STATE OF VERMONT PUBLIC UTILITY COMMISSION

Case No. 22-3427-PET

Petition of ER Danyow Road Solar, LLC for a
certificate of public good, pursuant to 30
V.S.A. § 248, for a 5 MW ground-mounted
solar array located in Sheldon, Vermont

Order entered:

PROPOSAL FOR DECISION

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I. INTRODUCTION

This case involves a petition filed by ER Danyow Road Solar, LLC ("ERDR" or the "Petitioner") with the Vermont Public Utility Commission ("Commission") requesting a certificate of public good ("CPG") under 30 V.S.A. § 248 authorizing the construction and operation of a 5.0 MW solar electric generation facility off Danyow Road in Sheldon, Vermont (the proposed "Project").

In this Proposal for Decision, I recommend that the Commission approve the Project and issue a CPG, subject to conditions.

II. <u>PROCEDURAL HISTORY</u>

On August 19 and 22, 2022, the Petitioner filed a petition with supporting testimony and exhibits (the "Petition") requesting a CPG to install and operate a 5.0 MW solar electric generation facility in Sheldon, Vermont.

On August 31, 2022, the Vermont Division for Historic Preservation ("DHP") filed a motion to intervene. I granted that motion from the bench at a scheduling conference held by videoconference on September 6, 2022.

On September 16, 2022, ERDR filed a memorandum of understanding ("MOU") between itself and DHP.¹

On September 23, 2022, the Vermont Department of Public Service ("Department") filed comments requesting that a site visit and public hearing be held in this case.

Also on September 23, 2022, Darlene A. Billado Barton, a neighbor to the Project, filed a motion to intervene. I granted Ms. Billado Barton's motion in part by order dated October 3, 2022.

On October 24, 2022, ERDR file the supplemental testimony of its witness Jake Clark and exhibit ERDR-TU-3.

On October 25, 2022, I conducted a site visit.

On October 26, 2022, I convened a public hearing by videoconference.

On November 7, 2022, ERDR filed the supplemental testimony of its witness, Michael Buscher, along with an updated landscape mitigation plan.

On November 16, 2022, ERDR filed a revised verson of exhibit ERDR-JC-10, its proposed decommisioning plan and letter of credit.

On January 11, 2023, ERDR filed an MOU between itself and the Vermont Agency of Agriculture, Food & Markets ("AAFM").²

On January 17, 2023, ERDR filed an MOU between itself and the Vermont Agency of Natural Resources ("ANR").³

¹ ERDR filed the MOU between itself and DHP as an "other document" in ePUC rather than as an exhibit. For the Commission to rely on the DHP MOU in reaching its decision in this case, it must be an exhibit that is admitted into the evidentiary record. Therefore, the DHP MOU will be referred to as exhibit ERDR-DHP-1 and will be admitted into the record, subject to objection, as if it had been filed as an exhibit.

² ERDR filed the MOU between itself and AAFM as an "other document" in ePUC rather than as an exhibit. For the Commission to rely on the AAFM MOU in reaching its decision in this case, it must be an exhibit that is admitted into the evidentiary record. Therefore, the AAFM MOU will be referred to as exhibit ERDR-AAFM-1 and will be admitted into the record, subject to objection, as if it had been filed as an exhibit.

³ ERDR filed the MOU between itself and ANR as an "other document" in ePUC rather than as an exhibit. For the Commission to rely on the ANR MOU in reaching its decision in this case, it must be an exhibit that is admitted into the evidentiary record. Therefore, the ANR MOU will be referred to as exhibit ERDR-ANR-1 and will be admitted into the record, subject to objection, as if it had been filed as an exhibit.

Also on January 17, 2023, the Department filed: (1) its determination under 30 V.S.A. § 202(f) that the Project is consistent with the 2022 Vermont Electric Plan, and (2) comments raising concerns with the aesthetic impacts of the Project.

On February 3, 2023, ERDR filed a second revised landscape mitigation plan.

Also on February 3, 2023, the Department filed the testimony of its witness Lucy Thayer and further comments stating that the revised landscape mitigation plan filed by ERDR that same day had addressed the Department's concerns regarding the aesthetic impacts from the Project.

On February 10, 2023, ERDR filed a second supplement to the testimony of its witness, Jake Clark.

On February 16, 2023, I issued a series of information requests to ERDR related to the issue of sound levels from the Project.

On February 23, 2023, ERDR filed a third supplement to the testimony of Mr. Clark as well as the testimony and exhibits of Greg Dixson.

Other than the public comments discussed below, no aditional filings were made with the Commission.⁴

No party has requested an evidentiary hearing or objected to the prefiled testimony and exhibits. Accordingly, the following prefiled testimony and exhibits are admitted as if presented at a hearing: prefiled testimony of Jake Clark, prefiled supplemental testimony of Jake Clark dated 10/24/22, prefiled second supplemental testimony of Jake Clark dated 2/10/23, prefiled third supplemental testimony of Jake Clark dated 2/23/23, and exhibits ERDR-JC-1 through 9 and ERDR-JC-10 revised; prefiled testimony of Timothy Upton and exhibits ERDR-TU-1 through 3; prefiled testimony of Michael Buscher, prefiled supplemental testimony of Michael Buscher dated 11/7/22, and exhibits ERDR-MB-1 and 2, including Appendices A through C, second revised Appendix D, and Appendix E; prefiled testimony of Greg Dixson and exhibits ERDR-GD-1 and 2; prefiled testimony of Lucy Thayer and exhibits PSD-LT-1 and 2;

⁴ If any party intended to oppose the petition, they were required to prefile their opposition testimony and a proposed litigation schedule no later than February 14, 2023. *See* Case No. 22-3427-PET, Order of 9/13/22. No such filings were received.

Department § 202(f) determination letter dated 1/17/23; and exhibits ERDR-DHP-1, ERDR-AAFM-1, and ERDR-ANR-1.⁵

III. <u>PUBLIC HEARING AND COMMENTS</u>

On September 6, 8, and 20, 2022, public comments on the Project were filed by Darlene A. Billado Barton, Hilarie Stiebris, and Anne B. Fleming, respectively. Each of these commenters expressed concerns about the aesthetic impacts from the Project and the loss of agricultural landscape. Ms. Billado Barton and Ms. Fleming both expressed concern over property value impacts from the Project, with Ms. Billado Barton also raising concerns over drainage from the Project, and Ms. Fleming raising concerns over potential health impacts.

Additionally, two members of the public attended and spoke at the public hearing held on October 26, 2022. Daniel Lussier, the landowner whose property would host the Project, described his efforts to seek input on the possibility of a solar project from surrounding neighbors going back approximately five years. Deric Lunna, a nearby landowner, stated that local residents are opposed to the Project and are concerned about potential Project impacts on the environment, the health of the local population, and property values.

Each of the issues raised by these commenters are addressed under the relevant criteria of Section 248 in the proposal for decision, below.

IV. FINDINGS

Based on the Petition and the accompanying record in this proceeding, I have determined that this matter is ready for decision. Based on the evidence of record, I report the following findings to the Commission in accordance with 30 V.S.A. § 8(c).

Description of the Project

1. ERDR is a Vermont limited liability company. Jake Clark, ERDR ("Clark") pf. at 2.

2. ERDR proposes to install and operate a 5 MW ground-mounted solar electric generation facility known as the Danyow Road Solar Project on approximately 27.79 acres of an approximately 36.20-acre parcel of land at 200 Danyow Road in Sheldon, Vermont. The

⁵ If any party has an objection to any of these documents being admitted into evidence, the party must submit its objection at the time it files its comments on this proposal for decision.

Petitioner has rights to lease the portions of the host Property necessary for the Project. Clark pf. at 4-5; exh. ERDR-JC-3.

3. The Project was initiated and designed with the intent of providing a Vermont-based foam glass manufacturer — Glavel, Inc. — with a source of local solar energy generation to help Glavel achieve its renewable energy goals. Clark pf. at 5.

4. ERDR will sell the Project's output to Green Mountain Power Corporation ("GMP") under a Power Purchase Agreement, and GMP will then deliver certain benefits, including some of the Renewable Energy Credits from the Project, to Glavel via a special contract. Clark pf. at 6.

5. The Project includes approximately 14,222 non-reflective photovoltaic modules installed on single-axis tracking racks spread across the approximate 27.79-acre Project area. The approximately 68 rows of panels comprising the solar array range in length and run generally north to south and track the sun from east to west. Racking systems will be approximately seven-to-eight feet tall at the axis and will be affixed to driven-post foundations. Clark pf. at 7; exhs. ERDR-JC-3 and 5.

6. Electricity will run from the modules in direct current (DC) to a network of UL1741-SA compliant string inverters that are dispersed among the array and will convert the electricity to alternating current (AC). Cabling will then run in protective conduit to switchgear, which will include the data acquisition system and other auxiliary equipment. Electricity will then run underground to two 2,500 kVA pad-mounted transformers with secondary oil containment. Clark pf. at 7.

7. The Project will have its own protective recloser and pad-mounted primary meter before being coupled at a terminating cabinet and protective switchgear. The electricity will then extend south on new overhead electrical lines for approximately 150 feet to a proposed riser pole, all located on the Project parcel. This new line section will require approximately six new wooden poles approximately 35-40 feet in height above ground. Clark pf. at 7-8.

8. The line will then connect to GMP's existing distribution service on Danyow Road. GMP will need to upgrade approximately 6,000-feet of existing three-phase service extending to the west to accommodate interconnection of the Project. The Petitioner will own the transformers, whereas GMP will own the above-referenced overhead line extension and riser poles. In addition to the upgrades, GMP will need to relocate the existing overhead distribution lines that currently run overland through the fields on which the Petitioner proposes to locate the Project, to the roadside along Vermont Route 105. Clark pf. at 8.

9. ERDR will not own or control the upgrades to GMP's existing distribution service that will occur off the Project parcel or the GMP facilities that exist today on the Project parcel that GMP will relocate along Route 105. The Petitioner will also have no control over the operation of these facilities. Clark pf. at 8.

10. The Petitioner will access the Project site via an existing farm road off Danyow Road, which the Petitioner will upgrade to a gravel driveway roughly 12-14 feet wide. The Petitioner will install a short-term staging area near the end of the existing access road and adjacent to the Project area entrance for deliveries and temporary storage of equipment. A turnaround area is proposed adjacent to the staging area along with an extension of the driveway into the array. Clark pf. at 9; exh. ERDR-JC-3.

11. The Project includes an approximately seven-to-eight-foot high agricultural style wire-knot perimeter fence affixed to driven fence posts. The perimeter fencing will restrict access to the Project and prevent the public from entering the array. ERDR will install a secured gate where the fence meets the access road. GMP and first responders will be provided with access through the gate. Clark pf. at 10; exh. ERDR-JC-5.

12. The Project does not require lighting. Clark pf. at 10.

13. The Project does not require tree clearing. Clark pf. at 9.

14. Only minimal earthwork will be involved for the installation of the access drive, underground conduit, necessary equipment pads for transformers, and associated stormwater treatment improvements. Clark pf. at 10.

15. The Project includes two 2,500 kVA pad-mounted transformers that use a biodegradable dielectric fluid. The Petitioner will also install a secondary oil containment system sufficient to hold a minimum of 110% of the transformer coolant volume plus five inches of freeboard for each of the transformers. Clark pf. at 10-11; exhs. ERDR-JC-3 and 5.

16. Construction activities and related deliveries will be limited to the hours between 7:00 A.M. and 6:00 P.M. on weekdays and 8:00 A.M. and 5:00 P.M. on Saturdays. No construction activities will take place on Sundays or state or federal holidays. Clark pf. at 11.

17. Once the Project is fully commissioned, operations and maintenance activities will be minimal. The Petitioner will perform routine system maintenance two to four times per year, which will consist of vegetation management and mechanical and electrical inspections. The Petitioner will remotely monitor operations and, in the event of a system malfunction, personnel will visit the site for troubleshooting or repairs. Clark pf. at 11-12.

18. ERDR performed sound modeling for eight residences located nearest to the Project site. The Project's highest daytime modeled sound pressure level was 38 dBA at the exterior of the residence closest to the sound-producing components of the Project. The highest modeled nighttime level at this residence was 32 dBA. Greg Dixson, ERDR ("Dixson") pf. at 4; exh. ERDR-GD-2.

Discussion

As currently proposed, the Project's highest daytime modeled sound pressure level will be 38 dBA at the exterior of the residence closest to the sound-producing components of the Project. The highest nighttime level at this residence was modeled to be 32 dBA. While I believe that these modeled sound levels are acceptable, the issue of sound in this case deserves discussion, not for the currently expected sound levels at the most impacted residences surrounding the Project, but for the way sound information was presented by the Petitioner.

When ERDR filed its petition and supporting testimony, the modeled sound levels for the Project were higher than what is currently proposed. In his initial testimony, ERDR witness Jake Clark testified that, based on a study performed by its consultant, the Project's maximum modeled sound level at the residence nearest to the Project would be 43 dBA. As a result, Mr. Clark further stated that the Project would not have an undue adverse sound impact because the Project's sound levels would be below 45 dBA at that residence.⁶

However, a review of the sound report produced by ERDR's consultant, and filed as an exhibit to Mr. Clark's testimony, shows that the 43 dBA sound level highlighted by Mr. Clark in his testimony, and relied on by him in reaching his conclusion that the Project would not have an undue impact from sound, was actually the lowest level modeled at a total of eight residences

⁶ Clark pf. at 19-20.

located near the Project site.⁷ Of those eight residences, two were modeled to experience maximum sound levels of 43 dBA, while the other six had modeled sound levels in excess of 43 dBA. Of the six residences with modeled sound levels over 43 dBA, three were modeled at 44 dBA, one was modeled at 45 dBA, and the remaining two were modeled at 46 and 47 dBA.⁸ Mr. Clark did not take the opportunity to call attention to these higher modeled sound levels in his testimony when he opined that the Project would not have an undue impact from sound because the Project's modeled sound levels were below 45 dBA at the residence nearest to the Project.

On February 16, 2023, I issued a series of information requests to ERDR regarding the contents of its sound report and Mr. Clark's related testimony.

In response to those information requests, ERDR filed the third supplemental testimony of Mr. Clark, the testimony of Greg Dixson, and a revised sound modeling report. According to Mr. Clark, ERDR decided to use smaller inverters for the Project than those modeled in the original sound report because certain equipment required for the larger inverters was not available.⁹ Use of the newly proposed smaller inverters resulted in the lower modeled sound levels described in finding 18, above.

In his third supplemental testimony, Mr. Clark further stated that his original testimony "was not intended to focus/highlight the residence with the lowest modeled daytime maximum sound level," but instead highlighted the "residence closest to the Project." Mr. Clark goes on to state that it is "a customary practice for the Petitioner to highlight the sound impacts at the closest residence to a solar project" and to rely on a sound report exhibit "for a complete presentation of all sound levels." Mr. Clark states that his testimony was intended to be a summary of the information contained in his exhibit and was "not intended to repeat the same information" that was contained in more detail in the report.¹⁰ Mr. Clark also clarified that ERDR's determination about which residence was closest to the Project was based on its

⁷ Exh. ERDR-JC-8 at 2.

⁸ Exh. ERDR-JC-8 at 2. In his third supplemental testimony, Mr. Clark corrected an error in the original sound report and identified the nearest building to the Project, as defined in that report, as one of the three residences modeled at 44 dBA.

⁹ Clark 3d supp. pf. at 1-2. ERDR did not disclose this change in inverters or the resulting reduced sound levels until after I issued my information requests.

¹⁰ Clark 3d supp. pf. at 5.

distance from the Project's fence, not its distance from the Project's sound-producing equipment.¹¹

Mr. Clark now recognizes that "[i]n hindsight, it would have been helpful to also highlight the residence closest to the sound producing equipment."¹² I agree. Highlighting the sound impact on the residence closest to the sound-producing equipment would have altered Mr. Clark's conclusion that "the noise levels calculated at the nearest residence will be below the maximum limits of 45 dBa (exterior) as required by the Commission."¹³ If Mr. Clark had presented a full summary of the sound report, his testimony would have revealed the existence of sound impacts at other residences that were above the maximum allowable level that he identified as applicable to the Project.

In response to Mr. Clark's statement that he chose to present the sound levels modeled at the residence closest to the Project fence because that is the Petitioner's customary practice, I reviewed five recent cases in which Encore Renewable Energy ("Encore") was involved.¹⁴ In each of those five cases, the sound level modeled at the residence closest to the project was the highest level modeled at any surrounding residence, and in each case was well below the 45 dBA level identified by Mr. Clark as the standard that must be met, with the highest being 37 dBA. While Mr. Clark's decision to present what amounted to the lowest modeled sound level in his testimony in this case may have been consistent with Encore's "nearest residence" approach to crafting its sound testimony in other cases, here the outcome of that approach is markedly different.

In the five cases that I reviewed, the sound levels modeled at the closest residences to the Project were also the highest sound levels modeled at any nearby residence. In other words, a clear picture of the sound impacts from those projects was presented by the testimony highlighting the modeled levels at the nearest residences because those levels corresponded to the greatest project impacts. In this case the opposite is true. By choosing to highlight in his

¹¹ Clark 3d supp. pf. at 4-5.

¹² Id.

¹³ Clark pf. at 20.

¹⁴ *ER Olde Farmhouse Road Solar, LLC*, Case No. 22-4918-PET; *ER Waite Cemetery Solar, LLC*, Case No. 21-4073-PET; *ER Kendall Hill Solar, LLC*, Case No. 21-3940; *ER South Street Solar, LLC*, Case No. 20-1219-PET; and *ER Sand Hill Solar, LLC*, Case No. 20-0955-PET. Encore Renewable Energy is a project development company with a focus on commercial, industrial, and community-scale solar PV systems for Vermont towns, schools, businesses, and landowners. Clark pf. at 1.

testimony the modeled sound levels from the residence closest to the Project fence, as opposed to the residence closest to the sound-producing elements of the Project, Mr. Clark was able to conclude that the Project would not violate the 45 dBA sound limit that he identified as applicable to the Project, when in fact the Project as originally presented would have violated that limit based on other results contained in the original sound report that Mr. Clark chose not to include in his summary testimony.

To the extent that there is any ambiguity in what the Commission expects from petitioners when presenting the results of sound analyses, and to avoid this situation in the future, I recommend that the Commission make clear that petitioners are required to clearly set forth in their testimony the worst-case results of their sound analyses at nearby residences, regardless of whether that occurs at a residence that is closest to a project's fence or at some other nearby residence.

Review of Project Under the Section 248 Criteria

Orderly Development of the Region [30 V.S.A. §§ 248(b)(1) and 248(b)(1)(C)]

19. The Project will not unduly interfere with the orderly development of the region. In making this finding, due consideration has 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. Substantial deference has been given to the land conservation measures and specific policies contained in the duly adopted regional plan. This finding is supported by the additional findings below.

20. The Northwest Regional Planning Commission Regional Plan ("Regional Plan") does not contain any land conservation measures or specific policies applicable to the Project parcel. The Project parcel is not under conservation easements or restrictions, and the Project would not violate conservation measures in the Regional Plan. Buscher pf. at 3; exh. ERDR-MB-2 at 19-22.

21. The Project supports the Regional Plan's energy goal to develop an additional 208.5 MW of new solar generation capacity to assist the State in meeting its goal of renewable energy resources meeting 90% of the State's total energy needs by 2050. Buscher pf. at 4; exh. ERDR-MB-2 at 20.

22. The Project is consistent with the Town of Sheldon Town Plan adopted on August 6, 2016 (the "Town Plan"). Exh. ERDR-MB-2 at 22-24.

23. The Project does not violate any land conservation measures outlined in the Town Plan. Buscher pf. at 3; exh. ERDR-MB-2 at 24.

24. The Town Plan addresses wetlands, stating that, "[w]etlands need to be protected from development because they are of crucial importance to the water system, both surface and underground." A portion of the Project would be located in a Class III wetland. However, this wetland does not presently provide wetland functions at a significant level. The wetland was sparsely vegetated due to the site being recently plowed within a managed agricultural field. The wetland's value is already compromised by current land use within an agricultural field that provides no ground water protection due to its isolated geomorphic positioning. Moreover, wetland functions will improve as a result of the proposed Project because intensive agricultural activities will be discontinued at this location. Exh. ERDR-MB-2 at 22-23; exh. ERDR-TU-2 at 9.

25. According to the Town Plan's Proposed Land Use Map, the Project will be located primarily in the Rural Lands I district, with a limited portion extending into the Rural Lands II district. The Project is compatible with the purposes and limitations of the Rural Lands I and II districts because it will not place unwanted demands on existing infrastructure, nor will it be located in areas that the Town Plan has identified as most suitable for Village or Commercial/Industrial development. Exh. ERDR-MB-2 at 23.

<u>Municipal Screening Requirements</u> [30 V.S.A. § 248(b)(1)(B)]

26. The Town of Sheldon has not adopted screening requirements for ground-mounted solar electric generation facilities pursuant to either 24 V.S.A. § 4414(15) or 24 V.S.A. § 2291(28) with which the Project would have to comply. Buscher pf. at 4-5.

27. The Project will meet the 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 those developed pursuant to the provisions of subsection 209(d), section 218c, and subsection 218(b) of Title 30. This finding is supported by the additional findings below.

28. The Project will help Glavel meet its renewable energy goals. Clark pf. at 15.

29. The Project will add to the renewable energy generation capacity present in Vermont and in GMP's service territory. Clark pf. at 15.

Impact on System Stability and Reliability [30 V.S.A. § 248(b)(3)]

30. The Project will not have an adverse effect on system stability and reliability. This finding is supported by the additional findings below.

31. GMP commissioned a system impact study to evaluate potential impacts from the Project on the grid, and a facilities study was subsequently performed. The Petitioner will enter into an interconnection agreement with GMP before construction and will pay for any upgrades necessary to implement interconnection of the Project. Clark pf. at 15-17; exh. ERDR-JC-7.

Discussion

I recommend that the Commission condition any approval of the Project on the following: Before operating the Project, ERDR must enter into an interconnection agreement with GMP that conforms to the requirements of Commission Rule 5.500. ERDR shall be responsible for the cost of GMP's electrical system upgrades reasonably necessary to implement interconnection for the Project and such other costs appropriately submitted to ERDR in accordance with Commission Rule 5.500.

Economic Benefit to the State [30 V.S.A. § 248(b)(4)]

32. The Project will result in an economic benefit to the State and its residents. This finding is supported by the additional findings below.

33. The Project will pay annual local and municipal property taxes to the Town of Sheldon as required under 32 V.S.A § 3481. Clark pf. at 17.

34. The Project will pay an annual Uniform Capacity Tax as required under 32 V.S.A § 8701. The revenue generated by this tax will go into the statewide education fund. Clark pf. at 17.

35. The Petitioner has hired many Vermont and regional firms to work on the environmental, aesthetics, legal, engineering, and permitting aspects of the Project. Additional electricians and workers will be needed during Project construction, as well as during the ongoing maintenance and operation of the Project. The Project's construction phase will also likely contribute to local economic activity via lodging, meals, and other ancillary purchases made by contractors. Clark pf. at 18.

<u>Aesthetics, Historic Sites, Air and Water Purity, the Natural Environment,</u> <u>the Use of Natural Resources, and Public Health and Safety</u> [30 V.S.A. § 248(b)(5)]

36. Subject to the conditions described below, the Project will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment, the use of natural resources, or 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), impacts on primary agricultural soils as defined in 10 V.S.A. § 6001, and greenhouse gas impacts. This finding is supported by the additional findings below, which give due consideration to the criteria specified in 10 V.S.A. §§ 1424a(d) and 6086(a)(1) through (8) and (9)(K).

Outstanding Resource Waters [10 V.S.A. § 1424a; 30 V.S.A. § 248(b)(8)]

37. The Project will not affect any outstanding resource waters as defined by 10 V.S.A. § 1424a(d) because there are no outstanding resource waters in the Project area. Tim Upton, ERDR, ("Upton") pf. at 3; exh. ERDR-TU-2 at 4.

Air Pollution and Greenhouse Gas Impacts

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

38. The Project will not result in undue air pollution or greenhouse gas emissions. This finding is supported by the additional findings below.

39. The Project will not involve any industrial or manufacturing emissions, excessive dust or smoke during construction, dust or noise from blasting, or odors or excessive noise from construction activity. Moreover, the Project will help reduce the need for carbon-based sources of electric energy, contributing to improved air quality. Clark pf. at 19.

40. Other than minor temporary emissions during construction, the Project will not emit greenhouse gases and will enable Vermont to lessen its reliance on greenhouse gas-emitting generation. Clark pf. at 20-22.

41. ERDR has committed to a set of greenhouse gas reporting protocols to provide information to ANR on the greenhouse-gas-related emissions from the Project. Clark pf. at 20-22.

Discussion

ERDR has committed to a set of reporting protocols to provide information to ANR on the Project's greenhouse-gas-related emissions. I recommend that the Commission include those reporting protocols as conditions in any CPG issued for the Project.

<u>Water Pollution</u> [10 V.S.A. § 6086(a)(1)]

42. The Project will not result in undue water pollution. This finding is supported by the findings under the criteria of headwaters through soils, below.

<u>Headwaters</u> [10 V.S.A. § 6086(a)(1)(A)]

43. The Project is not located in a headwaters area because the Project site, including any upgrades to GMP's distribution infrastructure needed to interconnect the Project, does not meet any of the five criteria for defining a headwater. Exh. ERDR-TU-2 at 4-5.

<u>Waste Disposal</u> [10 V.S.A. § 6086(a)(1)(B)]

44. Subject to the condition below, the Project will meet all applicable health and Vermont Department of Environmental Conservation regulations regarding the disposal of wastes and will not involve the injection of waste materials or any harmful or toxic substances into groundwater or wells. This finding is supported by the additional findings below.

45. The Project is not anticipated to generate any wastes during operation, sanitary or otherwise. The Project will not need permanent sanitary waste treatment, will not require onsite sanitary waste treatment or use of public waste treatment facilities, and will not involve any onsite waste disposal or the injection of waste materials or any harmful or toxic substances into groundwater or wells. Exh. ERDR-TU-2 at 5.

46. The Project will generate minor amounts of scrap and waste material during installation, and this waste will be disposed of or recycled at an approved disposal facility in accordance with Vermont Solid Waste Management Rules. Woody debris generated by any shrub and tree cutting will be offered by the Petitioner to the landowners for use as firewood, chipped and piled in an upland location, or transported off site by the Petitioner. Upton pf. at 6; exh. ERDR-TU-2 at 5.

47. The Project's two pad-mounted transformers will be housed within secondary oil containment systems sized to contain 110 percent of the largest anticipated volume of a potential release of transformer oil, plus a 5-inch rainwater event. Upton pf. at 6; exh. ERDR-TU-2 at 5-6.

Discussion

Based on the prefiled testimony of Mr. Upton, ERDR proposed the following finding: "GMP will comply with applicable stormwater regulations and with required best management practices associated with the use of pentachlorophenol-treated poles." However, the testimony of Mr. Upton that ERDR relies on in proposing this finding states only that ERDR "assumes that GMP will comply" with the applicable regulations and best practices.¹⁵ GMP is not a party to this proceeding, has not submitted any testimony for the Commission's consideration, and is not

¹⁵ See Upton pf. at 5.

a signatory to any MOU filed in this case. As a result, there is no basis on which the Commission can make the finding proposed by ERDR.

Given the extensive upgrades and modifications to the existing distribution system that are required as a direct result of the Project, I recommend that the Commission include the following condition in any CPG issued for the Project:

The CPG Holder is responsible for ensuring that GMP complies with applicable stormwater regulations and with required best management practices associated with the use of pentachlorophenol-treated poles.

The potential impacts associated with the distribution line upgrades and modifications are solely attributable to the Project and ERDR's need to interconnect that Project to the distribution system. It is therefore appropriate to impose this responsibility on ERDR. In making this recommendation I am not suggesting that ERDR itself will be performing the upgrades and modifications to GMP's existing system that are required by the Project. I am, however, recommending that the Commission include a condition that imposes on ERDR the responsibility to engage in appropriate oversight and provide the necessary direction to GMP to ensure that the Project does not result in any undue impacts under this criterion.

<u>Water Conservation</u> [10 V.S.A. §§ 6086(a)(1)(C)]

48. The Project will not have an undue adverse effect on water conservation because it will not require a water supply during construction or operation. Upton pf. at 6.

<u>Floodways</u> [10 V.S.A. § 6086(a)(1)(D)]

49. Subject to the condition below, the Project will not restrict or divert the flow of flood waters, significantly increase the peak discharge of a river or stream within or downstream from the Project, or endanger the health, safety, or welfare of the public or of riparian owners during flooding. This finding is supported by the additional findings below.

50. The designated River Corridor for the Missisquoi River is located partly within the area studied by ERDR. However, no permanent components directly associated with the Project's solar array will be located within the River Corridor. Upton pf. at 6; exh. ERDR-TU-2 at 6-7.

51. The corridor for the distribution line relocation and upgrades is partially mapped within FEMA zone designations A and B, which are areas of a 100-year flood and areas between the limits of the 100-year and 500-year flood, respectively. In addition, the southern portion of the upgraded distribution line is located within the Missisquoi River Corridor. Distribution line upgrades typically involve replacement of existing structures or installation of structures within existing road prisms, avoiding the creation of flooding or erosion risks. Exh. ERDR-TU-2 at 7.

Discussion

Based on the prefiled testimony and exhibits of Mr. Upton, ERDR proposed the following finding:

GMP will install poles in the existing alignment within the existing GMP maintained distribution corridor, or within fill associated with existing maintained road prisms. As such, the Interconnection Upgrades will not restrict or divert the flow of flood waters (floodway or floodway fringe), or endanger the health, safety, and welfare of the public, riparian, or downstream landowners during flooding or from potential erosion. Any aerial crossing(s) of the Missisquoi River may require approval under Section 10 of the federal Rivers and Harbors Act as determined by the U.S. Army Corps of Engineers Vermont Project Office. If such approval is necessary, GMP will obtain this approval prior to performing the Interconnection Upgrades.

However, Mr. Upton's testimony states only that "VHB assumes that GMP will comply with applicable regulations related to construction of utility lines within special flood hazard areas and river corridors."¹⁶ Similarly, the natural resources assessment states only that "the final Interconnection Upgrades design and collateral natural resources permitting will be the responsibility of GMP."¹⁷ Finally, the supplement to the natural resources assessment states: "Any aerial crossing(s) of the Missisquoi River may require approval under Section 10 of the federal Rivers and Harbors Act as determined by the U.S. Army Corps of Engineers Vermont Project Office. If such approval is necessary, GMP will obtain this approval prior to performing the Interconnection Upgrades."¹⁸

¹⁶ See Upton pf. at 7. Vanasse Hangen Brustlin, Inc. ("VHB") is ERDR's retained expert for presenting evidence on natural resource impacts from the Project.

¹⁷ Exhibit ERDR-TU-2 at 7.

¹⁸ Exhibit ERDR-TU-3 at 2.

Again, GMP is not a party to this proceeding, has not submitted any testimony for the Commission's consideration, and is not a signatory to any MOU filed in this case. As a result, there is no basis on which the Commission can make the finding proposed by ERDR.

Given the extensive upgrades and modifications to the existing distribution system that are required as a direct result of the Project, I recommend that the Commission include the following condition in any CPG issued for the Project:

The CPG Holder is responsible for ensuring that GMP complies with applicable regulations related to construction of utility lines within special flood hazard areas and river corridors, including obtaining any necessary collateral permits.

The potential impacts associated with the distribution line upgrades and modifications are solely attributable to the Project and ERDR's need to interconnect that Project to the distribution system. It is therefore appropriate to impose this responsibility on ERDR. In making this recommendation, I am not suggesting that ERDR itself will be performing the upgrades and modifications to GMP's existing system that are required by the Project. I am, however, recommending that the Commission include a condition that imposes on ERDR the responsibility to engage in appropriate oversight and provide the necessary direction to GMP to ensure that the Project does not result in any undue impacts under this criterion.

<u>Streams</u>

[10 V.S.A. § 6086(a)(1)(E)]

52. Subject to the condition below, the Project will maintain the natural condition of all streams and will not endanger the health, safety, or welfare of the public or adjoining landowners because no work is required or proposed in any streams. This finding is supported by the additional findings below.

53. No activities directly associated with the Project's solar array will occur within a stream or any 50-foot riparian buffers. Upton pf. at 7; exh. ERDR-TU-2 at 7.

Discussion

Based on the prefiled testimony and exhibits of Mr. Upton, ERDR proposed the following finding:

GMP will avoid placing poles and anchors within streambanks whenever feasible, will follow its ANR-approved integrated vegetation management plan for access and vegetation management, and will follow the ANR MOU. Therefore, there

will be no undue adverse impacts to streams from the Interconnection Upgrades: the natural condition of streams and rivers will be maintained, and the work will not endanger the health, safety, or welfare of the public or of adjoining landowners. If construction involves unavoidable installation of poles within streambanks or wetlands, the upgrades may require approval under Section 404 of the federal Clean Water Act from the U.S. Army Corps of Engineers Vermont Project Office; such approval would also ensure compliance with Criterion 1(E). If such approval is necessary, GMP will obtain such approval prior to performing the Interconnection Upgrades.

However, Mr. Upton's testimony states only that "VHB assumes that GMP will avoid installation of poles within streambanks and will adhere to its ANR-approved integrated vegetation management plan for any required clearing."¹⁹ Similarly, the natural resources assessment states only that "For the Interconnection Upgrades, provided that GMP avoids placing poles and anchors within streambanks and follows its ANR-approved integrated vegetation management plan for access and vegetation management, there will be no undue adverse impacts to streams from the Interconnection Upgrades."²⁰ Finally, the supplement to the natural resources assessment states: "If construction involves unavoidable installation of poles within streambanks or wetlands, the upgrades may require approval under Section 404 of the federal Clean Water Act from the U.S. Army Corps of Engineers Vermont Project Office; such approval would also ensure compliance with Criterion 1(E). VHB understands that if such approval is necessary, GMP will obtain such approval prior to performing the Interconnection Upgrades."²¹

Again, GMP is not a party to this proceeding, has not submitted any testimony for the Commission's consideration, and is not a signatory to any MOU filed in this case. As a result, there is no basis on which the Commission can make the finding proposed by ERDR.

Given the extensive upgrades and modifications to the existing distribution system that are required as a direct result of the Project, I recommend that the Commission include the following condition in any CPG issued for the Project:

The CPG Holder is responsible for ensuring that GMP avoids installation of poles within streambanks, will adhere to its ANR-approved integrated vegetation

¹⁹ See Upton pf. at 7.

²⁰ Exhibit ERDR-TU-2 at 8.

²¹ Exhibit ERDR-TU-3 at 2.

management plan for any required clearing, and will obtain any necessary collateral permits.

The potential impacts associated with the distribution line upgrades and modifications are solely attributable to the Project and ERDR's need to interconnect that Project to the distribution system. It is therefore appropriate to impose this responsibility on ERDR. In making this recommendation, I am not suggesting that ERDR itself will be performing the upgrades and modifications to GMP's existing system that are required by the Project. I am, however, recommending that the Commission include a condition that imposes on ERDR the responsibility to engage in appropriate oversight and provide the necessary direction to GMP to ensure that the Project does not result in any undue impacts under this criterion.

<u>Shorelines</u> [10 V.S.A. § 6086(a)(1)(F)]

54. Subject to the condition below, the Project will not have an undue adverse effect on any shorelines. This finding is supported by the additional findings below.

55. No permanent components directly associated with the Project's solar array will be located on a shoreline. Upton pf. at 8.

56. The distribution line upgrades and modifications required to serve the Project will cross the Missisquoi River. Exhs. ERDR-TU-2 at attachment 1, ERDR-TU-3 at 2.

Discussion

Based on the prefiled testimony and exhibits of Mr. Upton, ERDR proposed the following finding: "The Project does not involve development of any shorelines."

However, according to Mr. Upton's testimony under this criterion, "VHB assumes that GMP will comply with all applicable regulations related to the crossing of the Missisquoi River when the interconnection design is completed."²² Further, in his natural resource assessment, Mr. Upton correctly identifies shorelines as "the land adjacent to the waters of lakes, ponds, reservoirs, and rivers."²³ However, Mr. Upton then goes on the state that there "are no lakes, ponds, or reservoirs in the Study Area and Interconnection Upgrades Corridor, and no activities will take place below the OHW [ordinary high water] of the delineated perennial streams.

²² Upton pf. at 8.

 $^{^{23}}$ Exh. ERDR-TU-2 at 8.

Therefore, [t]he Plan will have no impacts to shorelines as defined under this criterion.²⁴ This conclusion fails to address the presence of the Missisquoi River and the apparent crossing of the river by the upgraded portion of the distribution line extending west and then south of the array. Mr. Upton draws a similar conclusion in his natural resources supplement, initially ignoring the presence of the Missisquoi River, but then qualifying his position by stating that "[a]ny aerial crossing(s) of the Missisquoi River may require approval under Section 10 of the federal Rivers and Harbors Act as determined by the U.S. Army Corps of Engineers Vermont Project Office."²⁵

Based on the testimony and exhibits, I do not believe the Commission can make the finding proposed by ERDR. This appears to be another example of ERDR attempting to divorce the solar facility and the impacts it has on its actual footprint, from the direct impacts the Project has beyond its footprint, specifically those from the significant level of activity associated with upgrading and relocating GMP's existing distribution infrastructure to accommodate the Project. Other examples include the criteria of waste disposal, floodways, and streams, above.

I understand that ERDR does not believe the Commission has authority under Section 248 to review the impacts from the distribution line upgrades and relocation that are the direct result of the solar facility proposed in this case.²⁶ I disagree.

ERDR states in a footnote to its petition that "because the PUC has no jurisdiction over such upgrades, it similarly has no jurisdiction to assess whether such upgrades to the distribution system facilities may impact the Section 248 criteria or to impose conditions related to construction of the distribution facility upgrades."²⁷ ERDR goes on to state that it is "not seeking a declaratory judgement on these legal or factual burden issues at this time," and only "provides its position here for context and to preserve its rights to object to nonjurisdictional review and regulation."²⁸

While ERDR states that is not seeking resolution of the legal issue it raised in the footnote to its petition, its draft proposed decision in this case directly implicates that position and requires analysis in support of the conditions I am recommending to the Commission related

²⁸ Id.

²⁴ Id.

²⁵ Exh. ERDR-TU-3 at 2.

²⁶ See Petition at 3-4, n.1.

²⁷ Id.

to the potential for impacts from the distribution line upgrades and modifications that would not exist but for the Project.

First, ERDR relies heavily on a Commission decision from 2006 in support of its position that the Commission has no authority to review upgrades to and impacts from distribution line modifications required to serve a Section 248 jurisdictional project.²⁹ However, I believe that ERDR mischaracterizes the holding from that case.

ERDR quotes a single sentence from that case in support of its position: "[T]he [Commission] does not have direct jurisdiction over the [distribution upgrade] under Section 248."³⁰ However, ERDR's selected quote ignores important context. While the Commission did state that "the upgrade, *by itself*, does not constitute a facility subject to Section 248," it further stated that because the upgrade "would be built only because of the proposed Berkshire project, the [Commission] has a responsibility under Section 248(b) to ensure that the proposed Berkshire project, including the necessary distribution upgrade, would not have any undue adverse impacts."³¹ The Commission went on to determine that the interconnecting utility that would be performing the upgrade must file testimony "describing the upgrade and addressing any criteria under Section 248(b) on which the upgrade has the potential for significant impact."³² The Commission further clarified its decision in a footnote stating:

We find this to be analogous to a situation in which a public highway would need to be upgraded in order for a Section 248-jurisdictional project not to result in unsafe conditions on the highway. We properly would review the proposed project's impacts on the highway, and could condition our approval of the project on the completion of the necessary highway upgrades. This would not, however, bring the highway upgrade itself under our Section 248 jurisdiction.³³

And, while I believe that ERDR's reliance on the Commission's 2006 decision is misplaced, perhaps of more concern is that ERDR's position fails to account for amendments added to Section 248 in 2015. Specifically, the Legislature added Section 248(a)(4)(J), which provides in relevant part:

In addition to any other information required by the Commission, the application for such a facility shall include information that delineates:

²⁹ See Petition of Vermont Elec. Coop., Inc., Docket 7201, Order of 9/15/06.

³⁰ Docket 7201, Order of 9/15/06 at 2.

³¹ *Id.* Emphasis added.

³² Id.

³³ *Id*. at n.1.

(i) the full limits of physical disturbance due to the construction and operation of the facility and related infrastructure, including areas disturbed due to the creation or modification of access roads and utility lines and the clearing or management of vegetation;

(ii) . . . ;

(iii) all visible infrastructure associated with the facility; and

(iv) all impacts of the facility's construction and operation under subdivision (b)(5) of this section, including impacts due to the creation or modification of access roads and utility lines and the clearing or management of vegetation.

In short, ERDR's position is supported neither by Commission precedent nor the plain language of Section 248(a)(4)(J).

That said, I do not believe that testimony from GMP on the impacts of the distribution line modifications and relocation is needed for the Commission to reach a conclusion in this case because ERDR has submitted testimony from Mr. Upton as well as his initial and supplemental natural resource assessments. Those materials, particularly the two natural resources assessments, review potential impacts from the distribution line work and provide a basis for the Commission to understand all potential impacts from the Project, as required by Section 248.

However, ERDR's proposed findings regarding the distribution lines changes necessitated by the Project, and the testimony and exhibits that support them, consistently place responsibility on GMP for ensuring that no undue adverse impacts occur from the work. The testimony and exhibits are replete with conditional statements such as "VHB assumes" that GMP will take necessary precautions, or "provided that GMP" complies with applicable regulations or obtains a necessary collateral permit there will be no undue impacts from the distribution line work. I do not believe that assumptions about the actions that GMP might undertake are sufficient for the Commission to find that no undue adverse impacts will occur as a result of the Project. Thus, this proposal for decision contains my recommended initial finding under several criteria that no undue impacts will occur "subject to conditions" and my related recommended conditions aimed at preventing such impacts.

With respect to the shorelines criterion, I recommend that the Commission include the following condition in any CPG issued for the Project:

The CPG Holder is responsible for ensuring that GMP avoids installation of poles between the mean high-water mark and the mean low-water mark of the

Missisquoi River, and will obtain any necessary collateral permits for any aerial crossing of the river.

<u>Wetlands</u> [10 V.S.A. § 6086(a)(1)(G)]

57. Subject to conditions, the Project will not have an undue adverse effect on wetlands. This finding is supported by the additional findings below.

58. No permanent components directly associated with the Project's solar array will be located in any Class I or Class II wetlands or buffers. Upton pf. at 9; exh. ERDR-TU-2 at Attachment 1.

59. The Project's array posts are proposed to span a portion of a Class III wetland. This wetland presently does not provide functions under the Vermont Wetland Rules at a significant level. The wetland feature was sparsely vegetated due to the Project site being recently plowed within a managed agricultural field. Support posts will be driven into the Class III wetland without excavation or the installation of fill for foundations. Thus, there will be no regulated dredge or fill activities. ERDR expects the Class III wetland's functional value to increase when the Project is built as intensive agricultural activities are discontinued. Upton pf. at 9; exh. ERDR-TU-2 at 9.

60. There are two delineated proposed Class III wetlands and three proposed Class II wetlands within the corridor in which the upgrades and modifications to GMP's distribution infrastructure will occur to serve the Project. Upton pf. at 9; exhs. ERDR-TOU-2 at 9 and ERDR-TOU-3 at 2.

61. ERDR and ANR have entered into an MOU that sets forth conditions to be included in any CPG issued for the Project to prevent undue adverse impacts on wetlands. Exh. ERDR-ANR-1.

Discussion

Based on the prefiled testimony and exhibits of Mr. Upton, ERDR proposed a finding under this criterion that includes the following with respect to the distribution line upgrades: "GMP will avoid unnecessary direct wetland and buffer impacts in the proposed Class II and Class III wetlands" and "GMP will follow applicable [Department of Environmental Conservation] [Best Management Practices] for utility line maintenance, or GMP will obtain a Vermont Wetland Permit and/or authorization from the [U.S. Army Core of Engineers]. GMP will also follow the ANR MOU discussed below under the section for the Interconnection Upgrades."³⁴

Again, GMP is not a party to this case, has not offered any testimony for the Commission's consideration, and is not a signatory to any MOU, including the MOU with ANR that the proposed finding says GMP will adhere to. And again, there is no basis on which the Commission can make this finding.

However, ERDR has entered into an MOU with ANR with conditions to be included in any CPG for the Project to protect wetlands from any undue adverse impacts from both the Project-specific infrastructure and the work done on the GMP distribution line needed to serve the Project. I recommend that, with some modifications discussed in Section VI below, the Commission include these conditions in any CPG it issues for the Project.³⁵

Sufficiency of Water and Burden on Existing Water Supply [10 V.S.A. §§ 6086(a)(2) and (3)]

62. There is sufficient water for the Project and the Project will not burden any existing water supply because it will not require a water supply during construction or operation. Upton pf. at 9.

<u>Soil Erosion</u> [10 V.S.A. § 6086(a)(4)]

63. Subject to conditions, the Project will not cause unreasonable soil erosion or reduce the capacity of the land to hold water so that a dangerous or unhealthy condition may result. This finding is supported by the additional findings below.

64. The Project will require authorization under the Department of Environmental Conservation Stormwater Construction General Permit. The MOU between ERDR and ANR requires ERDR to obtain that permit. Upton pf. at 10; exh. ERDR-ANR-1.

65. The permit will require implementation of Best Management Practices to control erosion and discharge of sediment from the construction site either through application of the

³⁵ These modifications are to ensure that the MOU, to which GMP is not a signatory, does not impose any obligations on GMP.

Department of Environmental Conservation Low Risk Site Handbook for Erosion Prevention and Sediment Control or a site-specific Erosion Prevention and Sediment Control Plan, as required. Upton pf. at 10; exh. ERDR-TU-2 at 10.

66. The installation and maintenance of Best Management Practices will prevent any undue soil erosion from all areas of earth disturbance. Best Management Practices will include a stabilized construction entrance to minimize tracking of soil by vehicles, demarcation of disturbed areas with barrier tape, and installation of perimeter controls such as silt and construction fencing. Exh. ERDR-TU-2 at 10.

67. Because of the limited amount of existing and proposed impervious surfaces, the Project will not require approval under Vermont's operational phase stormwater discharge permit program. Upton pf. at 5; exh. ERDR-TU-2 at 10.

Discussion

The MOU between ERDR and ANR requires ERDR to obtain a Vermont Construction Stormwater Permit from ANR's Department of Environmental Conservation Stormwater Program before engaging in any site preparation or construction to protect against undue soil erosion from the Project and the distribution line work needed to serve the Project. I recommend that the Commission include this condition in any CPG issued for the Project.

<u>Transportation</u> [10 V.S.A. § 6086(a)(5)]

68. The Project will not cause unreasonable traffic or congestion. The Petitioner proposes to deliver materials to the Project site via Danyow Road and other state and local roads that are accustomed to the type of traffic associated with the proposed daily material delivery. The Project is not expected to require oversize or overweight deliveries. The Project will not require road closures or lane shutdowns for extended periods of time. No other long-term interruptions or impacts to highways or local roads are anticipated. Clark pf. at 23.

Educational Services [10 V.S.A. § 6086(a)(6)]

69. The Project will not place an unreasonable burden on the ability of a municipality to provide educational services because the Project will not require or affect educational services. Clark pf. at 23.

<u>Municipal Services</u> [10 V.S.A. § 6086(a)(7)]

70. The Project will not place an unreasonable burden on the ability of the affected municipality to provide municipal or government services because the Project will not require or affect local services. The Project will not require any municipal water or sewer services, new roadway acceptance or maintenance by the Town, or any fire or police services beyond those typically required of other businesses. The Petitioner will provide first responders access to the Project site in the event of an emergency. A lockable disconnect switch will allow the shutdown of the Project in case of fire or other emergency. Clark pf. at 23-24.

Aesthetics, Historic Sites, and Rare and Irreplaceable Natural Areas [10 V.S.A. § 6086(a)(8)]

71. Subject to conditions, the Project will not have an undue adverse impact 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 the additional findings below.

Aesthetics

72. Subject to conditions, the Project will have an adverse, but not undue, impact on the aesthetics or scenic or natural beauty of the area. Michael Buscher, ERDR ("Buscher") pf. at 5, 6; exh. ERDR-MB-2 at 13, 18; additional findings, below.

73. The Project is a 5 MW photovoltaic electric generation facility. The fenced portion of the Project would occupy approximately 27.79 acres of the greater 36-acre parcel. Exh. ERDR-MB-2 at 3.

74. The array would consist of approximately 14,222 non-reflective photovoltaic panel modules mounted on approximately 68 rows of single-axis tracking units fixed to the ground.

The panel rows would generally run north to south and track the sun from east to west throughout the day. The panel racking systems would be roughly eight feet tall at the axis and roughly 10-15 feet tall on the high side at maximum tilt. Exh. ERDR-MB-2 at 3.

75. The Project site is located within existing agricultural fields and would not require any tree cutting. An existing three-phase GMP distribution line is located within the proposed array area. To accommodate the Project, GMP would relocate the line to the south, along VT Route 105. Exh. ERDR-MB-2 at 4.

76. The area near the Project is agricultural in nature, although there are a mix of uses close to the Project site, including rural residential, commercial, and recreational uses. There is a wooded area to the northwest of the Project site, and directly north are a residential structure and additional agricultural fields. Vermont Route 105 curves from the southern extent to the northeast corner of the Project. There is an additional residence in this location with a large barn and several dual-axis solar trackers. Along the southeast side of the proposed array location, along Vermont Route 105, there are four residential properties, the Missisquoi Valley Rail Trail, and the Missisquoi River. Danyow Road extends west of the Project and provides access to five or six residential properties and a farm complex. Along the western edge of the proposed array are more agricultural fields. Exh. ERDR-MB-2 at 9.

77. There are unobstructed views of the Project site from Route 105 for a stretch of roughly 2,000 feet and from a number of adjacent residences. Exh. ERDR-MB-2 at 13.

78. The size of the array, panels, and other Project elements would introduce components that would contrast with the existing agricultural character of these views. Exh. ERDR-MB-2 at 13.

79. The factors that contribute to the Project's adverse impact include the Project's high visibility from Route 105, the proximity of the Project to the Road (± 120 feet), the absence of any presently existing screening of the site, and the approximately 27 acres of continuous array massing. Lucy Thayer, Department ("Thayer") pf. at 2.

80. The Project would not violate any clear, written community standards intended to preserve the aesthetics or scenic or natural beauty of the area. Buscher pf. at 5-6.

81. The Regional Plan, including the Regional Energy Plan, does not contain any clear written standards for the Project site or the area surrounding the Project. The Regional Plan does

contain general statements and offers support, recommendations, and guidance for its member municipalities to implement scenic resource protection within their communities. The Project would not conflict with the general goals of the land use patterns of the region. Due to its limited visibility from surrounding areas, the Project would not unnecessarily impact any highly scenic landscapes or viewsheds within the region. Exh. ERDR-MB-2 at 15.

82. Aesthetics and scenic resources are referenced numerous times within the Town Plan. Chapter 3 contains a Summary of Goals and Policies for the overall Town Plan, and scenic resources are referenced within four of twelve planning elements. However, the references are typically of a general nature, and the recommendations do not identify specific scenic resources or provide guidance for the protection of aesthetics or scenic quality. Exh. ERDR-MB-2 at 15.

83. Both the Regional Plan and Town Plan recognize the presence and importance of scenic resources within the region. However, neither plan provides specific language that would be considered a clear written community standard that would be applicable to the Project. Exh. ERDR-MB-2 at 16.

84. The Project incorporates generally available mitigating steps that a reasonable person would take to improve the harmony of the Project with its surroundings. Buscher pf. at 6; exh. ERDR-MB-2 at 17.

85. ERDR has proposed a planting plan to mitigate the visual impacts of the Project from nearby public roads and surrounding residences. ERDR's original planting plan has been modified on two occasions since it was originally filed, once in response to concerns expressed by nearby residents and once in response to concerns expressed by the Department of Public Service. Buscher pf. supp. at 1-3; Thayer pf. at 4; exh. ERDR-MB-2 at Appendix D (2d rev.).

86. Other mitigating measures include: (1) use of surrounding vegetation to screen the Project from locations to the north and locations beyond the near vicinity; (2) use of non-reflective panels to reduce the potential for glare; (3) use of components that are relatively low in profile and rows of panels that contour with the existing topography; and (4) installation of the Project internal wiring underground between array racks and the transformer location. Exh. ERDR-MB-2 at 17.

87. The Project will not be shocking or offensive to the average viewer. The Project would have limited visibility, restricted to adjacent sections of Vermont Route 105, Danyow

Road, and surrounding properties. The Project incorporates several features that reduce its prominence, such as the low profile of the panels and racking units. In addition, proposed landscape mitigation will in time significantly screen and soften views of the Project. Overall, the Project would not be a dominant feature within the surrounding visual landscape. Exh. ERDR-MB-2 at 17.

Discussion

I recommend that the Commission find that the Project will have an adverse impact on the aesthetics of the area, but that the impact will not be undue.

In determining whether a proposed project satisfies the aesthetics criterion contained in 30 V.S.A. § 248(b)(5), the Commission applies the so-called "Quechee test."

The first step of the two-part test is to determine whether a project would have an adverse impact on aesthetics and the scenic and natural beauty of an area because it would not be in harmony 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. If the Project does not have an adverse effect on aesthetics because it is in harmony with its surroundings, then the project satisfies the aesthetics criterion.

If a project would have an adverse effect on aesthetics, such adverse impact will be found to be undue if any one of the three following questions is answered affirmatively: (a) Would the project violate a clear, written community standard intended to preserve the aesthetics or scenic, natural beauty of the area? (b) Would the project offend the sensibilities of the average person? (c) Have the applicants failed to take generally available mitigating steps that a reasonable person would take to improve the harmony of the proposed project with its surroundings?³⁶

In addition, the Commission's consideration of aesthetics under Section 248 is "significantly informed by overall societal benefits of the project."³⁷

The Project will introduce a large mass of solar panels and related infrastructure into an existing agricultural context. The Project will be visible for approximately 2,000 feet from the

³⁶ Amended Petition of UPC Vermont Wind, Docket 7156, Order of 8/8/07 at 64–65.

³⁷ In Re: Northern Loop Project, Docket 6792, Order of 7/17/03 at 28.

nearby Route 105 and from several surrounding residences. Absent mitigation, these views would be largely unobstructed. The elements introduced into this environment by the Project would be out of context and therefore would have an adverse impact on the aesthetics and scenic and natural beauty of the area.

While I recommend that the Commission find that the Project will have an adverse impact on the aesthetics of the area, I also recommend that the Commission find that the impact will not rise to the level of being undue. As explained above in findings 81 through 83, ERDR's testimony demonstrates that the Project will not violate any clear, written community standards in either the Town or Regional Plan. Additionally, as established by finding 87, the Project will not dominate the landscape and, over time, will become less visible as the proposed mitigation plantings mature. Therefore, the Project will not be shocking or offensive to the average viewer. Lastly, as described in findings 84 through 86, the Project incorporates reasonable mitigating steps to lessen the Project's impacts on its surroundings, including the use of mitigation plantings to help screen views of the solar array.

ERDR supplemented its proposed mitigation planting plan on two occasions, once in response to concerns from nearby residents, and once in response to additional concerns raised by the Department. The proposed mitigation is now extensive and, subject to compliance with the requirements of Commission Rule 5.805, will adequately screen the Project from nearby otherwise unobstructed viewpoints. I therefore recommend that the Commission approve the second revised landscape mitigation plan proposed by ERDR and identified in the record as the second revised version of Appendix D to exhibit ERDR-MB-2 filed on February 3, 2023, subject to the requirements of Commission Rule 5.805.

Historic Sites

88. Subject to conditions, the Project will not have an undue adverse effect on historic properties. This finding is supported by the additional findings below.

89. There are several above-ground historic sites located in Sheldon. However, there would be no significant visibility of the Project from the identified historic properties in the area. Thus, the Project will not have an undue adverse impact on above-ground historic sites. Clark pf. at 24; exh. ERDR-DHP-1 at 2; exh. ERDR-JC-9 at 10-12.

90. A Phase I Survey has been conducted at the Project site. Based on the results of the Phase I survey, a limited Phase II site evaluation was performed for two small sites. The limited Phase II site evaluation did not find any historic sites. Clark pf. at 24-25; Clark pf supp. 2d. at 1; exh. ERDR-JC-9 at 5, 8.

91. ERDR and DHP have entered into a memorandum of understanding that sets forth conditions to be included in any CPG issued for the Project to prevent undue adverse impacts on archaeological resources. Exh. ERDR-DHP-1.

Discussion

ERDR and DHP have agreed to the inclusion of certain conditions in a CPG to protect against undue impacts on archaeological resources. I recommend that the Commission include the agreed-upon conditions in any CPG issued for the Project, subject to two minor adjustments discussed below.

First, paragraph 4 of the MOU states that "archaeological investigations shall be scheduled so that mitigation measures, if any are determined to be necessary, can be satisfactorily planned and accomplished prior to construction of the Project." As written, this proposed condition could be read to allow site preparation activities to occur in sensitive areas before any needed mitigation measures are accomplished. Therefore, I recommend that the Commission amend the language to read "archaeological investigations shall be scheduled so that mitigation measures, if any are determined to be necessary, can be satisfactorily planned and accomplished before site preparation for or construction of the Project."

Second, paragraph 5 of the MOU states:

Any changes to the project that arise out of compliance with [the DHP] MOU and/or resulting from mitigation measures approved by VDHP are subject to prohibitions on substantial changes or material deviations pursuant to Commission Rule 5.408, including that any substantial changes must be approved by the Commission.

I recommend that the Commission add language to clarify that the restrictions described in this paragraph include the need for Commission approval before not only the implementation of substantial changes to the Project, but for material deviations as well. I recommend the following: Any changes to the Project that arise out of compliance with [the DHP] MOU and/or resulting from mitigation measures approved by DHP are subject to prohibitions on substantial changes or material deviations pursuant to Commission Rule 5.408 and Paragraph 1 of this CPG, including that any substantial changes or material deviations must be approved by the Commission before they are made.

Rare and Irreplaceable Natural Areas

92. The Project will not have an undue adverse effect on rare and irreplaceable natural areas because there are no rare and irreplaceable natural areas within the Project area. Upton pf. at 11; exh. ERDR-TU-2 at 10-11.

<u>Necessary Wildlife Habitat and Endangered Species</u> [10 V.S.A. § 6086(a)(8)(A)]

93. Subject to conditions, the Project will not have an undue adverse effect on any endangered species or necessary wildlife habitat. This finding is supported by the additional findings below.

94. There are no known rare, threatened, or endangered ("RTE") animal species mapped within the Project site. The Project site is located within the range of the state and federally protected Northern long-eared bat. However, there are no known summer tree roosting sites or winter hibernacula within the Project site or vicinity according to available Vermont Fish and Wildlife Department and U.S. Fish and Wildlife Service information. The array site does not involve the clearing of more than one percent of tree cover within a one-mile radius of the site. Therefore, no specific conservation measures are required. Upton pf. at 12; exh. ERDR-TU-2 at 12.

95. The corridor that will host the distribution line upgrades and relocation (to interconnect the Project) historically has been maintained as either a utility line corridor or road corridor. Therefore, the upgrades and relocation do not have the potential to remove one percent of available habitat within a one-mile radius and pose no threat of incidental take of forested bats. Therefore, no mitigation measures are required. Exh. ERDR-TU-3 at 3.

96. A population of the Vermont state-listed (threatened) plant species harsh-leaved sunflower (*Helianthus strumosus*) is located within the corridor in which the interconnection distribution line upgrades will be performed. Exh. ERDR-ANR-1 at 4.

97. There is no necessary wildlife habitat within the Project site or the interconnection route. Exh. ERDR-TU-2 at 12-13.

Discussion

Based on the prefiled testimony and exhibits of Mr. Upton, ERDR proposed a finding under this criterion that includes the following with respect to the distribution line upgrades: "GMP will follow the guidance in its ANR-approved integrated vegetation management plan for access and vegetation management regarding work near RTE species and adhere to the ANR MOU discussed below. As such, there will be no undue adverse impacts to RTE plant[s] from the Interconnection Upgrades activities."

Again, GMP is not a party to this case, has not offered any testimony for the Commission's consideration, and is not a signatory to any MOU, including the MOU with ANR that the proposed finding says GMP will adhere to. And again, there is no basis on which the Commission can make this finding.

However, ERDR has entered into an MOU with ANR with conditions to be included in any CPG for the Project to protect the population of harsh-leaved sunflower from any undue impacts from the work done on the GMP distribution line needed to serve the Project. I recommend that, with some modifications discussed in Section VI below, the Commission include these conditions in any CPG it issues for the Project.³⁸

Development Affecting Public Investments [10 V.S.A. § 6086(a)(9)(K)]

98. The Project will not unnecessarily or unreasonably endanger any public or quasipublic investment in a facility, service, or lands, or materially jeopardize or interfere with the function, efficiency, or safety of, or the public's use or enjoyment of, or access to any such facility, service, or lands. This finding is supported by the additional finding below.

99. Nearby existing public investments are Danyow Road and Vermont Route 105. The Project will not interfere with the public's use of these roads other than through minor temporary traffic impacts that will be mitigated as required by any applicable permits. Clark pf. at 26.

³⁸ These modifications are to ensure that the MOU, to which GMP is not a signatory, does not impose any obligations on GMP.

Public Health and Safety [30 V.S.A. § 248(b)(5)]

100. The Project will not have any undue adverse effects on the health, safety, and welfare of the public. This finding is supported by the additional findings below.

101. All work on the Project will be performed in accordance with the National Electrical Safety Code and the National Electrical Code. Clark pf. at 19.

102. ERDR will install a perimeter fence around the Project with appropriate electrical warning signs, and the Project will use anti-reflective coating on the panels to reduce the potential for glare. Clark pf. at 10, 19.

Primary Agricultural Soils [30 V.S.A. § 248(b)(5)]

103. Subject to conditions, the Project will not have any undue adverse effects on primary agricultural soils ("PAS") as defined in 10 V.S.A. § 6001. This finding is supported by the additional findings below.

104. The Project will have approximately 0.88 acre of direct permanent impacts and 1.66 acres of temporary impacts on PAS at the Project site. Upton pf. at 13; exh. ERDR-TU-2 at 15-16.

105. ERDR will mitigate for temporary disturbance from trenching by temporarily stockpiling soil on site and within the same Natural Resources Conservation Service ("NRCS") soil map unit per horizon, and then replacing the soil at the end of construction in the reverse order of excavation. Further, ERDR will stockpile soils excavated for permanent (i.e., Project-lifespan) impacts by stockpiling soil segregated per horizon and within the same NRCS soil map unit. Stockpiles will be stabilized and vegetated. Upon Project decommissioning, soil will be replaced in the reverse order of excavation within each soil map unit. Upton pf. at 13-14; exh. ERDR-TU-2 at 15-16.

106. Vehicles with an axle weight over 12,000 pounds will not be used on wet soils except on gravel roads constructed as approved by the Vermont Agency of Agriculture, Food & Markets ("AAFM"). Finally, ERDR proposes to perform pre- and post-construction soil compaction tests to determine the potential need for decompaction in accordance with standards and methods approved by AAFM. Upton pf. at 13-14; exh. ERDR-TU-2 at 15-16.
107. The modified and relocated distribution line needed to serve the Project will cross areas mapped as PAS. However, because the existing line and the area of potential relocation are located within maintained utility and road corridors, the interconnection line upgrades will not result in a reduction of agricultural potential. Upton pf. at 14.

108. ERDR and AAFM have entered into a memorandum of understanding that sets forth conditions to be included in any CPG issued for the Project to prevent undue adverse impacts on PAS. Exh. ERDR-AAFM-1.

Discussion

ERDR and AAFM have agreed to the inclusion of certain conditions in a CPG to protect against undue impacts on PAS. I recommend that the Commission include the agreed-upon conditions in any CPG issued for the Project

Consistency With Company's Least Cost Integrated Plan [30 V.S.A. § 248(b)(6)]

109. The Commission 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)]

110. The Project is consistent with the 2022 Comprehensive Energy Plan approved by the Department under 30 V.S.A. § 202(f). This finding is supported by the additional findings below.

111. The Department has determined pursuant to 30 V.S.A. § 202(f) that the Project is consistent with the 2022 Comprehensive Energy Plan. Department § 202(f) determination letter dated 1/17/23.

112. The Project furthers key objectives in the Comprehensive Energy Plan, which calls for meeting Vermont's long-term energy needs largely with renewable resources. Clark pf. at 27-28.

Waste-to-Energy Facility [30 V.S.A. §248(b)(9)]

The Project does not involve a waste-to-energy facility; therefore, this criterion is 113. not applicable.

Existing or Planned Transmission Facilities [30 V.S.A. § 248(b)(10)]

114. 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 the additional findings below.

115. The existing transmission infrastructure has already been mitigated against potential transmission ground fault over-voltage, and the Project is not sited within the Sheffield-Highgate Export Interface. Clark pf. at 28.

116. ERDR will pay for any upgrades to GMP's distribution system needed for the Project to interconnect safely with the grid. Clark pf. at 17.

Woody Biomass Facilities [30 V.S.A. § 248(b)(11)]

The Project will not produce electric energy using woody biomass; therefore, this 117. criterion is not applicable.

Minimum Setback Requirements [30 V.S.A. § 248(s)]

118. The Project complies with Vermont's statutory setback requirements for groundmounted solar electric generation facilities because the Project's solar panels or support structures for the solar panels are set back at least 100 feet from the nearest road and at least 50 feet from the nearest property boundary line. Clark pf. at 29, exh. ERDR-JC-3 at 2.

Discussion

Section 248(s) of Title 30 of the Vermont Statutes Annotated requires that the nearest portion of a facility's solar panels or support structure for a solar panel be set back at least 100 feet from any state or municipal highway and at least 50 feet from any property boundary that is not a state or municipal highway. The setbacks proposed for the Project's solar panels or support structures for the solar panels meet these minimum requirements.

V. DECOMMISSIONING COST ESTIMATE AND LETTER OF CREDIT

119. At the end of the Project's useful life, the Petitioner will assess whether: (1) it is financially viable to continue to operate the Project as is; (2) any changes could be made to the Project to allow its continued operation, subject to appropriate amendment of its CPG; or (3) the Project should be decommissioned. In any event, the Petitioner will remove the Project once it is no longer in service and restore the site to its condition before installation of the Project to the greatest extent practicable as required under Commission Rule 5.904(B). Clark pf. at 29; exh. ERDR-JC-10 (rev.) at 1.

120. Decommissioning will include the off-site removal of the solar panels, support structures, electrical lines, inverters, transformers, any concrete pads, and fencing/fence posts, and any other auxiliary equipment associated with the Project that is within the Petitioner's ownership or the ownership of its successor or assigns. Exh. ERDR-JC-10 (rev.) at 1.

121. Decommissioning will also include reclaiming the site to restore the site's agricultural potential by replacing prime agricultural soils that have been temporarily stockpiled onsite to areas that have been disturbed by Project infrastructure, plowing the site within the fenced-in area to a depth of eight inches if bulk density testing indicates that Project-related soil compaction has occurred, and preparing the site for reseeding or planting. Exh. ERDR-JC-10 (rev.) at 1.

122. ERDR submitted a decommissioning plan that details the steps and a cost estimate for decommissioning activities, and proposes the establishment of a decommissioning fund before construction begins. Clark pf. at 30; exh. ERDR-JC-10 (rev.).

Discussion

Commission Rule 5.900 establishes standard requirements for the decommissioning of electric generation, electric transmission, and natural gas facilities. Rule 5.904(B) requires that non-utility-owned generation facilities greater than 500 kW in capacity be removed once they are no longer in service and the site be restored, to the greatest extent practicable, to the condition it was in before installation of the facility. Commission Rule 5.904(B)(2) also requires that

requests to construct these facilities include a draft irrevocable standby letter of credit in an amount sufficient to fund the estimated decommissioning and site restoration costs.

ERDR has submitted a plan for decommissioning the Project with a detailed cost estimate of \$169,498.00 to decommission the Project. ERDR has also submitted a draft irrevocable standby letter of credit that complies with our requirements regarding letters of credit.

ERDR's plan for decommissioning and the draft letter of credit and drawing certificate submitted with the cost estimate are generally consistent with the requirements of Commission Rule 5.904(B). Therefore, with one minor modification, I recommend that the Commission include in the CPG for the Project conditions requiring compliance with the terms and conditions of the proposed decommissioning plan and relevant provisions of Commission Rule 5.904(B). I further recommend that all applicable conditions from Commission Rule 5.904(B) be included in the CPG. The modification I recommend concerns the timing of ERDR seeking and obtaining Commission approval of the letter of credit. In both ERDR's testimony and its proposed decommissioning plan, ERDR commits to obtaining Commission approval of a final executed letter of credit before it begins construction of the Project. I recommend, consistent with past practice, that the Commission require ERDR to obtain approval of the letter of credit before it begins is proposed.

VI. <u>Memoranda of Understanding</u>

123. On September 16, 2022, ERDR filed a memorandum of understanding between itself and DHP (the "DHP MOU"). The DHP MOU contains provisions to protect against undue impacts on historic resources. Exh. ERDR-DHP-1.

124. On January 11, 2023, ERDR filed a memorandum of understanding between itself and AAFM (the "AAFM MOU"). The AAFM MOU contains provisions to protect against undue impacts on primary agricultural soils. Exh. ERDR-AAFM-1.

125. On January 17, 2023, ERDR filed a memorandum of understanding between itself and ANR (the "ANR MOU"). The ANR MOU contains provisions to protect against undue impacts on natural resources. Exh. ERDR-ANR-1.

Discussion

I recommend that the Commission accept the DHP MOU and AAFM MOU with all of their provisions and conditions without material change or conditions and require ERDR to comply with the terms and conditions of those MOUs as a condition of approval of the Project.

With respect to the ANR MOU, I recommend that the Commission accept the MOU and require ERDR to comply with its terms and conditions as a condition of approval of the Project, subject to modification.

As briefly discussed under the criteria of waste disposal, floodways, streams, wetlands, and necessary wildlife habitat and endangered species, and in greater detail under the shorelines criterion, ERDR in several instances is relying on GMP to be responsible for ensuring that no undue impacts occur on certain natural resources. This approach is also evident, though to a lesser degree, in certain portions of the ANR MOU where responsibility is placed on GMP to obtain a necessary permit, or responsibility for certain actions is expressed as being "either" ERDR's or GMP's.

As noted several times earlier in this proposal for decision, GMP is not a party to this proceeding, has not offered any testimony on which the Commission can make findings, and is not a signatory to the ANR MOU. Therefore, it is not appropriate for the Commission to place responsibilities on GMP in any order approving the Project or a certificate of public good establishing the requirements for its construction.

I realize that it is GMP, and not ERDR, that will be performing the work needed to upgrade and relocate the existing GMP distribution line so that it can accommodate the Project. However, the work is only being done to interconnect the Project, and the Project is therefore the direct cause of any potential impacts resulting from the work. I also realize that GMP may have independent responsibilities when it performs work on its distribution lines, and if it fails to meet those responsibilities it may have to answer to other regulatory agencies. However, in issuing a CPG to ERDR, it is appropriate for the Commission to place responsibility on ERDR—the CPG Holder—to ensure that GMP meets its obligations in performing the distribution line work, including obtaining required permits and observing applicable best practices and regulations.

Therefore, I recommend that the Commission include in any CPG issued for the Project the conditions in the ANR MOU as modified in the draft certificate of public good issued with this proposal for decision. The modifications are made so that responsibility for ensuring against undue impacts from the distribution line work remains with ERDR and is not shifted to an entity that is not a party to this proceeding and has not agreed to be bound by the terms of the CPG sought by ERDR.

VII. CONCLUSION

Based upon the evidence in the record, I recommend that the Commission conclude that the Project, subject to conditions:

(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, and substantial deference having been given to the land conservation measures and specific policies contained in the duly adopted regional plan;

(b) complies with the screening requirements of applicable municipal bylaws or ordinances and recommendations of a municipality applying such a bylaw or ordinance;

(c) 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 those developed pursuant to the provisions of subsection 209(d), section 218c, and subsection 218(b) of Title 30;

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

(e) will result in an economic benefit to the State and its residents;

(f) 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), impacts on primary agricultural soils as defined in 10 V.S.A. § 6001, and 6086(a)(1) through (8) and (9)(K), and greenhouse gas impacts;

(g) is a non-utility project and criterion 30 V.S.A. § 248(b)(6) is therefore not applicable;

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

 (i) 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 Secretary of Natural Resources; (j) does not involve a waste-to-energy facility;

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

(l) does not involve an in-state generation facility that produces electric energy using woody biomass; and

(m) is consistent with statutory minimum setback requirements.

This Proposal for Decision has been served on all parties to this proceeding in accordance with 3 V.S.A. § 811.

Date: March 14, 2023 In.

John J. Cotter, Esq. Hearing Officer

VIII. ORDER

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

1. The findings, conclusions, and recommendations of the Hearing Officer are adopted. All other findings proposed by parties, to the extent that they are inconsistent with this Order, were considered and not adopted.

2. In accordance with the evidence and plans submitted in this proceeding, the 5.0 MW AC solar electric generation facility (the "Project") proposed for construction and operation by ER Danyow Road Solar, LLC (the "CPG Holder") off Danyow Road in Sheldon, Vermont, will promote the general good of the State of Vermont pursuant to 30 V.S.A. § 248, and a certificate of public good ("CPG") to that effect will be issued in this matter.

3. As a condition of this Order, the CPG Holder must comply with all terms and conditions set out in the CPG issued in conjunction with this Order.

Dated at Montpelier, Vermont, this _____



Filed:

Attest:

Clerk of the Commission

Notice to Readers: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Commission (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: <u>puc.clerk@vermont.gov</u>)

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Commission within 30 days. Appeal will not stay the effect of this Order, absent further order by this Commission or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Commission within 28 days of the date of this decision and Order.

STATE OF VERMONT PUBLIC UTILITY COMMISSION

Case No. 22-3427-PET

Petition of ER Danyow Road Solar, LLC for a	
certificate of public good, pursuant to 30	
V.S.A. § 248, for a 5 MW ground-mounted	
solar array located in Sheldon, Vermont	

Entered:

<u>CERTIFICATE OF PUBLIC GOOD ("CPG") ISSUED</u> <u>PURSUANT TO 30 V.S.A. SECTION 248</u>

IT IS HEREBY CERTIFIED that the Vermont Public Utility Commission ("Commission") this day found and adjudged that the site preparation, construction, operation, and maintenance of a 5.0 MW solar electric generation facility off Danyow Road in Sheldon, Vermont (the "Project"), by ER Danyow Road Solar, LLC ("CPG Holder"), in accordance with the evidence and plans submitted in this proceeding, will promote the general good of the State, subject to the following conditions:

1. Site preparation, construction, operation, and maintenance of the Project must be in accordance with the plans and evidence submitted in this proceeding. Any material deviation from these plans or a substantial change to the Project must be approved by the Commission. Failure to obtain advance approval from the Commission 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.

2. Before beginning site preparation, construction, operation, or maintenance of the Project, the CPG Holder must obtain all other necessary permits and approvals. Site preparation, construction, operation, and maintenance of the Project must be in accordance with such permits and approvals, and with all other applicable regulations, including those of the Vermont Agency of Natural Resources ("ANR").

3. The CPG Holder must restrict construction activities and related deliveries for the Project to the hours between 7:00 A.M. and 6:00 P.M. Monday through Friday and between 8:00 A.M. and 5:00 P.M. on Saturdays. No construction activities or deliveries are allowed on Sundays, state holidays, or federal holidays. 4. The CPG Holder is responsible for all costs of distribution and transmission system upgrades that are necessary to address adverse impacts on system stability and reliability due to the Project, as determined by the system impact study and facilities study.

5. Before operating the Project, the CPG Holder must enter into an interconnection agreement with Green Mountain Power Corporation that conforms to the requirements of Public Utility Commission Rule 5.500. The CPG Holder is responsible for the cost of electrical system upgrades reasonably necessary to implement interconnection of the Project and such other costs appropriately submitted to the CPG Holder in accordance with Commission Rule 5.500.

6. The CPG Holder must remove the facilities authorized by this CPG once they are no longer in service and must restore the site to its condition before installation of the facility to the greatest extent practicable, consistent with the terms and conditions of its proposed decommissioning plan, identified in the evidentiary record as exhibit ERDR-JC-10 (rev.), which is approved except as modified below.

7. Before beginning site preparation, the CPG Holder must file with the Commission and obtain Commission approval for an executed letter of credit in the amount of \$169,498.00. The letter of credit must be an irrevocable standby letter of credit that: (i) names the Commission as the sole beneficiary of the letter of credit; (ii) is issued by an A-rated financial institution; (iii) includes an automatic extension provision or "evergreen clause"; and (iv) is bankruptcy remote.

8. Every three years the CPG Holder must file a report with the Commission, the Department, and each party to this proceeding, describing any adjustments and changes to the decommissioning fund in the previous three-year period. This report must be filed no later than February 28 of the third year following the issuance of the CPG and every subsequent third year.

9. The value of the decommissioning fund must be adjusted for inflation every three years based on the net positive change in the annual average of the U.S. Bureau of Labor Statistics' Northeast Urban Consumer Price Index for the preceding three-year period.

10. The Project's standby letter of credit must be adjusted every three years to reflect changes to the decommissioning fund as provided in condition 9, above. Revisions must be made no later than February 28 in conjunction with the report required pursuant to condition 8, above. The Commission may require more frequent adjustments due to facility or site conditions.

11. The Commission has the right to draw on the Project's irrevocable standby letter of credit to pay for decommissioning in the event that the CPG Holder has not begun decommissioning activities within 90 days of a Commission order directing decommissioning.

12. Upon completion of all decommissioning and site restoration activities, the CPG Holder must request a determination from the Commission that the CPG Holder's decommissioning obligations have been satisfied. Upon the Commission's determination that the decommissioning obligations have been satisfied, the Commission will terminate the Project's letter of credit.

13. The CPG Holder must fully implement the final aesthetic mitigation plan, identified in the record as the second revised Appendix D to exhibit ERDR-MB-2, as soon as reasonably possible, and in no case more than 90 days following the completion of construction, unless such timing would require implementation between October 15 and April 15, in which case the plan must be fully implemented within 30 days of the following April 15.

14. Within 30 days following the full implementation of the final aesthetic mitigation plan, the CPG Holder must submit to the Commission and all parties in this proceeding a certification that all work has been fully implemented in a manner consistent with the approved plan. This certification must include the completion of construction date as well as the date of interconnection and must be supported by an affidavit and dated photographs of the installed mitigation measures. If construction of the Project components or aesthetic mitigation has deviated from the design of the Project as approved, the CPG Holder must also file for Commission review and approval a revised final mitigation plan. Submission of a revised final mitigation plan will not relieve the CPG Holder from its obligation to request an amendment to the CPG for a substantial change.

15. For a period of three years, the CPG Holder must conduct an annual inspection of the Project to determine the health, vigor, and continued effectiveness of the mitigation. The CPG Holder must file with the Commission and parties an annual certification documenting the results of the inspection and any corrective actions taken. Certifications required under this paragraph must be submitted by the dates one, two, and three years following the submission of the certification of completion required by Paragraph 14, above.

16. The CPG Holder must maintain mitigation measures contained in the final aesthetic mitigation plan or revised final aesthetic mitigation plan for the life of the Project as those measures are depicted on the plan.

17. In accordance with Commission Rule 5.805(C), the Commission may conduct further process as needed to ensure compliance with the final aesthetic mitigation plan or revised final aesthetic mitigation plan.

18. Before beginning site preparation, the CPG Holder must file with the Commission, the parties, and the Town of Sheldon a letter stating that it has fulfilled all pre-site preparation CPG conditions, and that it intends to begin site preparation for the Project.

19. Before operating the Project, the CPG Holder must file with the Commission, the parties, and the Town of Sheldon a letter confirming that it has fulfilled all pre-operation CPG conditions and that it intends to begin operation of the Project.

20. As required by 30 V.S.A. § 248(a)(7), within 45 days of the date of this Order, the CPG Holder must record a notice of the CPG on the form available at http://puc.vermont.gov/document/cpg-municipal-notice-form in the land records of each municipality in which a facility subject to the CPG is located. The CPG Holder must also file proof of this recording with the Commission.

21. As provided in 30 V.S.A. § 248(t), despite any contrary provision of the law, primary agricultural soils as defined in 10 V.S.A. § 6001 located on the site of a solar electric generation facility approved under Section 248 must remain classified as such soils, and the review of any change in use of the site subsequent to the construction of the facility must treat the soils as if the facility had never been constructed.

22. The CPG Holder is responsible for ensuring that the interconnecting utility, Green Mountain Power Corporation ("GMP"), complies with applicable stormwater regulations and with required best management practices associated with the use of pentachlorophenol-treated poles.

23. The CPG Holder is responsible for ensuring that GMP complies with applicable regulations related to construction of utility lines within special flood hazard areas and river corridors, including obtaining any necessary collateral permits.

24. The CPG Holder is responsible for ensuring that GMP avoids installation of poles within streambanks, will adhere to its ANR-approved integrated vegetation management plan for any required clearing, and will obtain any necessary collateral permits.

25. The CPG Holder is responsible for ensuring that GMP avoids installation of poles between the mean high-water mark and the mean low-water mark of the Missisquoi River, and will obtain any necessary collateral permits for any aerial crossing of the river.

26. Except as modified below, the CPG Holder must comply with the terms contained in the memorandum of understanding with ANR, identified in the evidentiary record as exhibit ERDR-ANR-1.

27. Before any site preparation or construction of the Project and of the Project-related interconnection line upgrades, the CPG Holder must obtain a Vermont Construction Stormwater Permit from ANR's Department of Environmental Conservation Stormwater Program. All Project activities must be performed in accordance with the terms and conditions of the Vermont Construction Stormwater Permit.

28. Before any site preparation or construction of the Project and of the Project-related interconnection line upgrades, the CPG Holder must obtain a Vermont Individual Wetland Permit from ANR's Department of Environmental Conservation Wetlands Program. All Project activities must be performed in accordance with the terms and conditions of the Vermont Wetland Permit.

29. The CPG Holder must demarcate the outer edge of all 50-foot buffer zones of all Class II Wetlands in all instances where the edge of the buffer zone is within 50 feet of the Project activity area with visible flagging before site preparation or construction and instruct all work crews to avoid the wetland and buffer zone areas.

30. No later than six months in advance of the Project's decommissioning, the CPG Holder must complete, and provide to the Department of Environmental Conservation Wetlands Program, an updated wetlands assessment to determine if any of the Project infrastructure is located within any Class I or II wetlands or their buffer zones.

31. If, at the time of decommissioning, any Project infrastructure is determined to be located within a Class I or II wetland or its buffer zone, then the CPG Holder must obtain from the Wetlands Program a jurisdictional determination as to whether the decommissioning activities require a Vermont Wetland Permit, in which case the CPG Holder must obtain such permit before performing any decommissioning activities and must comply with its terms and conditions. If, at the time of decommissioning, any Project infrastructure is determined to be located within a Class I or II wetland or its buffer zone and a Vermont Wetland Permit is not required, the CPG Holder must, sufficiently in advance of decommissioning, submit a wetlands restoration plan to the Wetlands Program for review and approval as an Allowed Use under the Vermont Wetland Rules (see Section 6.23 of the current Vermont Wetland Rules). The restoration plan must address the removal of the solar array and other Project infrastructure located in any wetland, and must, at a minimum, contain the following elements: (i) identification of phasing and staging areas; (ii) use of methods that prevent rutting in the wetland, including removal of structures during frozen or dry conditions, or use of construction mats or similar techniques to minimize soil disturbance; (iii) revegetation of all disturbed areas within the wetland and buffer zone with appropriate conservation seed mix(es); and (iv) provisions for inspection by ANR before and after site restoration. If any Project infrastructure is located within a Class I or II wetland or its buffer zone at the time of decommissioning, then decommissioning of the Project must not take place until ANR's Wetland Program has issued a Vermont Wetland Permit or has approved the wetlands restoration plan as an allowed use under the Vermont Wetland Rules, whichever is applicable.

32. The following conditions 33 through 39 apply to the upgrades, modifications, and relocation of the GMP distribution line needed to serve the Project (the "interconnection line upgrade(s)"). These conditions apply to all work, including site preparation and construction activities, necessary to complete the interconnection line upgrades. These conditions will terminate upon completion of the interconnection line upgrades and will not apply to any of GMP's future operations, maintenance, or construction activities associated with GMP's distribution facilities once the work necessitated by the Project is complete.

33. Before starting site preparation or construction of the Project and the Project-related interconnection line upgrades, the CPG Holder must either: (a) demonstrate to ANR and obtain ANR's concurrence that all activities required for the interconnection line upgrades qualify as an Allowed Use under the Vermont Wetland Rules. If the activities qualify as an Allowed Use, then all site preparation and construction activities related to the interconnection line upgrades

must be performed in accordance with the Allowed Use requirements of the Vermont Wetland Rules; or (b) demonstrate to ANR and obtain ANR's concurrence that all interconnection line upgrade activities are located more than 50 feet from a Class II Wetland.

34. If neither of the provisions set forth in Paragraph 33, above can be met, then the CPG Holder must apply for and obtain a Vermont Wetland Permit from ANR's Department of Environmental Conservation Wetlands Program for the Project-related interconnection line upgrade activities. In that case, all impacts associated with the interconnection line upgrades will be treated by the Wetlands Program as cumulative impacts together with the impacts associated with other Project activities for the purposes of the Vermont Individual Wetland Permit to be obtained. The CPG Holder must not begin any site preparation or construction of the Project-related interconnection line upgrade activities, until a Vermont Wetland Permit is issued that includes the interconnection line upgrade activities.

35. The CPG Holder is responsible for ensuring that the outer edge of all 50-foot buffer zones of all Class II Wetlands are demarcated with visible flagging before the start of site preparation or construction of the interconnection line upgrades and that all work crews are instructed to avoid the wetland and buffer zone areas, except for activities specifically authorized by a Vermont Wetland Permit.

36. A population of the Vermont state listed (threatened) plant species harsh-leaved sunflower (*Helianthus strumosus*) is located within the existing GMP distribution line corridor where interconnection line upgrades will be performed. All work, including site preparation and construction activities, must avoid the harsh-leaved sunflower population and a 25-foot buffer area where feasible.

37. Before the start of site preparation or construction of the Project and of the Projectrelated interconnection line upgrades, the harsh-leaved sunflower population boundary must be clearly demarcated and surrounded with high-visibility fencing. In addition, a 25-foot buffer area extending beyond the population boundary fencing must also be clearly demarcated. All crews must be instructed to avoid the population and the buffer area except for entry required to perform necessary work, in which case all such work must be performed in accordance with and comply with the following: (i) all equipment must be cleaned to remove all visible soil and plant

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material before entering the plant population or its 25-foot buffer area; (ii) an endangered and threatened species takings permit must be obtained before any work is performed within the area of the harsh-leaved sunflower plant population, or within five feet of the plant population. All work must comply with the takings permit; (iii) any pole that is located within the harsh-leaved sunflower plant population, and which needs to be removed, must be cut flush with the ground and the subsurface portion left in place; (iv) the CPG Holder must use a qualified botanist to monitor the harsh-leaved sunflower plant population during each growing season for a period of five years after the completion of any work that takes place within the boundary of the plant population. An annual monitoring report must be provided by the CPG Holder to ANR's Department of Fish and Wildlife Natural Heritage Program; and (v) the harsh-leaved sunflower plant population and the 25-foot buffer area around the plant population must be monitored by the CPG Holder for the presence of non-native invasive species for a period of five years after the completion of any work that takes place within the boundary of the plant population or any ground disturbance activities that take place within the 25-foot buffer area. The CPG Holder must provide an annual monitoring report to ANR's Department of Fish and Wildlife Natural Heritage Program. All non-native invasive species identified during this period must be removed by hand on at least an annual basis.

38. To protect riparian buffer zones, all new poles (including replacement poles) for the Project-related interconnection line upgrades must be installed in accordance with the following: (i) no new poles may be placed within 100-feet of the top of bank of the Missisquoi River and no new poles may be placed within 50-feet of the top of bank of any stream; and (ii) if it is not practicable for any new poles to avoid the above referenced 100-foot and 50-foot buffer areas, then such poles may be placed within those areas provided they are not located any closer to the top of bank than the poles which presently exist in those areas.

39. If, after completion of GMP's final line design it is determined that any portion of the Project-related interconnection line upgrade work will need to take place beyond the existing line corridor, then before the start of site preparation or construction of the Project and of the Project-related interconnection line upgrades, the CPG Holder must perform a natural resources assessment of those areas beyond the existing corridor and apply to the Commission for an amended certificate of public good or a non-substantial change determination as appropriate.

The CPG Holder must provide the natural resources assessment along with the line upgrade design plans to ANR at least 45 days before any filing with the Commission.

40. The CPG Holder must allow ANR, through its authorized representatives, to enter upon and inspect the Project area upon reasonable notice, in a reasonable manner, and at reasonable times during ordinary business hours to determine compliance with the above conditions.

41. The CPG Holder must provide ANR with the following Project "as-built" information within 60 days of the commissioning date of the Project to assist ANR 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;

1. Mass of concrete used;

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.

42. By January 30 of each year, ANR may request that the CPG Holder provide an annual report for the previous calendar year of operations to ANR. The annual report must contain the information set out below, which will be used to assist ANR with compiling and analyzing greenhouse gas impacts. The CPG Holder 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, the CPG Holder 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 the sale of any Renewable Energy Credits associated with the generation; 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.), the CPG Holder must provide descriptions of both the failed and replacement components at the same level of detail as required by the "as-built" reporting requirements of Paragraph 41, above. This provision does not require the CPG Holder to provide information about *de minimis* replacement of system components (e.g., replacement of racking system hardware), or information regarding regular maintenance activities.

43. Should ANR not request the information set out in Paragraph 42 in any two consecutive years after Project commissioning, the CPG Holder's reporting obligations for all subsequent years shall automatically cease. ANR and the CPG Holder, by mutual agreement, may cancel the CPG Holder's reporting obligations set out in Paragraph 42 at any time.

44. ANR shall not use the information provided by the CPG Holder as required by Paragraphs 41 and 42 above to make any claims or report of benefits (including, but not limited to, benefits related to the renewable attributes of the Project's electric generation and greenhouse gas reductions associated with the Project) accruing to Vermont, or any other entity, resulting from the Project generating electricity from photovoltaic generation. 45. The CPG Holder must comply with the terms contained in the memorandum of understanding with the Vermont Division for Historic Preservation ("DHP"), identified in the evidentiary record as exhibit ERDR-DHP-1.

46. The CPG Holder must conduct archaeological investigation(s) and prepare related reports to identify, evaluate, and mitigate, if necessary, impacts on archaeological sites within the Project area. The CPG Holder's archaeological consultant must submit any scope of work to DHP for review and approval before beginning the work.

47. Before the completion of all relevant archaeological investigations, the CPG Holder, in consultation with DHP, must identify archaeological Sites VT-FR-0441 and VT- FR-0442 as not-to-be-disturbed archaeological buffer zones. Topsoil removal, grading, scraping, cutting, filling, stockpiling, logging, or any other type of ground disturbance is prohibited within the archaeological buffer zones until all necessary archaeological work is completed. Agricultural cultivation consistent with current and past practices shall not constitute ground disturbance.

48. All relevant archaeological studies to identify, evaluate, or mitigate impacts to archaeological sites must be carried out by a qualified consulting archaeologist. All such studies and associated reports must follow the DHP Guidelines for Conducting Archaeological Studies in Vermont (2017). A digital copy of the final report must be submitted to DHP. Any archaeological reports submitted to the Public Utility Commission must have specific archaeological site locational information redacted in accordance with 22 V.S.A. § 761(b) and 1 V.S.A. § 317(c) (20).

49. The archaeological investigations must be scheduled so that mitigation measures, if any are determined to be necessary, can be satisfactorily planned and accomplished before site preparation for or construction of the Project. Any archaeological sites within the Project area must not be impacted until mitigation measures have been completed. Proposed mitigation measures must be approved by DHP before implementation. Mitigation may include, but is not limited to, further site evaluation, data recovery, or modification of the buffer zone boundaries or the specific conditions that refer to the same.

50. Any changes to the Project that arise out of compliance with requirements of the memorandum of understanding identified in Paragraph 45, above and/or resulting from mitigation measures approved by DHP are subject to prohibitions on substantial changes or

material deviations pursuant to Commission Rule 5.408 and Paragraph 1 of this CPG, including that any substantial changes or material deviations must be approved by the Commission before they are made.

51. The CPG Holder must comply with the terms contained in the memorandum of understanding with the Agency of Agriculture, Food & Markets ("AAFM"), identified in the evidentiary record as exhibit ERDR-AAFM-1.

52. In areas where primary agricultural soils ("PAS") will be excavated, the CPG Holder must stockpile the PAS separately by soil horizon, making sure the piles are located and planted with ground cover as appropriate to prevent erosion and preserve integrity, and must comply with AAFM's Act 250 Procedure: Reclamation of Vermont Agricultural Soils (rev. Oct. 30, 2014) ("AAFM Guidelines"), currently available online at:

<u>https://agriculture.vermont.gov/sites/agriculture/files/documents/land_use/ReclamationGuideline</u> <u>sforAgriculturalSoils_.pdf</u>, as may be amended or updated. The CPG Holder must also comply with the AAFM Guidelines when sequencing returned soils at the conclusion of construction or Project decommissioning. The requirements of this paragraph do not apply to driven piles or posts to support the solar array, fence posts, and any other driven posts necessary to support infrastructure without the use of concrete or masonry.

53. Soil stockpiles must be located within the Project fence or in a similarly secure location.

54. If installing electric conduit or other features with fill or other imported material of any kind in areas of PAS, the CPG Holder must remove any PAS in a manner that separates soil horizons; stockpile the displaced layer(s), by the layer, for the life of the Project; and replace the remaining soil horizons in their original sequence to fill the trench after installation of the conduit or other features. When decommissioning the Project, the CPG Holder must excavate and replace soil horizons in the same way, this time removing the conduit or other features and imported material and replacing it with the stockpiled layer(s) in their original sequence. If no imported material is used, no stockpiling shall be required for the associated excavation, provided the CPG Holder ensures that any PAS removed during construction and again during decommissioning is replaced in a manner that retains the integrity of the PAS and the proper sequencing of soil horizons consistent with AAFM Guidelines. 55. The Project must not include any grading of PAS, except to the extent necessary for work related to stormwater improvements and tree planting.

56. Any fill or gravel used for staging areas must be separated from native soils by a suitable barrier such as geotextile fabric.

57. To reduce impacts on PAS from soil compaction, the CPG Holder must not use any vehicle or equipment with an axle load (the fraction of the gross weight distributed over each axle) of over 12,000 pounds on wet soils. Wet soils exist when the site has seen higher than average rainfall for a trailing 30-day period, based on National Weather Service or similar state or federal rainfall data. This prohibition shall not apply to the use of any onsite gravel roads that are constructed with geotextile fabric, a minimum of 10" of gravel, and a 1" or thicker cap of crushed aggregate.

58. Before site preparation or construction and again at the end of decommissioning, the CPG Holder must test the bulk density of the soil on each mapped soil unit containing primary agricultural soils within the Project limits to ensure that the primary agricultural soils on the site are materially the same after the Project as they were before construction. "Materially the same" means an increase in soil bulk density of no more than 10 percent.

59. The CPG Holder must undertake the soil tests and mitigate any material change in soil bulk density as follows:

- a. Before construction, for each area of direct impact such as staging areas, access roads, and any area on the Project site where axle loads (the fraction of the gross weight distributed over each axle) of construction vehicles or equipment will exceed 12,000 pounds per vehicle, the CPG Holder must collect two soil samples at least 100 feet apart and test them using the method "Bulk Density Test" described in the Natural Resources Conservation Service "Soil Quality Test Kit Guide." (Currently available online at https://efotg.sc.egov.usda.gov/references/public/WI/Soil_Quality_Test_Kit_Guide.)
- b. In any areas of primary agricultural soils on the Project site where axle loads of construction vehicles or equipment will not exceed 12,000 pounds, the

CPG Holder must collect and test one sample for each mapped soil unit before construction and must otherwise follow the same testing protocols.

c. At the end of the decommissioning process, the CPG Holder must repeat the testing at the same locations tested before construction.

60. If the post-decommissioning soil bulk density for any sample shows an increase in soil bulk density from preconstruction soil bulk density that is greater than 10 percent, then the CPG Holder must conduct agricultural subsoiling and/or other strategies to decompact soil until soil bulk density is materially the same as it was before Project construction.

61. The CPG Holder must serve test results upon AAFM within 60 days of the test, as follows: (i) by email and U.S. Mail to counsel of record in this matter, as listed in Public Utility Commission records at the time of service; and (ii) by email to AGR.Notice@vermont.gov, as may be updated in Public Utility Commission records at the time of service.

62. The CPG Holder must pay all invoices (if any) from any State agency that (a) are related to this proceeding and (b) are not still under review by the Commission.

63. This Certificate of Public Good may not be transferred without prior approval of the Commission.

Anthony Z. Roisman	PUBLIC UTILITY
) Margaret Cheney	COMMISSION
	OF VERMONT
J. Riley Allen	

OFFICE OF THE CLERK

Filed:

Attest: _____ Clerk of the Commission

Notice to Readers: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Commission (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: <u>puc.clerk@vermont.gov</u>)

PUC Case No. 22-3427-PET - SERVICE LIST

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