity of the Project site. Severson pf. supp. (6/20/14) at 2.

210. The nearest RT&E records to the Project site are for an S2 (rare) plant species and two S3 (uncommon) plant species from the Rutland Mall site, approximately 0.4 miles southwest of the Project site, and for an S1 (endangered) plant species located in a pond approximately 0.5 miles northeast of the Project site. Severson pf. supp. (6/20/14) at 2.

211. Oakledge Environmental Services, Inc. compiled a target list of these potential RT&E plant species and conducted a botanical survey of the Project site on June 15, 2014, following the recommendation of Bob Popp, Botanist with the ANR Wildlife Diversity Program. Additional botanical survey work was conducted on May 29, 2014, and June 9, 2014, to develop a more comprehensive species list for the site. Severson pf. supp. (6/20/14) at 2.

212. There are no records from the Project site for any State-listed RT&E, and no RT&E plant species were identified during the botanical survey. Severson pf. supp. (6/20/14) at 2, 3; exh. Pet. Supp. JES-2.

213. Based on the results of the botanical survey and the desktop survey of ANR's Natural Resources Atlas, the Project area does not include any Endangered Species Habitat. Severson pf. supp. (6/20/14) at 3.

214. The Project is located between a mapped deer wintering area and summer habitat. Petitioner will install wildlife exclusionary fencing around the solar arrays and other Project infrastructure in order to prevent deer, or other mammals, from entering and becoming trapped within the Project area. Exh. Pet. Joint-1 at 5; *see also* finding 220, below.

### **Development Affecting Public Investments**

[10 V.S.A. § 6086(a)(9)(K)]

#### **Findings**

215. The Project will not unnecessarily or unreasonably endanger any public or quasi-public investment in any facility, service, or lands, and it will not materially jeopardize the function, efficiency, or safety of, or the public's use or enjoyment of or access to any facility, service, or lands. This finding is supported by the findings under 10 V.S.A. § 6086(a)(5), above, and finding 216, below.

216. Cold River Road and Stratton Road are the closest public investments to the Project. The Project will not encroach onto or interfere with the public's use of these investments. Viens pf. at 4; exh. Pet. NSK-5.

**Public Health and Safety**

[30 V.S.A. § 248(b)(5)]

**Findings**

217. The Project will not have any adverse effects on the health, safety, or welfare of the public and will not unnecessarily or unreasonably endanger the public or adjoining landowners. This finding is supported by findings 218 through 221 below, and the findings under 10 V.S.A. § 6086(a)(5), above.

218. The Project's inverters and transformers will be locked. Viens pf. at 12.

219. The Project will conform with applicable building, fire, and electrical codes. Viens pf. at 12; tr. 8/20/14 at 91-92 (Viens).

220. RRE proposes fencing for the Project that will, at a minimum, comply with the following specifications:

- a. On level ground, the fence will be at least 7-feet high; on sloping ground, the fence shall be 9-10 feet high;
- b. Woven mesh wire (with an opening of 4x4 to 6x8 inches) game fence is to be utilized for the entire height of the fence. Alternatively, two or more strands of 9- to 11-gauge smooth wire may be stretched at 4 to 6 inches above a 5-foot woven mesh wire game fence. Barbed wire is not necessary, nor recommended;
- c. Vertical stays will not be more than 6 to 8 inches apart;
- d. The fence will be secured and kept close to the ground level to avoid access by small animals and crawling deer. Depressions along slopes will be filled with material or have secured mesh fencing in place; and
- e. Fence posts will be set no more than 10 to 12 feet apart.

Exh. Pet. Joint-1 at 5.

221. Access keys to the locked gate will be provided to the local fire and emergency services personnel. Viens pf. at 12.

**Discussion**

Board Rule 3.500 requires that all electric facilities constructed in Vermont conform to the National Electrical Safety Code ("NESC"). Under the NESC, electric supply stations,

including generation facilities, are generally required to have perimeter fences that are seven feet in height and prevent unauthorized entry.<sup>61</sup> In this case, RRE reached an MOU with ANR in which RRE agreed to install a woven mesh wire game fence of at least 7 feet in height with openings of 4"x4" to 6"x8" and vertical stays of not more than 6 to 8 inches apart. According to RRE, the fence described in the MOU with ANR meets the NESC requirements.

The Department declined to express its opinion on whether the proposed fence would be compliant with the NESC or the National Electrical Code ("NEC"), and instead recommended that the Board impose a condition that would require RRE to obtain and submit, prior to construction, a certification from a Vermont-certified master electrician or electrical engineer that the fence would be code-compliant, with a detailed explanation of how the proposed fencing specifically meets the requirements of both the NESC and NEC.<sup>62</sup>

The evidentiary record in this case contains uncontested testimony by an RRE witness that the proposed fence would be compliant with the NESC. The Department did not put on any evidence to the contrary, but rather utilized cross-examination as a basis for raising this issue in its brief. While RRE did reply to the Department's brief with respect to the Department's proposal for the decommissioning fund, it did not object to or discuss the Department's recommendation with respect to the fence. Given the lack of objection from RRE to the Department's request, I recommend the Board impose the following condition on any approval for the Project:

Prior to commencing site preparation or construction, RRE shall obtain a signed certification from a Vermont-certified master electrician or Vermont-registered electrical engineer that the proposed fence as described in exhibit Pet. Joint-1 is compliant with the requirements of the National Electrical Safety Code and National Electrical Code, including a detailed explanation for why the proposed fencing specifically meets the requirements of each code.

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61. National Electrical Safety Code § 110.A.1.

62. Department Brief at 8-9.

In the event RRE is unable to obtain the required certification, RRE may seek a waiver from the Board of the requirements of PSB Rule 3.500 with respect to safety fencing.<sup>63</sup>

**Least-Cost Integrated Resource Plan**

[30 V.S.A. § 248(b)(6)]

**Findings**

222. The Board has not required non-utilities to have a least-cost integrated resource plan. Therefore, this criterion is inapplicable.

**Compliance With Twenty-Year Electric Plan**

[30 V.S.A. § 248(b)(7)]

**Findings**

223. Vermont is currently operating under the Comprehensive Energy Plan ("CEP"), rather than an electric energy plan. The CEP establishes the goal to obtain 90% of Vermont's energy from renewable resources by 2050. Viens pf. at 14.

224. As a renewable energy project, the Project is consistent with the goals articulated in the CEP. Viens pf. at 14.

**Outstanding Resource Waters**

[30 V.S.A. § 248(b)(8)]

**Findings**

225. The Project will not result in an undue adverse effect on any Outstanding Resource Water, as the Project is not located on or in the vicinity of any segment of such waters. Severson pf. at 5.

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63. See letter to Susan M. Hudson, Clerk, Vermont Public Service Board from Danielle M. Changala, Esq., dated August 14, 2014.

**Waste-to-Energy Facility**

[30 V.S.A. § 248(b)(9)]

**Findings**

226. The proposed Project does not involve construction of a waste-to-energy facility. Therefore, this criterion is inapplicable.

**Existing or Planned Transmission Facilities**

[30 V.S.A. § 248(b)(10)]

**Findings**

227. The Project can be served economically by existing or planned transmission facilities without undue adverse effects on Vermont utilities or customers. This finding is supported by finding 228, below.

228. RRE will assume the costs for the interconnection facilities and other necessary system modifications. There will be no undue adverse impact on the local utility or its customers from the changes necessary to accommodate this Project on the GMP electric distribution system. Exh. Pet. Supp. RV-1.

**IV. PRIMARY AGRICULTURAL SOILS****Findings**

229. The Project will not significantly reduce the agricultural potential of the soils found at the Project site. This finding is supported by findings 230 through 247, below.

230. The primary onsite soils include Sudbury Fine Sandy Loam (0 to 3 percent slope), Enosburg Loamy Fine Sand, Ninigret Fine Sandy Loam (0 to 4 percent slope), Georgia and Amenia Soils (0 to 3 percent slope), and Eldridge Fine Sandy Loam. All of these soils have a "Prime" Important Farmland Classification and a Vermont Agricultural Value Group of 3. Kesselring pf. at 6; exh. Pet. NSK-7; tr. 8/21/14 at 48-49 (Kesselring).

231. Along the easterly perimeter of the Project site are small areas of Paxton Fine Sandy Loam (8 to 15 percent slope), Georgia and Amenia Soils (0 to 3 percent slope), and Deerfield Loamy Sand (0 to 3 percent slope). These soils have Vermont Agricultural Values of 9, 3, and 6,



respectively. The primary soil types are described as poorly to moderately well-drained soils, comprised of fine sandy loam of hydrologic soil group B & C. The soils are identified as having a restrictive feature at greater than 80" of depth. Kesselring pf. at 6; exh. Pet. NSK-7; tr. 8/21/14 at 50-51 (Kesselring).

232. Eldridge Fine Sandy Loam Soil has an agricultural value of 3 and is located in the southwesterly portion of the site. Tr. 8/21/14 at 49 (Kesselring).

233. Soil disturbance will be associated with tree removal, construction of the access drives, construction of the inverter pads and transformer vault(s), and removal of an old foundation and regrading of the foundation area. Kesselring pf. at 7.

234. Less than 0.4 acres of wooded, prime agricultural soils are to be cleared along the westerly edge of the southern array. Following tree clearing, this area will be replanted to establish grass cover over the site, to be maintained during Project operations. Kesselring pf. at 7.

235. The construction of the inverter pads and transformer vault(s) will disturb less than 0.1 acres of Enosburg Loamy Fine Sand, prime agricultural soil. Access drive construction will disturb soil to a depth of approximately 18". These soils will be removed and replaced with stone to create a stabilized driving surface, with an estimated volume of 511 cubic yards. The soils will be stockpiled for future replacement. Kesselring pf. at 7.

236. The inverter pads will require soil disturbance to a depth of approximately 5 feet at the frost walls and 2-3 feet under the slab. The transformer vault areas will require soil disturbance to a depth of approximately 7 feet for the construction of concrete foundations and the pad area. Disturbed soil from these activities is anticipated to be approximately 1,130 cubic yards, which will be stored onsite for future use. Kesselring pf. at 7-8.

237. Impacts from the foundation removal and regrading are estimated to be 1,800 cubic yards. Kesselring pf. at 7-8.

238. Temporary impacts to agricultural soils are anticipated to be 15 cubic yards as a result of using directional drilling versus open trenching to install the underground conduit. Severson pf. supp. (2/20/14) at 3.

239. The racking system foundation posts will be either driven posts or ground screws, therefore, no earth removal, excavation or loss of agricultural soils is proposed. The posts will be removed by pulling or reverse screwing them back out of the ground, again with no anticipated loss or removal of agricultural soils. Kesselring pf. at 8.

240. Agricultural soils that are removed during construction will be stockpiled onsite for future use. A soil stockpile is proposed on the southerly portion of the Project site. Kesselring pf. at 8; exh. Pet. NSK-5.

241. Disturbed soils will be transported by truck from the northern part of the Project site to the soil stockpile on the southern part of the Project site. Tr. 8/20/14 at 106-107 (Viens).

242. A Plan for Reclamation of Primary Agricultural Soils is included in the Project's decommissioning plan. Kesselring pf. at 8; , exh. Pet. RV-2 (Revised 8/22/14).

243. The array area will be maintained by mowing and periodic brush hogging, at least annually, which will result in the area being open, without tree growth, for the life of the Project. Kesselring pf. at 8.

244. No agricultural use is proposed during the functioning term of the Project. Kesselring pf. at 8.

245. RRE will decommission the site pursuant to a Board-approved decommissioning plan and fund. Reclamation of agricultural soils on the Project site will be achieved by:

- Removal of solar array racks and posts (soil will remain largely in place);
- Removal of fencing (soil will remain largely in place);
- Removal of electrical conduit (trenches backfilled with native soils);
- Removal of inverter pads, transformer vault(s), and associated equipment;
- Removal of imported soils and/or stone and geotextile fabric; and
- Replacement of agricultural soils with soils from the onsite stockpile in areas where they were previously removed.

Kesselring pf. at 9; exh. Pet. RV-2 (Revised 8/22/14).

246. After soil placement, pH testing is to be performed on the replaced soils in accordance with the Vermont Agency of Agriculture guidelines for reclamation of primary agricultural soils.

A pH of 6.0 or higher will be maintained using recommended Agency of Agriculture procedures. Kesselring pf. at 9.

247. Reseeding and mulching of disturbed areas is proposed using a seed mix preapproved by the Vermont Agency of Natural Resources and/or the United States Department of Agriculture-Warm Season Grass Guide entitled, "The Use of Native Warm Season Grasses for Critical Area Stabilization." Kesselring pf. at 10.

### **Discussion**

The Project site contains primary agricultural soils that will, in part, be disturbed by the installation of the Project. However, the decommissioning plan, discussed below, contains provisions for reclamation of those soils upon Project decommissioning. Additionally, while the site will not be available for agricultural purposes during the useful life of the Project, the site is not currently in agricultural production nor has it been actively farmed for 15-20 years,<sup>64</sup> and in any event, will be available for agricultural purposes after decommissioning occurs.

The Town is opposed to the installation of the Project on this parcel because of the disturbance to primary agricultural soils, pointing to both the policy set forth in the Rutland Town Plan of discouraging development on such lands so that they may be reserved for agricultural use, and the restrictions applicable to ground-mounted solar facilities contained in the Standards.<sup>65</sup> However, as discussed earlier in this proposal for decision, the Town views the highest and best use for this parcel to be residential, the development of which would have far greater impact on the primary agricultural soils on the Project site, potentially removing them from agricultural production on a permanent basis.<sup>66</sup> I therefore recommend the Board find that the limited and temporary disturbance to the agricultural soils that would result from installation of the Project is an acceptable one.

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64. See finding 37, above.

65. Town Brief at 7-8.

66. The restrictions on the placement of ground-mounted solar arrays on parcels containing agricultural soils found in the Standards would not apply to any other types of development on the parcel.

## V. DECOMMISSIONING FUND

### Findings

248. In accordance with Board Rule 5.402(c)(2), RRE developed a decommissioning plan and fund for decommissioning the Project at the end of its useful life. Viens pf. at 6; Viens pf. reb. at 5; exh. Pet. RV-2 (Revised 8/22/14).

249. The decommissioning fund will initially be funded by an irrevocable standby letter of credit ("LC") that includes an auto-extension provision (i.e., "evergreen clause"), and is issued by an A-rated financial institution solely for the benefit of the Board. No other entity, including RRE, shall have the ability to demand payment under the LC. An executed LC shall be in place and filed with the Board prior to commencement of construction. Exh. Pet. RV-2 (Revised 8/22/14).

250. RRE proposes to establish the fund in the amount of \$72,150 based on a cost estimate that it prepared. The estimated cost of decommissioning will be adjusted annually to account for inflation, based upon the current Consumer Price Index ("CPI") as maintained by the Bureau of Labor Statistics. RRE will file an annual report with the Board and the Department on the status of the Decommissioning Fund after each annual adjustment. The report will include the annual inflation adjustment to determine a revised estimated cost of decommissioning. If the revised estimated cost of decommissioning exceeds the then value of the LC, RRE shall cause a new or amended LC to be issued to reflect the revised estimated cost of decommissioning. In the event the CPI has a negative value at the time the annual adjustment is calculated, the value of the LC shall not be reduced. Exh. Pet. RV-2 (Revised 8/22/14).

251. RRE's estimated cost of decommissioning of \$72,150 accounts for the salvage value of the materials from the decommissioned Project. Tr. 8/20/14 at 104-05 (Viens).

252. Upon completion of decommissioning, RRE will seek a certification of completion from the Board. The certification will be provided to the entity issuing the LC with instructions to release and terminate the LC. Exh. Pet. RV-2 (Revised 8/22/14).

253. The Board will have the right to draw on the LC to pay the costs of decommissioning in the event that RRE is unable or unwilling to commence decommissioning within a reasonable

period of time, not to exceed ninety days, following issuance of a Board order requiring decommissioning of the Project. Exh. Pet. RV-2 (Revised 8/22/14).

### **Discussion**

Board Rule 5.402(C)(2) requires non-utility petitioners proposing to construct generation facilities greater than 1 MW in capacity to include with their petition a plan for decommissioning the project at the end of its useful life.

RRE agrees to decommission the Project at the end of its useful life, and has submitted a detailed plan for decommissioning that estimates it will cost \$72,150 to decommission the Project.<sup>67</sup>

In previous Board approvals, the Board has approved plans for decommissioning that include: (1) a detailed plan for decommissioning the proposed project and an estimate of the decommissioning costs; and (2) a plan for the creation of a decommissioning fund. RRE has provided a detailed plan for decommissioning the Project and an estimate of the decommissioning costs. RRE proposes that the decommissioning fund will be funded with an irrevocable, standby LC from an A-rated financial institution or other institution approved by the Board, that includes an auto-extension provision (i.e., "evergreen clause"), and names the Board as the sole beneficiary.

The Department recommends that RRE be required to base the fund amount on the total costs of decommissioning without recognition for any salvage value that Project components may retain at the time of decommissioning. Specifically, the Department recommends that the initial fund amount be established in the amount of \$170,200 in 2013 dollars.<sup>68</sup>

RRE contends that the funding amount it has proposed is sufficient because it is "significantly greater than those of similarly sized solar projects in Vermont," and "proposes that the Board approve a fund comparable to those approved in other dockets at \$50,000 per MW."<sup>69</sup>

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67. The initial fund amount was later recalculated to \$73,945 in response to a discovery request. Tr. 8/20/14 at 104 (Viens).

68. DPS Brief at 10-11.

69. RRE Reply Brief at 7. RRE's position in its reply brief would result in an initial funding amount of \$115,000.

Board precedent makes clear that salvage value is not to be taken into account when determining the amount of a decommissioning fund for a project being reviewed under Section 248.<sup>70</sup> The decommissioning plan submitted by RRE states that the amount of the fund "should represent the full estimated costs of decommissioning without netting out estimated salvage value."<sup>71</sup> However, in spite of this statement in RRE's proposed plan, during cross-examination RRE's witness acknowledged that the estimated salvage value of Project components was used to lower the initial amount proposed for the decommissioning fund by \$96,225.<sup>72</sup> This is inconsistent with Board precedent and I recommend that the Board not approve RRE's decommissioning plan and fund until it is based on the full amount of the estimated costs of decommissioning without netting out any salvage value.

With the exception of the salvage value issue described above, RRE's plan for decommissioning, as well as the form LC and drawing certificate submitted with the plan,<sup>73</sup> are consistent with the requirements the Board has imposed on decommissioning plans in the past. Accordingly, I recommend the Board adopt, as conditions of approval, the following:

Prior to the commencement of site preparation or construction, RRE shall file with the Board and obtain Board approval of a final executed letter of credit ("LC") from an A-rated financial institution or other financial institution approved by the Board. The LC shall be an irrevocable standby LC that: (i) is bankruptcy remote; (ii) includes an auto-extension provision (i.e., "evergreen clause"); and (iii) is issued solely for the benefit of the Board. No other entity, including RRE, shall have the ability to demand payment under the LC. The amount of the LC shall represent the full estimated costs of decommissioning without netting out any estimated salvage value for Project infrastructure.

Prior to the commencement of site preparation or construction, RRE shall file with the Board and obtain Board approval of an amended decommissioning plan reflecting the revised initial funding amount for the decommissioning fund. The plan shall contain a detailed estimate of the costs of decommissioning, covering all of the activities specified in the decommissioning plan. The plan shall certify

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70. *See e.g.*, Docket 7628, Order of 5/31/11 at 150.

71. Exh. Pet. RV-2 (Revised 8/22/14).

72. Tr. 8/20/14 at 105-06 (Viens).

73. *See* exh. Pet. RV-2 (Revised 8/22/14).

that the cost estimate has been prepared by a person(s) with appropriate knowledge and experience in photovoltaic generation projects and cost estimating.

Parties with standing on the issue of decommissioning shall have seven calendar days to file any comments on the revised funding amount that is to be filed with the amended decommissioning plan.

## **VI. MEMORANDUM OF UNDERSTANDING**

### **Findings**

254. ANR and RRE executed and filed an MOU with the Board in which they agree on matters related to stormwater runoff, wetlands issues, installation of buried conduit, Project fencing, construction detail and Project output reporting, and installation of a secondary containment system. *See generally* exh. Pet. Joint-1.

255. The MOU provides that if the Board does not approve the MOU in its entirety, then the agreements contained in the MOU may terminate. Exh. Pet. Joint-1 at 8.

### **Discussion**

I recommend that the Board accept the MOU with all of its provisions and conditions without material change or condition and require RRE to comply with the terms and conditions of the MOU as a condition of any Board approval of the Project.

## **VII. CONCLUSION**

RRE has provided sufficient evidence to demonstrate that the Project, subject to the conditions discussed above, complies with all applicable Section 248 criteria. Based upon the evidence in the record, I conclude that the Project, subject to the conditions set forth in the Proposed Order and CPG below:

- (a) will not unduly interfere with the orderly development of the region with due consideration having been given to the recommendations of the municipal and regional planning commissions, and the recommendations of the municipal legislative bodies;
- (b) will meet a need for present and future demand for service which could not otherwise be provided in a more cost-effective manner through energy conservation programs and measures

and energy efficiency and load management measures, including but not limited to those developed pursuant to the provisions of subsection 209(d), section 218c, and subsection 218(b) of Title 30;

(c) will not adversely affect system stability and reliability;

(d) will result in an economic benefit to the state and its residents;

(e) will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment, the use of natural resources, and public health and safety, with due consideration having been given to the criteria specified in 10 V.S.A. §§ 1424a(d) and 6086(a)(1) through (8) and (9)(K), and greenhouse gas impacts;

(f) is a non-utility project and criterion b(6) is therefore inapplicable;

(g) is consistent with the *Vermont Twenty-Year Electric Plan*;

(h) does not involve a facility affecting or located on any segment of the waters of the State that has been designated as outstanding resource waters by the Water Resources Board;

(i) does not involve a waste-to-energy facility; and

(j) can be served economically by existing or planned transmission facilities without undue adverse effect on Vermont utilities or customers.

I recommend that the Board approve the proposed project and issue a CPG for construction of the proposed Project with the conditions set forth in the proposed Order and CPG, below.

### **VIII. HEARING OFFICER DISCUSSION**

The Petitioner, the DPS, the Town, and the Neighbors have filed comments on the Proposal for Decision. I have adopted two changes to the proposal for decision in response to comments from RRE and from the Neighbors and have made changes to two separate findings as a result.

First, RRE commented that it is a "manager-managed" limited liability company, not a "member-managed" limited liability company as it was originally described in finding 1.<sup>74</sup> Accordingly, I have changed finding 1 so that it correctly describes RRE as a manager-managed limited liability company.

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74. Letter from Danielle M. Changala, Esq., to Susan M. Hudson, Clerk of the Board, dated December 4, 2014.



Second, the Neighbors have brought to my attention an error in finding 181 which originally stated that the plantings along the northern edge of the Project boundary would be allowed to grow to a height of up to 40 feet. However, the neighbors correctly point out that the revised vegetative screening plan relies on Shadblow Serviceberry trees rather than Red Maples along the northern boundary.<sup>75</sup> The Shadblow Serviceberry trees will grow to a height of 8-10 feet. I have corrected finding 181 to reflect this fact.

I have incorporated the changes described above in this Proposal for Decision and, because they are not adverse to any party's interest, pursuant to 30 V.S.A. § 811, I also conclude that the proposal need not be reissued to the parties for comment.

The remaining issues raised by RRE, the DPS, the Town, and the Neighbors are substantive in nature; thus, they will be considered directly by the Board.

Dated at Montpelier, Vermont, this 6th day of January, 2015.

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s/ John J. Cotter

John J. Cotter, Esq.  
Hearing Officer

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75. Neighbors Exceptions and Brief at 12.

## **IX. BOARD DISCUSSION**

On December 4, 2014, RRE, the Department, the Town, and the Neighbors each filed comments on the Hearing Officer's Proposal for Decision ("PFD"). Both the Town and the Neighbors requested an opportunity to present oral argument before the Board.<sup>76</sup> On January 7, 2015, in response to the requests of the Town and the Neighbors, the Board convened and heard oral argument on the PFD.

On January 26, 2015, the Board conducted a site visit to the Project parcel and several surrounding properties that would have views of the Project.

Having considered all of the comments on the PFD, as well as the positions presented during the oral arguments and our observations from the site visit, we hereby adopt the Hearing Officer's PFD with one exception discussed below, and we revise a condition related to the Project's aesthetic impacts to better preserve the screening effects of some existing vegetation.

### **A. ISSUES RAISED BY MULTIPLE PARTIES**

Several substantive issues were raised by more than one party, so we will address them on an issue-by-issue basis below, taking into account the specific position advocated on each issue by each party.

#### **1. Orderly Development of the Region**

In the PFD, the Hearing Officer recommends that we find the Project would not unduly interfere with the orderly development of the region because the Project is largely consistent with the Rutland Town Plan, and the Project's impacts primarily are local, rather than regional in nature.<sup>77</sup>

Both the Town and the Neighbors contend that the Project would unduly interfere with the orderly development of the region because the Project is contrary to the Standards and is not supported by the Town Plan. Both of these parties also argue that the Hearing Officer failed to

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76. Town Comments at 1; Neighbors Comments at 1.

77. PFD at 11, 13-19.

give due consideration to the recommendations of the Town, which came in the form of the Standards.<sup>78</sup>

The Town contends that the PFD fails to afford the Standards, the Town Plan, and the Town's witnesses the due consideration required by 30 V.S.A. § 248(b)(1).<sup>79</sup> According to the Town, the lack of due consideration given to the Town's recommendations is best exemplified by the PFD's treatment of the subject of primary agricultural soils. The Town asserts that its goal is to preserve for agricultural use as much acreage as possible containing primary agricultural soils, and in support of this goal, the Plan discourages development on lands containing primary agricultural soils. The Town argues that the Standards are another needed step in preserving these soils for agricultural use because ground-mounted solar arrays naturally gravitate to large, open areas – areas that may contain primary agricultural soils.<sup>80</sup> According to the Town, there is no rush to develop housing within its borders, so the Plan only "discourages" development on primary agricultural soils. On the other hand, the Town asserts that there is a new and sudden rush to construct photovoltaic facilities that wasn't present when the Plan was adopted, giving rise to the need for the Standards and their prohibition of ground-mounted solar arrays on any parcel that consists of primary agricultural soils.<sup>81</sup>

The Town further contends that the Standards do not unreasonably inhibit the development of photovoltaic electric generation facilities, but rather guide them to appropriate locations within the Town. According to the Town, only 22% of land within the Town consists of prime or statewide agricultural soils, leaving 78% of land in the Town consisting of soils not primarily suited to farming, and therefore presumably eligible for the placement of ground-mounted solar arrays.<sup>82</sup>

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78. Town Comments at 2-8; Neighbors Comments at 2-10.

79. Town Comments at 3.

80. Tr. 1/7/15 at 31.

81. Tr. 1/7/15 at 28, 34.

82. Town Comments at 3; exh. Pet. Reb. RV-1 at 34.

The Town also asserts that the PFD improperly concludes that differences between the Plan and the Standards as they relate to renewable energy development within the Town means that the Standards are in conflict with the Plan. Rather, the Town states, the differences are to be expected because events have taken the Town from theoretical possibilities to practical realities with regard to solar development, causing the Town's policies to evolve from general statements of support for renewable energy in the Plan to the specific guidelines in the Standards designed to channel solar projects in what the Town believes is an appropriate manner.<sup>83</sup>

Lastly, the Town argues that the PFD erroneously rejects the Town's testimony that the Project would negatively impact the orderly development of the surrounding area. According to the Town, the PFD's rejection of the evidence as based on speculation is inappropriate because an analysis of orderly development requires consideration of future events. The Town points out that its witness on orderly development, Howard Burgess, is a lister with 20 years of experience who is therefore qualified to assess future land uses. The Town is critical of the PFD's rejection of Mr. Burgess' testimony in light of the PFD's reliance on the testimony of RRE's aesthetics expert, Mark Kane, with respect to whether the Project would be shocking or offensive to the average person.<sup>84</sup>

The Neighbors contend that the Plan's support for renewable energy projects and the Plan's designation of the Project parcel as Industrial/Commercial do not support a conclusion that the Project would not unduly interfere with orderly development of the region.<sup>85</sup>

First, the Neighbors assert that the Plan's express support for renewable energy consists of uninformed and meaningless generalizations because the Plan was drafted at a time when the Town had no reason to expect the level of solar facility development that has been occurring recently in the area. As a result, the Neighbors state that the Plan's support for renewable energy cannot be used as a basis to support approval of the Project.<sup>86</sup>

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83. Town Comments at 4-5.

84. Town Comments at 8-10.

85. Neighbors Comments at 2.

86. Neighbors Comments at 2-4.

Second, the Neighbors argue that the Industrial/Commercial designation of the Project parcel in the Plan's Future Land Use Map does not support a finding of no undue interference with orderly development because the map is designated for planning purposes only and is not sufficiently accurate to be used for any other purpose, such as zoning.<sup>87</sup> In support of this contention the Neighbors point to the fact that a conservation district to the west of the Project parcel is separated from the parcel by a straight line, placing a portion of a larger wetland complex within the land designated as Industrial/Commercial.<sup>88</sup>

The Neighbors are also critical of the PFD's reconciliation of language in the Plan's section that describes the characteristics of lands with the Industrial/Commercial designation and state that the Plan contains only statements of goals and is not meant to be used to control or restrict development. The Neighbors conclude that even if the Project were consistent with the Plan it would be meaningless because § 248(b) requires the Board to give due consideration to the recommendations of the Town, which, according to the Neighbors, are not found in the Plan but are instead found in the Standards adopted by the Town in October of 2013.<sup>89</sup>

The Neighbors also assert that the Board should not attempt to resolve any differences between the Plan and the Standards, but should instead apply the Standards in this proceeding because they represent the most recent expression of the Town's goals with respect to solar facilities.<sup>90</sup>

The Neighbors also find fault with the PFD's analysis of the setbacks in the Standards and contend that the Board need not determine the reasonableness of the setbacks as a general matter, but need only determine whether the required 200-foot setback is reasonable when applied to the Project.<sup>91</sup>

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87. The Town of Rutland does not have zoning.

88. Neighbors Comments at 4-5.

89. Neighbors Comments at 7.

90. Neighbors Comments at 9.

91. Neighbors Comments at 9-10.

Lastly, the Neighbors contend that the PFD did not properly apply the testimony of their expert witness, Dr. Benjamin Luce. The Neighbors contend that Dr. Luce's testimony demonstrates that "[a] poorly developed site contributes to the downfall of the other properties in its immediate vicinity," and "[i]n the course of time you may have blight." A proper reading of Dr. Luce's testimony, according to the Neighbors, would compel the conclusion that the Project is inconsistent with existing land uses in the area and would not contribute to orderly development.<sup>92</sup>

We have reviewed the comments filed by the Town and the Neighbors and decline to disturb the Hearing Officer's recommended findings under the orderly development criterion.

Criterion (b)(1) requires the Board to find that a project would not unduly interfere with the orderly development of the region. In making such a finding, the Board is statutorily required to give due consideration to the recommendations of the municipal and regional planning commissions, the recommendations of the municipal legislative bodies, and the land conservation measures contained in the plan of any affected municipality.<sup>93</sup>

The Town points to the PFD's discussion of primary agricultural soils in support of its contention that the Hearing Officer failed to give the statutorily required due consideration to the Standards' prohibition against the installation of ground-mounted solar arrays on lands containing primary agricultural soils. We do not find the Town's position to be persuasive. The PFD contains extensive analysis supporting the Hearing Officer's recommended finding that the Project's non-conformance with the Standards' prohibition against the installation of ground-mounted solar arrays on lands containing primary agricultural soils would not result in undue interference with orderly development of the region. That analysis reflects the due consideration afforded by the Hearing Officer to the Town's recommendations, and we agree with the Hearing Officer's reasoning.<sup>94</sup> The Hearing Officer correctly points out the tension

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92. Neighbors Comments at 10-11.

93. 30 V.S.A. § 248(b)(2).

94. The Vermont Supreme Court "has construed the phrase 'due consideration' in § 248(b)(1) to 'at least impliedly postulate[ ] that municipal enactments, in the specific area, are advisory rather than controlling.'" *In re Vermont Elec. Power Co., Inc.*, 2006 VT 370, ¶ 25, 179 Vt. 370, 385 (quoting *City of S. Burlington v. Vt. Elec. Power Co.*, 133 Vt. 438, 447 (1975)). Thus, provided the Board properly weighs and evaluates the recommendations of the

between the prohibition of ground-mounted solar arrays on lands with primary agricultural soils, and the lack of any such prohibition of any other type of development on those same lands – development that is more likely to be permanent and result in greater impacts to the agricultural quality of such soils than those associated with solar development. In light of the Town's apparent position that other types of development with greater impacts on primary agricultural soils would not have an undue impact on orderly regional development, we do not find fault with the Hearing Officer's reasoning that installation of the Project also would not result in such undue impact.

Nor are we persuaded by the Town's assertion that this prohibition in the Standards would not unreasonably inhibit the development of solar projects. According to the Town, only 22% of land within the Town is impacted by this prohibition, leaving a full 78% available for solar development. This, of course, assumes that the entirety of that other 78% of land in the Town is otherwise both available and suitable for solar development, an unlikely proposition. Additionally, the Standards not only prohibit placement of ground-mounted solar facilities on lands with primary agricultural soils, they also restrict solar development to the edges of fields without primary agricultural soils if such fields are suitable for agricultural purposes, while at the same time they impose for larger projects setbacks of 200 feet from any public road or property border.<sup>95</sup> Taken together, these restrictions would severely limit ground-mounted solar development on existing open land within the Town where the edges of open fields suitable for agricultural purposes are adjacent to or near public roads or property boundaries.

We also decline to reject the Hearing Officer's proposed finding based on the arguments advanced by both the Town and the Neighbors that the Board should not consider the differences between the Plan and the Standards described by the Hearing Officer in making his recommendation, but instead should simply apply the Standards in this proceeding because they were developed and adopted subsequent to the Plan. The Hearing Officer appropriately points

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Town in reaching its decision, it has given those recommendations "due consideration" in conformance with the statute even if the Board ultimately declines to accept those recommendations. *In re UPC Vermont Wind, LLC*, 2009 VT 295, ¶¶ 18 and 19, 185 Vt. 296, 305.

95. Exh. Town 1 at 6-7.

out differences between the Plan and the Standards as part of his due consideration of the Standards. In particular, we find the Plan's classification of the Project parcel as Industrial/Commercial to be at odds with the Standards' effective prohibition of ground-mounted solar development on that same parcel. The Hearing Officer's analysis of the differences between the Plan and the Standards demonstrates that he gave due consideration to the recommendations of the Town in this proceeding, after which, on balance, he reasonably concludes that the Project would not unduly interfere with orderly regional development.

We disagree with the Town's contention that the Hearing Officer erroneously rejected the testimony of its witness, Mr. Burgess. The discussion in the PFD demonstrates that the Hearing Officer considered Mr. Burgess' testimony, but did not find it sufficient to support the finding the Town seeks. Rather, the Hearing Officer found the testimony of other witnesses on the question of orderly development to be more convincing, and he therefore relied on that testimony in making his recommended findings on orderly development. Not only is this appropriate, it is a necessary component of a Hearing Officer's statutory duties.<sup>96</sup> We find no basis in the record to conclude that the Hearing Officer's decision on this point was erroneous.

It is unclear why the Neighbors think the Plan and its designation of the Project parcel as Industrial/Commercial have no relevance to this proceeding based on the concept that the Plan is a planning document only, and not a zoning bylaw. The Plan's designation of the Project parcel is relevant to the "due consideration" requirement in criterion (b)(1) because it evinces the Town's vision for future uses of the parcel. The Hearing Officer did not rely on the designation as controlling on this issue. Rather, he took it into account along with several other factors in giving "due consideration" to the Town's recommendations on orderly development. We disagree with the notion advanced by the Neighbors that the Plan's support for renewable energy projects does not in turn support in part the Hearing Officer's recommended finding. The Plan contains statements of support in both its energy objectives and energy strategies, and it was appropriate for the Hearing Officer to include these statements in his consideration of the Project under criterion (b)(1).

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96. See 30 V.S.A. § 8(a) - (c).



The Neighbors contend that the Hearing Officer failed to give "due consideration" to the Town's recommendations as found in the Standards, and not in the Plan. However, as discussed above in relation to a similar argument advanced by the Town, the Hearing Officer's proposed findings and discussion of orderly development demonstrate that he gave significant consideration to the Town's recommendations, including those contained in the Standards, in reaching his conclusion. The fact that he ultimately chose not to follow the recommendations in the Standards does not compel the conclusion that he ran afoul of the statutory requirement to afford the Standards "due consideration."<sup>97</sup>

Additionally, the Neighbors' argument regarding the reasonableness of the setbacks contained in the Standards is not persuasive. The Hearing Officer's analysis properly considered the impacts of the setbacks in the context of Vermont's legislated policy goals supporting the deployment of in-state renewable generation facilities. Those legislated policy goals inform the analysis of what is acceptable as orderly development in the region. The Hearing Officer correctly points out that the setbacks would place significant hurdles in the face of development that is supported by Vermont's legislature. Based on this consideration, the Hearing Officer further concluded that this Project's failure to conform to the setback requirements contained in the Standards would not result in undue interference with orderly regional development. We find no fault with either that analysis or conclusion.

During the oral argument on January 7, 2015, counsel for the Town stated that the setback requirements contained in the Standards were incorrect, representing that the setbacks should have been based on megawatts of project capacity rather than kilowatts of project capacity.<sup>98</sup> However, our decision would be no different even if the setbacks were based on megawatts of project capacity. The Hearing Officer recommends that we find that this 2.3 MW Project would not unduly interfere with the orderly development of the region even though it would not comply

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97. See *In re UPC Vermont Wind, LLC*, 2009 VT 295, ¶¶ 18 and 19, 185 Vt. 296, 305.

98. Tr. 1/7/15 at 25. This was the first time the Town raised this issue, even though it had opportunities to do so prior to the oral argument. At the technical hearing, a Town witness was asked questions about the setbacks, and in response confirmed the existence of a 200-foot setback for projects of 1.5 kW to 2 kW or greater. Tr. 8/22/14 at 42 (Ashcroft). Additionally, the PFD discussed the issue at some length and the Town did not raise the issue in its comments in response to the PFD. The Town also did not take any steps to correct the record after the oral argument and we are therefore left with the record as it stands.

with the 200-foot setback requirement because the Project is largely consistent with the Plan and the Project's impacts are primarily localized in nature. This is the same 200-foot setback requirement that would be applicable to this Project regardless of whether the Standards utilized megawatts or kilowatts of capacity in establishing the setbacks. For the reasons discussed herein, we agree with the Hearing Officer's recommendation.

Lastly, we disagree with the Neighbors that the Hearing Officer incorrectly applied the testimony of their witness, Dr. Luce. Dr. Luce conceded that no single utility-scale solar project is likely to have a regional impact, although numerous such projects throughout a town or region could.<sup>99</sup> This testimony is consistent with the Hearing Officer's conclusion that this particular Project's impacts would be largely localized in nature. We agree with the Hearing Officer that 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.

## **2. Aesthetics**

In the PFD, the Hearing Officer recommends that we find the Project would have an adverse, but not undue, impact on the aesthetics and scenic beauty of the area surrounding the Project site.<sup>100</sup>

Both the Town and the Neighbors assert that the Project would have an undue adverse impact on aesthetics.

The Town argues that undue aesthetic impacts from the Project will occur on the surrounding area for the same reasons it asserts that the Project would unduly interfere with the orderly development of the region.<sup>101</sup>

The Town is also critical of the PFD's reasoning regarding the applicability of the Standards to the aesthetics review in this proceeding. The Town contends that the PFD correctly

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99. Luce pf. at 3.

100. PFD at 44-55.

101. Town Comments at 10-11.

concludes that the Standards constitute a clear, written community standard,<sup>102</sup> but that it avoids their application to the Project by determining that the Standards are a *de facto* zoning bylaw and therefore cannot regulate a project being reviewed under § 248. According to the Town, this is unfair because Board precedent and numerous Act 250 cases have not recognized town plan language as a clear, written community standard when the language is broad and abstract. However, now that the Town has drafted language that is specific enough to avoid this fate, the PFD nonetheless recommends not recognizing the setbacks as a clear, written community standard because they bear all the hallmarks of a zoning bylaw.<sup>103</sup>

The Neighbors contend that the Project fails to meet the aesthetics criterion because it would violate a clear, written community standard, would be shocking or offensive to the average person, and because RRE has failed to take all reasonably available mitigating steps to reduce the Project's aesthetic impacts.

First, the Neighbors argue that the setback requirements contained in the Standards constitute a clear, written community standard which the Project would violate and therefore the Project would result in an undue aesthetic impact. The Neighbors assert that the PFD incorrectly concludes that the setback requirements in the Standards would function as a *de facto* zoning regulation if applied to the Project. According to the Neighbors, the Town is not attempting to utilize the setback requirements in the Standards to "regulate" the Project; it is simply providing the Board with a clear guideline for its consideration under this prong of the Quechee test. The Neighbors note that it would be difficult for a town to craft a clear and specific standard without it having the characteristics of a zoning bylaw, and state that in adopting the Standards the Town was not attempting to circumvent the exemption from zoning bylaws afforded to projects being reviewed under § 248.<sup>104</sup> The Neighbors also dismiss the PFD's conclusion that when

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102. The PFD does reject a number of reasons advanced by RRE and the Department for why the Standards should not constitute a clear, written community standard for aesthetics review in this proceeding. However, the ultimate recommendation is that the Board determine that the setbacks contained in the Standards do not constitute a clear, written community standard because of their zoning bylaw characteristics. *See* PFD at 47.

103. Town Comments at 11-12.

104. Neighbors Comments at 13-14.

supporting plans are in conflict with town plans, the supporting plans should give way, contending that the more recent and specific standards should always apply.<sup>105</sup>

Second, the Neighbors assert that the Project would be shocking or offensive to the average person in the position of the Neighbors, as opposed to the average member of the general public. The Neighbors argue that the Board's decision in the *Halnon* case, which considered the reaction of an average person viewing the proposed net-metered wind turbine from the perspective of a nearby landowner, is more faithful to the decision in *Quechee* than the approach taken by the PFD, which concludes that the adjoining landowners are not considered to be "average" for the purposes of aesthetics analysis because of their individualized perspectives.<sup>106</sup>

Lastly, the Neighbors assert that RRE has not met its burden to demonstrate that all reasonable mitigation measures were taken to reduce the Project's aesthetic impacts. The Neighbors are critical of the PFD because it concludes that adherence to the setback requirements contained in the Standards would fundamentally alter the nature of the Project, making compliance with the setbacks an unreasonable mitigation measure. The Neighbors assert that consideration should have been given to some lesser setbacks as possible mitigation that might both be deemed reasonable and allow for some level of potentially effective screening for views from the Neighbors' properties.<sup>107</sup> The Neighbors argue that the reason additional mitigation cannot be done without reducing the size of the Project is because the Project uses up all the developable space on the Project parcel. According to the Neighbors, this is the result of poor site selection, and the Board should take site selection into account when reviewing the aesthetic impacts of projects under § 248.<sup>108</sup>

The Town's first argument – that the Project fails the aesthetics criterion for the same reasons the Town believes that it fails the orderly development criterion – is not sufficiently

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105. Neighbors Comments at 14.

106. Neighbors Comments at 15-16.

107. The Project as proposed would include setbacks of approximately 64 feet to the nearest panels from Cold River Road.

108. Neighbors Comments at 6-8.

developed. The Town offers no analysis based on the evidentiary record to explain why the Project fails the aesthetics criterion; we therefore do not accept this argument.

The PFD reasons that the setback requirements in the Standards do not constitute a clear, written community standard in this proceeding. The Town disagrees. The Town believes it is caught in an impossible situation because if town plan language is too broad or abstract it is rejected as not being a clear standard, but if language is drafted that is specific enough to avoid this problem, it risks being rejected as an applicable standard because it will bear the hallmarks of a zoning bylaw.

The Town is incorrect in its characterization of its options. Act 250 cases and Board precedent have provided towns with guidance on what sort of language would constitute a clear, written community standard that would not rise to the level of a *de facto* zoning bylaw. For example, we have stated: "In order for a provision to be considered a clear, written community standard, it must be 'intended to preserve the aesthetics or scenic beauty of the area' where the proposed project is located and must apply to specific resources in the proposed project area."<sup>109</sup> Act 250 precedent directs that towns should draft language "to identify scenic resources that the community considered to be of special importance: a wooded shoreline, a high ridge, or a scenic back road, for example."<sup>110</sup> In this case, not only is the Project parcel not identified as a valued scenic resource, it is identified on the Town's Future Land Use Map as Industrial/Commercial. Under both Act 250 and Board precedent it was possible for the Town to draft language that would apply to this parcel in this proceeding, but the Town failed to do so.

It is on this point where we part ways with the Hearing Officer as noted at the beginning of this discussion. In the PFD he states, "The setbacks established by the Standards apply to any parcel within the Town where a ground-mounted solar array is being proposed. Therefore, by definition the Project parcel is identified as subject to the setback requirements."<sup>111</sup> While we agree that the setbacks established by the Standards would apply to this parcel by virtue of their

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109. *Petition of Georgia Mountain Community Wind, LLC*, Docket 7508, Order of 6/11/10 at 52 (citing *In re Halnon*, NM-25, Order of 3/15/01 at 23-24 and n.5).

110. *Re: Town of Barre*, #5W1167-EB, Findings of Fact, Conclusions of Law, and Order at 21 (June 2, 1994).

111. PFD at 50.

zoning-bylaw nature, we do not agree that they would constitute a clear, written community standard for purposes of aesthetics review under § 248 because the Standards fail to identify this particular parcel as a scenic resource worthy of protection.

For the same reasons just discussed, we also disagree with a similar argument put forth by the Neighbors regarding the difficulty of drafting a clear standard. Additionally, we do not accept the Neighbors' reasoning about the applicability of the Standards in this proceeding based on the intent of the Town in adopting them. It is immaterial to the question at hand that the Town's intent was to provide the Board with guidance rather than to regulate the Project in circumvention of the statutory exemption from zoning afforded to projects being reviewed under § 248. What is material is that the setback requirements found in the Standards would effectively act as a zoning bylaw, and their application in this proceeding would circumvent the statutory exemption from zoning found in 24 V.S.A. § 4413(b).<sup>112</sup>

The Neighbors cite *In re Halnon* in support of their contention that zoning bylaws are eligible for consideration as clear, written community standards in aesthetics reviews under § 248. We acknowledge that in that case the Board considered language from the town's zoning ordinance as part of its determination that the proposed project did not violate a clear, written community standard.<sup>113</sup> However, since that time, Board precedent has been clear that zoning bylaws are not an appropriate source for clear, written community standards in § 248 proceedings.<sup>114</sup> Consistent with that precedent, we decline to apply the setback requirements in the Standards in this proceeding because of their *de facto* zoning-bylaw nature.

We also disagree with the Neighbors that the Project would be shocking or offensive to the average person. All three aesthetics experts in this case testified that the Project would not be shocking or offensive to the average person, including the expert retained by the Neighbors.

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112. *Cf. In re Vermont Gas Systems, Inc.*, 150 Vt. 34, 39 (1988) ("An administrative agency's rule-making authority cannot support an expansive interpretation of its own powers."); *In re Agency of Administration*, 141 Vt. 68, 76 (1982) ("An administrative agency may not use its rule-making authority to enlarge a restrictive grant of jurisdiction from the legislature.").

113. *In re Halnon*, NM-25, Order of 3/15/01 at 23-24.

114. *See e.g., Petition of Georgia Mountain Community Wind, LLC*, Docket 7508, Order of 6/11/10 at 53; *Joint Petition of Green Mountain Power Corporation, et al*, Docket 7628, Order of 5/31/11 at 86-87; *Petition of North Springfield Sustainable Energy Project LLC*, Docket 7833, Order of 2/11/14 at 97.

Their opinions were based on analyses of public views from Cold River and Stratton Roads. This approach is consistent with longstanding Board precedent regarding who constitutes an average person for purposes of this analysis.<sup>115</sup>

The Neighbors again rely on *Halnon* for the proposition that the perspective of the average person in this case should be that of one of the adjoining landowner Neighbors. We acknowledge that in *Halnon* the Board considered the impacts of the proposed project on neighboring residents. However, the Board's determination in *Halnon* was reached in the context of a failure by the project proponent to adequately explain why the proposed turbine needed to be placed directly in the neighbors' viewshed, when other possible locations for the turbine were available on the parcel of land controlled by the proponent, the use of which would mitigate those impacts without unreasonably affecting the project.<sup>116</sup> Unlike the project proponent in *Halnon*, in this case RRE has sought to mitigate the aesthetic impacts of the Project through a vegetative screening proposal. Additionally, as discussed below, in recognition of the unique circumstances of the Project, we have taken into account the Project's visual impacts on the surrounding property owners and have decided to impose some additional mitigation intended to soften those impacts to the extent possible without unreasonably altering the nature of the Project. It is also important to note again that Board precedent, since both before and after the *Halnon* decision, has consistently relied on the perspective of the public at large when viewing proposed projects from public view points, and not on the perspective of adjoining landowners with more particularized interests, as the average person for purposes of aesthetics review under § 248.<sup>117</sup>

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115. See e.g., *Petition of Green Mountain Power Corporation*, Docket 5823, Order of 5/16/96, finding 128 at 26; *Petition of EMDC, LLC*, Order of 7/17/06 at 102-03 (discussing project impacts on members of the public); *Amended Petition of UPC Vermont Wind, LLC*, Docket 7156, Order of 8/8/07, findings 179-186 at 62-63 (findings detailing project visibility from public viewpoints); *Petition of Georgia Mountain Community Wind, LLC*, Docket 7508, Order of 6/11/10, findings 147-52 at 48-49 (findings detailing project visibility from public viewpoints); *Petition of Barton Solar LLC*, Docket 8148, Order of 6/30/14 at 38-39; *Application of Sun CSA 9*, CPG #NM-4298, Order of 11/7/14 at 8-9; *Application of Shelburne Bay Senior Living Center, LLC*, CPG #NM-5016, Order of 11/18/14 at 9-10; *Application of Beach Properties Inc.*, CPG #NM-5006, Order of 11/25/14 at 9-10.

116. *In re Halnon*, NM-25, Order of 3/15/01 at 24-28.

117. See note 40.

The Town raises the issue about the aesthetic impact of the Project on the average person in its comments on the PFD's treatment of orderly development. The Town is critical of the PFD, contending that the Hearing Officer relied on nothing more than the "divined . . . personal introspection" of RRE's aesthetics expert, Mr. Kane. We disagree. The Hearing Officer relied on the testimony of three expert witnesses, one of whom testified in opposition to the Project on behalf of the Neighbors, to support his finding that the Project would not be shocking or offensive to the average person. With respect to Mr. Kane, his opinion was not based on "divined personal introspection." It was based on Mr. Kane's expert consideration of numerous factors such as the limited number of public vantage points, the limited duration of views from those vantage points, the effectiveness of the proposed vegetative screening, and the low profile of the Project.<sup>118</sup>

Lastly, the Neighbors' criticisms of the PFD's analysis in regard to reasonable mitigating steps are largely unfounded. However, based on our review of the evidence, which was informed by our observations during the January 26, 2015, site visit, we are revising proposed condition 21 to prevent degradation to the effectiveness of the existing vegetative screening on the eastern edge of the Project site along Cold River Road.

The Neighbors criticize the PFD's conclusion that increasing the proposed approximately 64-foot setback to the 200-foot setback required by the Standards would so reduce the size and capacity of the Project as to render it a fundamentally different project.<sup>119</sup> However, we agree with the Hearing Officer that the evidence of record, particularly exhibit Pet. NSK-5, demonstrates that the capacity of the Project would have to be reduced to such a degree to comply with the greater setbacks that it would "frustrate the project's purpose" and therefore be unreasonable.<sup>120</sup>

We also disagree with the Neighbors' contention that setback-based mitigation cannot be deemed unreasonable in the absence of evidence that some lesser setbacks than those contained

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118. PFD at 54.

119. See PFD at 52 (citing *Petition of Charlotte Solar, LLC*, Docket 7844, Order of 1/22/13 at 27).

120. *Petition of Charlotte Solar, LLC*, Docket 7844, Order of 1/22/13 at 27 (citing *In re Stokes Communications Corp.*, 164 Vt. 30, 39 (1995)).



in the Standards are not feasible. RRE put on evidence in support of the setbacks that it proposed in this proceeding. The Neighbors countered, asserting that the 200-foot setback contained in the Standards was the correct setback to which the Project should be required to adhere, rather than the approximately 64-foot setback to the nearest panels proposed by RRE. The PFD simply resolves the question of the reasonableness of these proffered setbacks based on the evidentiary record developed by the parties, including the Neighbors. The Neighbors did not introduce evidence about the possibility of lesser setbacks.<sup>121</sup>

We also find the Neighbors' argument regarding site selection to be without merit. The question before us is whether RRE has engaged in all reasonable mitigation with respect to the parcel of land under its control, not whether there are other parcels of land that would allow additional mitigation for a project of similar size. With one exception discussed immediately below, we find that RRE has met this obligation.

The Hearing Officer correctly describes Board precedent that holds that while the aesthetics criterion does not guarantee that views of the landscape will never change, it does require that reasonable consideration be given to the visual impacts on neighboring landowners.<sup>122</sup> We also agree with the Hearing Officer that there exist no reasonable mitigating measures for this Project that would screen all views from the surrounding properties. However, we are concerned that the vegetative screening plan proposed by RRE will actually degrade the effectiveness of the existing vegetative screening for views from at least one residence on the eastern side of Cold River Road due to its elevated location. Accordingly, we are requiring RRE to amend its vegetative screening plan to preserve any existing vegetation along the eastern edge of the Project site that is greater in height than the plantings in its proposal.

We understand that this requirement may result in shading impacts to some panels for some portion of the day along the eastern edge of the Project. We leave it to RRE to determine whether it makes more sense to install the same number of panels it envisions in its proposal,

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121. The appropriate time to have advanced this position would have been in the Neighbors' prefiled testimony, which would have allowed RRE an opportunity to respond.

122. PFD at 53 (quoting *Petitions of Vermont Electric Power Company, Inc. (VELCO) et al.*, Docket 6860, Order of 1/28/05 at 140 (citations omitted)).

with some operating at a lesser output than expected, or to install fewer panels with a correspondingly increased setback from Cold River Road to avoid potential shading impacts.

We emphasize here that we are imposing this requirement due to two factors unique to this Project. First, the Project parcel sits at the bottom of a geographical bowl with several residences perched on the surrounding higher elevations in close proximity to the Project site. Second, there already exists some measure of vegetative screening along the easterly edge of the Project site, the effectiveness of which would be degraded for at least one of these residences if we failed to impose this requirement. While we find RRE's screening proposal to be generally reasonable, the particular facts of this case cause us to conclude that when reasonable consideration is given to surrounding landowners, RRE's proposal must be amended so that the effectiveness of the existing vegetative screening be maintained, rather than degraded, as part of RRE's mitigation strategy.

Accordingly, we amend proposed condition 21 as follows:

Except as described herein, RRE shall install and maintain aesthetic plantings on the Project site as depicted in exhibit Pet. Reb. MK-5. However, RRE shall not remove any existing vegetation along the western edge of the north/south segment of Cold River Road that is greater in height than that which would be planted under RRE's vegetative screening proposal, but instead shall maintain that existing vegetation as part of its vegetative screening proposal. In the event any of the existing vegetation that is taller than that proposed in exhibit Pet. Reb. MK-5 dies, RRE shall replace it with vegetation of a similar height. Prior to implementing its vegetative screening proposal, RRE shall survey and document through photographs the extent, location, and height of all existing vegetation along the western edge of the north/south segment of Cold River Road that is greater in height than that which would be planted under RRE's vegetative screening proposal evidenced in exhibit Pet. Reb. MK-5. The results of this survey and documentation shall be filed with the Board prior to implementation of RRE's vegetative screening proposal.

### **3. Historic Sites**

The Neighbors contend that RRE failed to meet its burden of proof regarding the Project's impacts on two nearby historic structures.<sup>123</sup> According to the Neighbors, RRE's historic

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<sup>123</sup> The Town also asserts that the Project would have an undue adverse impact on historic resources but provides no analysis beyond that set forth in its comments on orderly development of the region. *See* Town Comments at 10-11.

resources expert, Catherine Quinn, addressed only one of four issues that need to be addressed in order to determine whether an adverse impact on historic resources is also undue. The Neighbors argue that, as a result, the PFD's conclusion that the Project would not have an undue adverse impact on historic resources is without evidentiary support.<sup>124</sup>

We find the Neighbors' argument unpersuasive because the Hearing Officer properly relied on competent evidence in the record to support his proposed finding, including a concurrence by the Vermont Division for Historic Preservation that the Project would have no undue adverse impact on the nearby historic resources.<sup>125</sup> It is immaterial whether that evidence came from Ms. Quinn or some other source.

#### **4. Decommissioning Fund**

RRE and the Department each filed comments on the initial amount of funding that the Board should require for the decommissioning fund.

RRE contends that the initial decommissioning fund amount should be determined on a per-MW basis of the Project's capacity. Specifically, RRE requests that the Board calculate the initial amount of the fund using \$50,000 per MW of capacity. According to RRE, establishing the amount using this formula would be consistent with prior Board decisions approving decommissioning funds for solar generating facilities. RRE acknowledges that it provided a calculation of the estimated costs to decommission the Project that was in excess of its recommended \$50,000 per MW, but states that "estimates are not an exact science," and requests that the Board impose RRE's proposed initial funding amount.<sup>126</sup>

The Department believes that the initial decommissioning fund amount should be based on the full estimated cost to decommission the Project, as calculated by RRE, without netting out any salvage value for Project components. The Department requests that certain language be added to proposed condition 27 to make clear that the initial decommissioning fund amount should not net out any salvage value, and to specify exhibit Pet. RV-2 as the source for the

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124. Neighbors Comments at 19-20.

125. PFD at 58-59.

126. RRE Comments at 2.

calculation in determining that amount.<sup>127</sup> The Department also asks that footnote 67 of the PFD, which describes a revised initial funding amount provided by RRE, be deleted because of a lack of record evidence to support it.

We reject RRE's proposal to calculate the initial decommissioning fund amount on a \$50,000-per-MW basis. Contrary to RRE's assertion, calculating the initial funding amount in this manner would not be consistent with Board precedent. Consistency with Board precedent requires that the initial funding amount be based on the actual estimated costs of decommissioning without accounting for any salvage value associated with decommissioned components. Accordingly, we accept the Hearing Officer's recommendation on this point. We also reject RRE's suggestion that we depart from our prior practice because "estimates are not an exact science." RRE represented that it is "knowledgeable and experienced with solar projects and cost estimating procedures."<sup>128</sup> Therefore, we see no basis to reduce the initial funding amount from the calculated costs provided by RRE.

With respect to the Department's comments regarding edits to proposed condition 27, we conclude that the requested edits are consistent with the recommendations of the Hearing Officer and may serve to provide greater clarity and we therefore adopt them with one change. We decline to use the reference to exhibit Pet. RV-2 for two reasons. First, the cost calculation that accompanies exhibit Pet. RV-2 is net of salvage value and does not contain any specific calculations for the amount of salvage value to be brought back into the initial funding amount. Second, exhibit DPS Cross-11 contains all the necessary information to calculate the initial funding amount, and the net value to which the salvage value amounts must be added is slightly higher than the net value in exhibit Pet. RV-2, resulting in a slightly greater initial funding amount. Accordingly, condition 27 shall read:

Prior to the commencement of site preparation or construction, RRE shall file with the Board and obtain Board approval of an amended decommissioning plan reflecting the revised initial funding amount for the decommissioning fund set forth in exhibit DPS Cross-11. The funding amount shall represent the full estimated costs of decommissioning and shall not net out any estimated salvage

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127. Department Comments at 3-4.

128. Exh. Pet. RV-2 at 2.

value for Project infrastructure. The plan shall contain a detailed estimate of the costs of decommissioning, covering all of the activities specified in the decommissioning plan. The plan shall certify that the cost estimate has been prepared by a person(s) with appropriate knowledge and experience in photovoltaic generation projects and cost estimating.

We decline to remove footnote 67 as requested by the Department. The Department contends that there is no basis in the evidentiary record for the revised funding amount described in that footnote, which is based on a revised calculation provided by RRE in a discovery response. The Department asserts that the only exhibits of record relevant to discovery on the issue of the decommissioning fund are exhibits DPS Cross-1, -2, and -3, which do not provide support for the footnote, and the footnote should therefore be deleted.<sup>129</sup>

Contrary to the Department's assertions, the revised funding amount cited in footnote 67 is found in the evidentiary record in exhibit DPS Cross-11 as RRE's calculated costs of decommissioning net of salvage value. This is the same exhibit that the Department cites in its comments to demonstrate that RRE utilized a salvage value of \$96,225 in its calculations.<sup>130</sup> Additionally, exhibits DPS Cross-1, -2, and -3 do not address the decommissioning fund at all.<sup>131</sup> Rather, they are discovery requests and responses discussing the question of whether the proposed fencing for the Project would comply with the NESC. Accordingly, we decline to remove footnote 67.

## **B. ISSUES RAISED BY INDIVIDUAL PARTIES**

### **1. RRE**

#### **A. Finding 82**

RRE requests that proposed finding 82 be amended to clarify that the Project's noise levels would be perceived by someone walking north along Cold River Road as comparable to those of a quiet rural area, and quieter than a library.<sup>132</sup>

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129. DPS comments at 4-5.

130. DPS Comments at 4.

131. Exh. DPS Cross-3 was never actually moved or admitted into the evidentiary record. *See* tr. 8/20/14 at 127.

132. RRE Comments at 1.

Finding 82 currently reads:

From Cold River Road, the Project noise will be comparable to the noise generated by regular traffic. Tr. 8/20/14 at 50 (Viens).

RRE asks that the finding be amended to read:

From Cold River Road, the Project noise will be less than the noise generated by regular traffic and comparable to that of a quiet rural area. Tr. 8/20/14 at 50 (Viens); exh. Pet. RV-3.

After reviewing the transcript it appears that proposed finding 82 could be altered to be more precise with respect to Mr. Viens' testimony at the August 20, 2014, technical hearing. However, we decline to make the specific changes requested by RRE because they are not entirely consistent with that testimony, and in any event, are not necessary to support the conclusion that the Project would not result in any undue noise impacts. We amend proposed finding 82 so that it reads:

82. From Cold River Road, the Project would not create any more noise than the traffic pattern through that area. Tr. 8/20/14 at 50 (Viens).

#### B. Condition 22

Subject to RRE's ability to obtain a Title 19 permit from the Town of Rutland, proposed condition 22 imposes an obligation on RRE to underground a portion of the Project's interconnection facilities in a manner that eliminates the placement of three utility poles that would otherwise be necessary if the Project's interconnection infrastructure were to be located above ground.

RRE states that it would need temporary access to private land owned by Mr. Ted Hubbard to station the drill pad during installation of the underground cable. RRE requests that the Board amend the proposed condition to provide that it is waived in the event that RRE is not able to obtain reasonable approval from the landowner to temporarily use the landowner's property to install the cable.

We have considered RRE's request along with the condition as proposed by the Hearing Officer and determined that the condition is in need of amendment to meet RRE's concern as well as some concerns of the Board. We understand the Hearing Officer's intent in allowing for a waiver of the Title 19 permit requirement in the event the permit is not obtained, and we also

understand RRE's concern that it may not be able to obtain permission to locate the drill pad on private land. However, we also have an obligation to the public to ensure that RRE engages in good-faith efforts to obtain both the Title 19 permit and the necessary access to the private land described above before RRE is allowed to construct the interconnection above ground.

Accordingly, proposed condition 22 is amended to read:

RRE shall install the interconnection cable for the Project underground from the point of interconnection at Green Mountain Power Corporation's ("GMP") pole on the north side of Cold River Road as depicted in exhibit Pet. Supp. RV-7 and described in the supplemental prefiled testimony of Rod Viens dated September 29, 2014. In the event that either the Town of Rutland denies RRE's application for a Title 19 permit to install the cable underneath Cold River Road, or RRE is denied permission to access the private lands needed to locate the drill pad during installation, RRE shall apply to the Board for a waiver of this condition. Any such application shall include a request for a waiver and be supported by an affidavit signed by an authorized representative of RRE with personal knowledge and experience, detailing the efforts undertaken by RRE to seek the Title 19 permit and/or permission to access the private lands needed to locate the drill pad during installation. If the Board is satisfied that RRE exhibited due diligence in its attempts to obtain the permit or to obtain permission to access to private lands, the Board will grant such a waiver.

### C. The Standards as a Clear, Written Community Standard

RRE also requests the Board to expand on the Hearing Officer's analysis with respect to supporting plans adopted pursuant to 24 V.S.A. § 4432. Specifically, RRE asks that we determine that supporting plans such as the Standards can never be considered a source for a clear, written community standard under the Quechee analysis because such plans undergo a less rigorous process of adoption than town plans undergo.<sup>133</sup>

We decline to make the determination requested by RRE. While we often look to town plans as a primary source for clear, written community standards when performing an aesthetics analysis, we have never ruled that town plans are the only possible source of such standards. Further, supporting plans adopted pursuant to 24 V.S.A. § 4432 must be adopted in furtherance of a town plan and, as noted by RRE, must be in conformance with the town plan.<sup>134</sup> To make a

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133. RRE Comments at 2.

134. See 24 V.S.A. §§ 4403(5) and 4432.

determination that a town plan can be a source for clear, written community standards, but that a supporting plan that implements and is in conformance with that town plan cannot be such a source, would be contradictory. Rather, we conclude that the Hearing Officer has struck the appropriate balance by determining that when the provisions of a town plan and a supporting plan are in conflict, the provisions of the town plan should prevail because the town plan will have undergone the more rigorous process of adoption required for those documents.

## **2. Department of Public Service**

### A. Condition 15

Proposed condition 15 states as follows:

Prior to commencing site preparation or construction, RRE shall obtain a signed certification from a Vermont-certified master electrician or Vermont-registered electrical engineer that the proposed fence as described in exhibit Pet. Joint-1 is compliant with the requirements of the National Electrical Safety Code and National Electrical Code, including a detailed explanation for why the proposed fencing specifically meets the requirements of each code. In the event RRE is unable to obtain such a certification, it may renew its request for a waiver of the requirements of PSB Rule 3.500 with respect to safety fencing.

The Department recommends that the final sentence of proposed condition 15 be removed so that RRE is unable to seek a waiver of the requirements of PSB Rule 3.500 with respect to safety fencing. According to the Department, RRE made numerous representations on the record that the fence would be NESC-compliant, and to permit RRE to subsequently seek a waiver of compliance with the NESC would be bad policy, allowing RRE to backslide on its obligations once a CPG has been issued.<sup>135</sup>

The Department is correct that the evidence of record supports a finding that the proposed fence would be compliant with the provisions of the NESC. In fact, the only testimony of record on this point is from RRE and wholly supports an unconditional finding to that effect. There is no contrary evidence in the record to support a different finding. We understand that the Hearing Officer included proposed condition 15 because RRE did not object to its imposition in its reply brief. Given the lack of objection from RRE, we will include the proposed condition in the final order and CPG and will strike the last sentence as requested by the Department. However, we

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135. Department Comments at 1-3.



note that the safety-fencing requirements of the NESC are applicable to the Project by virtue of PSB Rule 3.500. Board Rule 1.200 states, "Except where prohibited by statute or by the terms of the rule, itself, the Board may for good cause grant exceptions in particular cases to any provision of these rules." The final sentence of condition 15 as proposed by the Hearing Officer is simply a restatement of an avenue of relief afforded to any regulated entity under PSB Rule 1.200, and striking the sentence would not eliminate the ability of RRE to seek the type of waiver contemplated by that sentence.

However, we emphasize that if RRE were to seek such a waiver, RRE would be required to show cause why a waiver of the safety-fencing requirements of the NESC would be appropriate for this Project, and would need to do so in the context of its previous representations that the fence would be NESC-compliant.

#### B. Condition 23

The Department also recommends adding the phrase "the applicable sections of" prior to the words "the National Electrical Safety Code . . ." in proposed condition 23 to avoid any potential conflict between proposed conditions 15 and 23 should RRE seek and obtain a waiver of the safety-fencing requirements of the NESC. We believe that this is a useful clarification and adopt it.

### **3. Neighbors**

#### A. 3 V.S.A. § 812(a)

The Neighbors state that the PFD does not contain a proposed ruling on each finding of fact proposed by the parties in their briefs, which is a requirement for the Board's decision under 3 V.S.A. § 812(a).<sup>136</sup>

The Neighbors are correct that a final decision of the Board is subject to the requirement cited in 3 V.S.A. § 812(a). However, the PFD is not a final order and is therefore not subject to the requirement described by the Neighbors in their comments. Language addressing the requirements of 3 V.S.A. § 812(a) is included in our Order, below.

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136. Neighbors Comments at 2.

### B. Proposed findings 4 and 5

The Neighbors note that proposed findings 4 and 5, which provide some contextual information regarding the area immediately surrounding the Project parcel, do not mention the existence of the conservation district to the west of the Project site, or the Carrara residence which overlooks the Project site from the north side of Cold River Road.<sup>137</sup>

We note that the proposed findings are accurate as written, and that the Carrara residence is referenced in proposed finding 176. Nevertheless, we amend the two proposed findings because the changes suggested by the Neighbors provide some additional contextual detail regarding the area surrounding the Project site.

Finding 4 is revised to read:

4. The north and east sides of the Project site are bordered by Cold River Road. South and west of the Project site is a vacant wooded parcel, and to the southeast, abutting the Project, there is one home separated from the site by a mature hedgerow. West of the Project site is a conservation district which includes wetlands that extend onto the Project site. Viens pf. at 4; exh. Pet. Reb. RV-1 (Future Land Use map).

Finding 5 is revised to read:

5. Three additional residential structures are located along the east side of Cold River Road. The closest of these is located near the intersection of Cold River Road and Stratton Road, approximately 150 feet from the Project site. The second is about 280 feet away, near the midpoint of the Project's frontage on Cold River Road. The third has a driveway near the southernmost corner of the Project, but the residential structure is set over 500 feet away and up a hillside. Three other residences would have views of the Project, one located on Stratton Road just to the north of the intersection of Cold River and Stratton Roads, one located on a rise north of the east-west leg of Cold River Road, and one located near the northwest corner of the Project site. Exh. Pet. MK-2 at 5-6; exh. JV-2 at 3.

With the modifications described in this section, we adopt the findings, conclusions, and recommendations of the Hearing Officer.

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137. Neighbors Comments at 2.

**X. ORDER**

IT IS HEREBY ORDERED, ADJUDGED, AND DECREED by the State of Vermont Public Service Board ("Board") that:

1. The findings, conclusions, and recommendations of the Hearing Officer are hereby adopted, except as modified above. All findings proposed by parties that were not adopted by this Order are expressly rejected.
2. The construction and operation of a 2.3 MW AC solar electric generation facility to be located in the Town of Rutland, Vermont (the "Project"), by Rutland Renewable Energy, LLC ("RRE") will promote the general good of the State of Vermont in accordance with 30 V.S.A. § 248 and a certificate of public good ("CPG") to that effect shall be issued.
3. Construction, operation, and maintenance of the Project shall be in accordance with the plans and evidence as submitted in this proceeding. Any material deviation from these plans or a substantial change to the Project must be approved by the Board. Failure to obtain advance approval from the Board for a material deviation from the approved plans or a substantial change to the Project may result in the assessment of a penalty pursuant to 30 V.S.A. §§ 30 and 247.
4. RRE shall obtain any state and federal permits required for the Project and shall comply with all conditions set forth in any required permits.
5. RRE shall comply with the terms and conditions of the Memorandum of Understanding ("MOU") entered into with the Vermont Agency of Natural Resources, identified in the evidentiary record as exhibit Pet. Joint-1, and herein incorporated by reference.
6. The Project is certified as a Sustainably Priced Energy Enterprise Development Project.
7. Prior to commencing construction, RRE shall file with the Board, the parties, and the Town of Rutland a letter stating that it has fulfilled all requisite CPG conditions and that it intends to commence construction of the Project.
8. RRE shall restrict construction activities and related deliveries to the hours between 7:00 A.M. and 5:00 P.M. Monday through Friday and between 8:00 A.M. and 5:00 P.M. on Saturdays. No construction activities or deliveries shall occur on Sundays or state or federal holidays.

9. RRE shall comply with the terms and conditions of the authorization to discharge stormwater Notice of Intent No. 7151-9020 issued under Construction General Permit 3-9020 on March 13, 2014, for construction-related soil disturbance and for the discharge of stormwater runoff from construction activities. All Project construction and operation, where applicable, shall be performed in accordance with such permit.

10. RRE shall obtain and comply with the terms of an individual Vermont Wetland Permit prior to performing any site preparation or construction activities within the area designated as wetland on the Project site. All work performed in the wetland area shall be done in accordance with the terms and conditions of the Vermont Wetland Permit.

11. At least six months in advance of the Project's decommissioning, RRE shall contact the Vermont Wetlands Program for a jurisdictional determination as to whether the decommissioning activities require a Vermont Wetland Permit, in which case RRE shall obtain such permit prior to performing any decommissioning activities and comply with its terms and conditions. If a Vermont Wetland Permit is not required, RRE shall submit to the Vermont Agency of Natural Resources ("ANR"), sufficiently in advance of decommissioning, a wetlands restoration plan for approval as an allowed use (see current Section 6.23 of the Vermont Wetland Rules), for the removal of Project infrastructure. Decommissioning shall not occur without approval of the restoration plan. The restoration plan shall, at a minimum, contain the following elements:

- a. Identification of phasing and staging areas;
- b. Utilization of methods that prevent rutting in the wetland, including removal of structures during frozen or dry conditions, or use of swamp mats or similar techniques;
- c. Revegetation of all disturbed areas within the wetland and buffer zone with appropriate conservation seed mix(es); and
- d. Provisions for ANR inspection prior to and following site restoration.

12. A portion of the Class II wetland buffer is located within the Project's perimeter fence and is identified as the "vegetation management area" shown on exhibit Pet. NSK-5. Mowing within this area shall be limited to one time annually during dry conditions. In addition, there

shall be no removal of woody vegetation from this area. There shall be no other mowing or vegetation removal within the Class II wetland or buffer areas without the prior approval of the Vermont Wetlands Program.

13. The buried conduit connecting the southern and northern solar arrays shall be installed under the stream and the Class II wetland and buffer zone by utilizing a directional boring technique to avoid disturbance of these resources. The entry and exit points for the directional boring shall be located outside of the wetland and buffer zone. At the time of decommissioning, the conductors shall be pulled out of the conduit and all conduit deeper than one foot below grade shall be abandoned in place. Decommissioning activities associated with removal of the conductor and portions of the buried conduit shall be staged outside of the wetland and wetland buffer, and appropriate erosion controls shall be implemented as needed.

14. The Project is located between a mapped deer wintering area and summer habitat. RRE shall install wildlife exclusionary fencing around the solar arrays and other Project infrastructure in order to prevent deer, or other mammals, from entering and becoming trapped within the Project area. The fencing shall, at a minimum, comply with the following specifications:

- a. On level ground, the fence shall be at least 7 feet high; on sloping ground, the fence shall be 9-10 feet high;
- b. Woven mesh wire (with an opening of 4x4 to 6x8 inch) game fence is to be utilized for the entire height of the fence. Alternatively, two or more strands of 9- to 11-gauge smooth wire may be stretched at 4-6 inches above a 5-foot woven mesh wire game fence. Barbed wire is not necessary, nor recommended;
- c. Vertical stays shall not be more than 6 to 8 inches apart;
- d. The fence shall be secured and kept close to the ground level to avoid access by small animals and crawling deer. Depressions along slopes shall be filled with material or have secured mesh fencing in place; and
- e. Fence posts shall be set no more than 10 to 12 feet apart.

15. Prior to commencing site preparation or construction, RRE shall obtain a signed certification from a Vermont-certified master electrician or Vermont-registered electrical

engineer that the proposed fence as described in exhibit Pet. Joint-1 is compliant with the requirements of the National Electrical Safety Code and National Electrical Code, including a detailed explanation for why the proposed fencing specifically meets the requirements of each code.

16. RRE shall provide ANR with the following Project "as-built" information within 60 days of the commissioning date of the Project to assist the Agency with compiling and analyzing greenhouse gas impacts:

- a. Solar panel manufacturer and model;
- b. Solar panel cell technology (e.g., mono-Si, multi-Si, CdTe, etc.);
- c. Rated solar panel output (in watts);
- d. Number of solar panels installed;
- e. Array mounting type (fixed, 1-axis tracking, 2-axis tracking, ground, roof, other);
- f. For fixed or 1-axis tracking, panel orientation and mounting angle;
- g. Rack system manufacturer and model;
- h. Rack system components, including the number of aluminum rails, steel mounting posts, etc.;
- i. Number and type of any other mounting components (e.g., concrete ballasts and foundation blocks);
- j. Manufacturer, model, and number of inverters;
- k. Manufacturer, model, and number of transformers;
- l. Mass of concrete used (for ballasts, foundations, mounting pads, etc.);
- m. Percent of Portland cement composition of concrete;
- n. Description, quantity, and source of any recycled materials used (e.g., recycled content concrete, recycled aluminum racking, etc.);
- o. Amount (length) and gauge of wiring used for project;
- p. Components for connection to grid (circuit boxes, circuit breaker panels, metering equipment, etc.);
- q. Distance (e.g., truck miles traveled) for transport of system components to

site; and

r. Distance to grid connection.

17. By January 30 of each year, ANR may request that RRE provide an annual report for the previous calendar year of operations to ANR that shall contain the information set out below and will be used to assist ANR with compiling and analyzing greenhouse gas impacts; RRE will have 60 days from the date of ANR's request to supply the information. Should ANR not request the information set out below by January 30, RRE will not have any obligation to provide an annual report from the previous year of operations. The information to be provided includes the following:

- a. Electric generation in kWh for the prior year, broken down by month; and
- b. Any information about the replacement of PV panels, inverters, transformers, or a complete racking system. In instances of failure and replacement of equipment (e.g., PV panels, inverters, etc.), RRE shall provide descriptions of both the failed and replacement components at the same level of detail as required by the "as-built" reporting requirements of Condition No. 16, above. This provision does not require RRE to provide information about *de minimis* replacement of system components (e.g., replacement of racking system hardware) or information regarding regular maintenance activities.

18. Should ANR not request the information in Condition No. 17, above, in any two consecutive years after Project commissioning, RRE's reporting obligations will automatically cease.

19. ANR and RRE, by mutual agreement, may cancel RRE's reporting obligations at any time.

20. RRE shall use a non-toxic, bio-based coolant (FR3 or equivalent) for the Project transformer. RRE shall install a secondary containment moat sufficient to accommodate 150% of the transformer coolant volume. The secondary containment system shall be designed and constructed in accordance with the design depicted on exhibit Pet. NSK-6. The cover for the transformer vault shall be sealed as depicted in the vault details included in the prior referenced exhibit in order to prevent transformer coolant from entering the vault. RRE's operations and

maintenance contractor shall perform periodic inspections of the secondary oil containment system and maintain the system in good working order for the life of the Project.

21. Except as described herein, RRE shall install and maintain aesthetic plantings on the Project site as depicted in exhibit Pet. Reb. MK-5. However, RRE shall not remove any existing vegetation along the western edge of the north/south segment of Cold River Road that is greater in height than that which would be planted under RRE's vegetative screening proposal, but instead shall maintain that existing vegetation as part of its vegetative screening proposal. In the event any of the existing vegetation that is taller than that proposed in exhibit Pet. Reb. MK-5 dies, RRE shall replace it with vegetation of a similar height. Prior to implementing its vegetative screening proposal, RRE shall survey and document through photographs the extent, location, and height of all existing vegetation along the western edge of the north/south segment of Cold River Road that is greater in height than that which would be planted under RRE's vegetative screening proposal evidenced in exhibit Pet. Reb. MK-5. The results of this survey and documentation shall be filed with the Board prior to implementation of RRE's vegetative screening proposal.

22. RRE shall install the interconnection cable for the Project underground from the point of interconnection at Green Mountain Power Corporation's ("GMP") pole on the north side of Cold River Road as depicted in exhibit Pet. Supp. RV-7 and described in the supplemental prefiled testimony of Rod Viens dated September 29, 2014. In the event that either the Town of Rutland denies RRE's application for a Title 19 permit to install the cable underneath Cold River Road, or RRE is denied permission to access the private lands needed to locate the drill pad during installation, RRE shall apply to the Board for a waiver of this condition. Any such application shall include a request for a waiver and be supported by an affidavit signed by an authorized representative of RRE with personal knowledge and experience, detailing the efforts undertaken by RRE to seek the Title 19 permit and/or permission to access the private lands needed to locate the drill pad during installation. If the Board is satisfied that RRE exhibited due diligence in its attempts to obtain the permit or to obtain permission to access to private lands, the Board will grant such a waiver.



23. RRE shall perform all work on the Project in accordance with the applicable sections of the National Electrical Safety Code and National Electrical Code.

24. RRE shall enter into an Interconnection Agreement with GMP that conforms to the requirements of Public Service Board Rule 5.500 and shall be responsible for the cost of GMP's electrical system upgrades reasonably necessary to implement interconnection for the Project, including those identified in exhibit Pet. Supp. RV-1, and such other costs appropriately submitted to RRE.

25. RRE shall obtain any necessary transportation permits, including from the Vermont Agency of Transportation, and RRE shall conform to all permit conditions related to the delivery of materials and truck traffic associated with the construction of the Project.

26. Prior to the commencement of site preparation or construction, RRE shall file with the Board and obtain Board approval of a final executed letter of credit ("LC") from an A-rated financial institution or other financial institution approved by the Board. The LC shall be an irrevocable standby LC that: (i) is bankruptcy remote; (ii) includes an auto-extension provision (i.e., "evergreen clause"); and (iii) is issued solely for the benefit of the Board. No other entity, including RRE, shall have the ability to demand payment under the LC. The amount of the LC shall represent the full estimated costs of decommissioning and shall not net out any estimated salvage value for Project infrastructure.

27. Prior to the commencement of site preparation or construction, RRE shall file with the Board and obtain Board approval of an amended decommissioning plan reflecting the revised initial funding amount for the decommissioning fund set forth in exhibit DPS Cross-11. The funding amount shall represent the full estimated costs of decommissioning and shall not net out any estimated salvage value for Project infrastructure. The plan shall contain a detailed estimate of the costs of decommissioning, covering all of the activities specified in the decommissioning plan. The plan shall certify that the cost estimate has been prepared by a person(s) with appropriate knowledge and experience in photovoltaic generation projects and cost estimating.

28. RRE shall file an annual decommissioning fund status report with the revised estimated cost of decommissioning and any newly issued or amended LC as required by the decommissioning plan by January 31 of each year.

29. Upon approval by the Board, RRE shall implement the amended decommissioning plan and fund as described in the evidence submitted in this proceeding.

30. Prior to commencing operation, RRE shall file with the Board and parties a letter confirming that it has fulfilled all requisite CPG conditions and that it intends to commence operation of the Project.

Dated at Montpelier, Vermont, this 11<sup>th</sup> day of March, 2015.

<u>s/James Volz</u>	)	
	)	PUBLIC SERVICE
	)	
<u>s/John D. Burke</u>	)	BOARD
	)	
	)	OF VERMONT
<u>s/Margaret Cheney</u>	)	

OFFICE OF THE CLERK

FILED: March 11, 2015

ATTEST: s/ Susan M. Hudson  
Clerk of the Board

*NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: psb.clerk@state.vt.us)*

*Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and Order.*