

STATE OF VERMONT  
PUBLIC UTILITY COMMISSION

Case No. 18-3084-PET

Petition of Wallingford Solar LLC for a certificate of public good, pursuant to 30 V.S.A. § 248, authorizing the installation and operation of a 2.2 MW solar electric generation facility off Creek Road in Wallingford, Vermont	Hearing at Montpelier, Vermont February 28, 2019
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Order entered: 04/12/2019

**ORDER GRANTING CERTIFICATE OF PUBLIC GOOD**

In this Order, the Vermont Public Utility Commission adopts the following proposal for decision.

PRESENT: Elizabeth Schilling, Esq., Hearing Officer

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## **PROPOSAL FOR DECISION**

### **I. INTRODUCTION**

This case involves a petition filed by Wallingford Solar LLC (“Wallingford Solar” 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 2.2 MW solar electric generation facility at 139 Creek Road in Wallingford, 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. PROCEDURAL HISTORY**

On September 6, 2018, Wallingford Solar filed a petition with supporting testimony and exhibits (the “Petition”) requesting a CPG to install and operate a 2.2 MW solar electric generation facility in Wallingford, Vermont.

On September 20, 2018, the Town of Wallingford Selectboard filed a letter exercising its right to appear as a party in this proceeding.<sup>1</sup>

On October 3, 2018, the Rutland Regional Planning Commission filed public comments on the Project stating that the Project is consistent with the Rutland Regional Plan adopted on June 19, 2018.

On October 5, 2018, the Town of Wallingford filed comments in support of the Project.

On October 17, 2018, I conducted a prehearing conference and issued a prehearing conference order.

On November 7, 2018, I conducted a site visit and public hearing. Prior to the public hearing the Department conducted a public information session. Several members of the public attended the public information session. No one provided any comments during the public hearing.

On November 14, 2018, the Vermont Division for Historic Preservation filed comments on the Project stating that the Project does not present any archaeological concerns and will have no adverse effect on any historic sites.

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<sup>1</sup> 30 V.S.A. §§ 248(a)(4)(H) and (I).

On January 22, 2019, Wallingford Solar filed stipulations entered into with the Vermont Agency of Natural Resources and the Vermont Agency of Agriculture, Food and Markets as well as supplemental prefiled testimony and exhibits.

On February 12, 2019, the Department filed prefiled testimony and exhibits in which it concluded that the Project: will not have an undue adverse effect on aesthetics or the scenic or natural beauty of the area; will not unduly interfere with the orderly development of the region; is not expected to pose any significant detriment to electric system reliability or stability; requires no significant improvements to the Vermont transmission or subtransmission system; and will not pose an undue safety risk.

On February 28, 2019, I held an evidentiary hearing. The prefiled testimony and exhibits were entered into the evidentiary record at the hearing. Additionally, Wallingford Solar's Petition, the Rutland Regional Planning Commission's comments ("RRPC Comments"), and the Vermont Division for Historic Preservation's comments ("DHP Comments") are entered into evidence subject to timely objection by the parties.<sup>2</sup>

No other comments on the Petition were received by the Commission.

### **III. FINDINGS**

Based upon 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. The Petitioner is Wallingford Solar LLC, a Vermont limited liability company with principal offices at 170 Bonnet Street, Manchester Center, Vermont 05255. Petition at 1.
2. Wallingford Solar proposes to construct and operate a 2.2 MW (AC) solar electric generation facility at 139 Creek Road in Wallingford, Vermont. Thomas Hand, Petitioner ("Hand") pf. at 2.
3. The Project is a standard-offer renewable energy project being developed as a merchant plant by Wallingford Solar. Hand pf. at 3 and 13.

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<sup>2</sup> If any party has an objection to these documents being entered into evidence, the party shall submit its objection within the time period set for commenting on the proposal for decision.

4. The Project will be located on approximately 17 acres of a larger parcel of approximately 49.6 acres, which was previously the site of a gravel pit and hot mix asphalt plant and industrial facility. Hand pf. at 2 and 3.

5. The Project parcel is bounded by wooded undeveloped land to the north and west, rural residential areas to the south, and active industrial operations to the east. Hand pf. at 5; exh. WS-TH-2(Rev.).

6. The Project will be accessed using an existing access road off Creek Road, which will be extended by 1,971 feet with an additional 60-foot turnaround. The extended portion of the road will be approximately 12 feet in width. Hand pf. at 3, 6-7; exh. WS-TH-2(Rev.).

7. The Project will consist of approximately 9,504, 330-watt (DC) south-facing solar panels mounted at a fixed angle of 30 degrees on 528 metal racks with 18 modules or panels per rack. At their highest point, the panels will reach a height of approximately 10 feet from the ground. Hand pf. at 3-4.

8. The solar panels will be connected to 44, 50 kW inverters, which will convert the DC electricity to AC. The power from each inverter will be fed to one oil-filled pad-mounted transformer, with a rating of up to 2,500 kVA, to step up the inverter's output voltage to match that of the distribution grid. Hand pf. at 3-4; exh. WS-TH-2(Rev.).

9. The Project will interconnect with Green Mountain Power Corporation's ("GMP") three-phase transmission line via an existing GMP pole located on the Project parcel. The existing distribution line on the Project parcel will be extended approximately 250 feet west and two utility poles will be installed to support the additional span. The new poles will be similar in height to the existing poles located on the site and will support metering, protection, and switching equipment. Hand pf. at 3-4; exh. WS-TH-2(Rev.).

10. All switchgear equipment will be inside a locked UL-listed, code-approved electrical enclosure. Hand pf. at 20.

11. The Project will be surrounded by a minimum seven-foot-high, fixed knot, game-style fence. A small gap will be maintained at the bottom of the fence to allow small wildlife to travel through the site. Hand pf. at 4; exh. WS-TH-2(Rev.).

12. Construction of the Project is expected to take approximately 20 weeks. Hand pf. at 7.

13. The Project will require up to approximately 7.5 acres of tree clearing. Exh. WS-TH-2(Rev.).

14. The sound generated during Project construction will be of limited duration and will be comparable to the sound generated by construction equipment. Jason Ross, Petitioner (“Ross”) pf. at 2.

15. Construction activities will be limited to the hours between 7:00 A.M. and 7:00 P.M. Monday through Friday and between 8:00 A.M. and 5:00 P.M. on Saturdays, as needed. Construction will not occur on state or federal holidays or Sundays unless authorized by the Commission, upon request. Ross pf. at 2.

16. Wallingford Solar performed a sound study analysis that examined the potential sound levels from the Project during operation. The Project’s inverters and transformers are the only sound-emitting equipment for the Project that may be audible from off-site locations. The estimated Project-related sound levels will be approximately 25 dBA at the nearest property boundary and 20 dBA at the nearest residence during the daytime, and 13 dBA at the nearest property boundary and 10 dBA at the nearest residence at night. Ross pf. at 2-3; exh. WS-JR-2.

17. The Project’s estimated sound levels during both daytime and nighttime are relatively low, are consistent with other similar solar projects, and are likely to be at or below general background noise levels. Ross pf. at 3; exh. WS-JR-2.

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

As required by 30 V.S.A. § 8007(b), the Commission has implemented procedures governing the application and review of renewable energy projects with a plant capacity that is greater than 150 kW and is 2.2 MW or less by adopting standards and procedures for such projects that include the conditional waiver of several Section 248 criteria.<sup>3</sup> Because the Project is a standard-offer renewable energy project and will have a plant capacity not to exceed 2.2 MW, the Project meets the requirements for conditional waivers of certain Section 248 criteria pursuant to 30 V.S.A. § 8007(b) and the Commission’s Section 8007(b) Order. These criteria are identified in the findings below.

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<sup>3</sup> *In Re: Simplified Procedures for Renewable Energy Plants with a Capacity Between 150 kW and 2.2 MW*, Order of 8/31/10 (“Section 8007(b) Order”).

**Orderly Development of the Region**

[30 V.S.A. § 248(b)(1)]

18. The Project will not unduly interfere with the orderly development of the region, with due consideration having been given to the recommendations of the municipal and regional planning commissions, the recommendations of the municipal legislative bodies, and the land conservation measures contained in the plan of any affected municipality. This finding is supported by findings 19 through 22, below.

19. The Wallingford Selectboard and Wallingford Energy Committee each provided a letter in support of the Project. Neither body made any recommendations regarding the Project. Exhs. WS-TH-6 and WS-TH-13.

20. The Project is consistent with the Rutland Regional Plan, adopted June 19, 2018, which identifies gravel pits and quarries as preferred areas for energy generation. The Rutland Regional Planning Commission did not make any recommendations regarding the Project. RRPC Comments; exh. WS-MW-3.

21. The Project will be located within an area zoned “Industrial” on Wallingford’s zoning map. The “Industrial” zone is the area designated in the Wallingford Town Plan as suitable for commercial scale solar. Hand pf. at 3; exh. WS-MW-3.

22. The Wallingford Town Plan does not contain any land conservation measures specific to the Project site or the surrounding area. Hand pf. at 12.

**Municipal Screening Requirements**

[30 V.S.A. § 248(b)(1)(B)]

23. Wallingford’s municipal zoning regulations adopted August 17, 2015, and the Town Ordinances do not contain any screening requirements applicable to ground-mounted solar electric generation facilities. Hand pf. at 12.

**Need for Present and Future Demand for Service**

[30 V.S.A. § 248(b)(2)]

24. Pursuant to the Commission’s Section 8007(b) Order, this criterion is conditionally waived for the Project, and no party presented any testimony that would warrant rescinding that waiver in this proceeding.

**Impact on System Stability and Reliability**

[30 V.S.A. § 248(b)(3)]

25. The Project will not have an adverse effect on system stability and reliability. This finding is supported by findings 26 through 30, below.

26. Wallingford Solar filed an interconnection application with GMP on October 26, 2017. Hand pf. at 13.

27. On May 1, 2018, GMP provided a Facilities Report and a Generator Interconnection Agreement to Wallingford Solar. The Facilities Report concluded that the Project “has the potential to negatively impact the reliability and power quality of the area electric power system.” However, the Facilities Report stated that the “potential problems can be avoided through tested and well known strategies,” and the Report provided the scope of work and cost estimates for the improvements necessary to safely interconnect the Project. Hand pf. at 13-14; exh. WS-TH-9.

28. Wallingford Solar will pay for any electrical system modifications required to interconnect the Project to the GMP system. Hand pf. at 15.

29. Wallingford Solar will not interconnect the Project until it enters an Interconnection Agreement with GMP and otherwise receives the necessary approvals from GMP. Hand pf. at 15.

30. Wallingford Solar proposed the following CPG conditions related to the Project’s electrical components, in response to feedback it received from the Department:

- a. All the Project’s inverters shall comply with UL-1741SA; and
- b. In the event the CPG Holder owns and controls the underground primary voltage line running from the Project transformer to the GMP distribution line, as depicted in Exhibit WS-TH-2(Rev.), the CPG Holder shall register with Dig Safe and comply with 30 V.S.A. Chapter 86 and Rule 3.800 for the life of the Project.

Hand supp. pf. at 3-4.

**Discussion**

I recommend that the Commission approve the Project subject to the following conditions: (1) prior to operation of the Project, Wallingford Solar must enter into an interconnection agreement with GMP that conforms to the requirements of Commission Rule

5.500, and (2) Wallingford Solar 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 Wallingford Solar in accordance with Commission Rule 5.500.

Additionally, to ensure system stability and reliability, I recommend that the Commission include the conditions, identified above, which were proposed by Wallingford Solar in response to feedback it received from the Department.

**Economic Benefit to the State**

[30 V.S.A. § 248(b)(4)]

31. Pursuant to the Commission's Section 8007(b) Order, this criterion is conditionally waived for the Project, and no party presented any testimony that would warrant rescinding that waiver in this proceeding.

**Aesthetics, Historic Sites, Air and Water Purity, the Natural Environment,  
the Use of Natural Resources, and Public Health and Safety**

[30 V.S.A. § 248(b)(5)]

32. 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), and greenhouse gas impacts. This finding is supported by findings 33 through 102, 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)]

33. 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. Carla Fenner, Petitioner ("Fenner") pf. at 11; exh. WS-CF-2 at 3.

**Air Pollution and Greenhouse Gas Impacts**  
[30 V.S.A. § 248(b)(5); 10 V.S.A. § 6086(a)(1)]

34. The Project will not result in undue air pollution or greenhouse gas emissions. This finding is supported by findings 35 through 38, below.

35. During construction and maintenance of the Project, the use of equipment and vehicles will produce temporary and minimal emissions of air pollutants. Hand pf. at 16-17.

36. Any dust resulting from construction and maintenance activities may be controlled with water. Hand pf. at 17.

37. The Project will annually produce an estimated 3,600,000 kilowatt hours of electricity without creating any greenhouse gas emissions during its operation. Hand pf. at 20.

38. The Project may have the effect of reducing greenhouse gas emissions during times of peak demand within the ISO New England regional grid, by replacing power that would otherwise be produced by fossil fuels. Hand pf. at 20-21.

**Discussion**

In the stipulation entered between the Vermont Agency of Natural Resources and Wallingford Solar, the Petitioner agreed to provide the Agency with post-construction and annual information to assist the Agency with compiling and analyzing greenhouse gas impacts. The signatories to the stipulation agree that the conditions are appropriate for considering the greenhouse gas emissions associated with the Project. Therefore, I recommend that the Commission include the proposed conditions in the CPG.

**Water Pollution**  
[10 V.S.A. § 6086(a)(1)]

39. The Project will not result in undue water pollution. This finding is supported by findings 40 through 64, below.

**Headwaters**  
[10 V.S.A. § 6086(a)(1)(A)]

40. The Project is not located in a headwaters area. Fenner pf. at 3; exh. WS-CF-2 at 3-4.

**Waste Disposal**

[10 V.S.A. § 6086(a)(1)(B)]

41. 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. Fenner pf. at 5; exh. WS-CF-2 at 4-5.

42. The Project will not need permanent sanitary waste treatment, will not require on-site sanitary waste treatment or the use of public waste treatment facilities, and will not involve any on-site waste disposal. Exh. WS-CF-2 at 5.

43. Waste generated during construction will be disposed of in accordance with applicable solid waste regulations. Fenner pf. at 5; exh. WS-CF-2 at 5.

44. Woody debris generated from tree removal and shrub clearing will be stockpiled in upland areas within the Project parcel and either offered to the landowner or neighbors for firewood or chipped and removed from the site. Exh. WS-CF-2 at 5.

45. The Project transformer will use a non-toxic, biodegradable cooling oil. The transformer will be equipped with a secondary oil containment pan capable of holding 110 percent of the volume of oil plus a minimum of five inches of freeboard. Hand pf. at 4; exh. WS-CF-2 at 4.

**Water Conservation, Sufficiency of Water, and Burden on Existing Water Supply**

[10 V.S.A. §§ 6086(a)(1)(C), (a)(2), and (a)(3)]

46. Pursuant to the Commission's Section 8007(b) Order, these criteria are conditionally waived for the Project, and no party presented any testimony that would warrant rescinding that waiver in this proceeding.

**Floodways**

[10 V.S.A. § 6086(a)(1)(D)]

47. A small portion of the Project is located in a floodway or floodway fringe, but it 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 findings 48 through 50, below.

48. During construction and operation, the Project will utilize an existing access road which is located within the Vermont Agency of Natural Resources-mapped river corridor and the Federal Emergency Management Agency mapped-floodplain of Otter Creek. The road will be used in its current condition; no expansion or improvements are proposed. Fenner pf. at 5-6; exh. WS-CF-2 at 6.

49. The Project will also utilize a short section of an existing, unimproved trail to access the Project during construction and operation. The access trail will require improvements resulting in 956 square feet of new impervious surface located in the river corridor. However, the new impervious surface will be limited in size and located further away from Otter Creek than an existing gravel access road and an existing building. Fenner pf. at 6; exh. WS-CF-2 at 6.

50. An existing overhead utility pole, with 3-phase service from GMP, is located within the river corridor and floodplain and may be replaced during Project construction. If the pole is replaced, it will be replaced in kind. Fenner pf. at 6; exh. WS-CF-2 at 6.

### Discussion

In the stipulation entered between the Vermont Agency of Natural Resources and Wallingford Solar, the parties agreed to proposed CPG conditions regarding project activities with the potential to affect the floodway or floodway fringe of Otter Creek. I recommend that the Commission include the proposed conditions in the CPG to ensure the Project does not have an undue adverse effect on the floodway or floodway fringe.

### Streams

[10 V.S.A. § 6086(a)(1)(E)]

51. The Project will not have an undue adverse effect on streams. This finding is supported by findings 52 and 53, below.

52. Otter Creek, an unnamed intermittent stream, and two open water bodies associated with streams are located within the area Wallingford Solar studied when designing the Project. All the streams and water bodies have 50-foot riparian buffers. Fenner pf. at 6-7; exh. WS-CF-2 at 7.

53. The Project has been designed to avoid impacts to all streams and their 50-foot riparian buffers. Fenner pf. at 6-7; exh. WS-CF-2 at 7.

Discussion

In the stipulation entered between the Vermont Agency of Natural Resources and Wallingford Solar, the parties agreed to a proposed CPG condition to prohibit construction activities and vegetative clearing and management within 100 feet of Otter Creek. I recommend that the Commission include the proposed condition in the CPG to ensure Project activities do not have an undue adverse effect on streams.

**Shorelines**

[10 V.S.A. § 6086(a)(1)(F)]

54. The Project will not have an undue adverse effect on shorelines because the Project is not located on or adjacent to the shoreline of lake, pond, reservoir, or river. Fenner pf. at 7; exh. WS-CF-2 at 8.

**Wetlands**

[10 V.S.A. § 6086(a)(1)(G)]

55. The Project will not have an undue adverse effect on wetlands. This finding is supported by findings 56 and 57, below.

56. Wallingford Solar identified, and the Vermont Department of Environmental Conservation confirmed, one vernal pool and five wetlands, including four Class II wetlands and one Class III wetland, near the Project area. Fenner pf. at 7-8; exh. WS-CF-2 at 8-9.

57. The Project has been designed to avoid all impacts to vernal pools, wetlands, and wetland buffer zones. Fenner pf. at 7-8; exh. WS-CF-2 at 8-9; exh. WS-TH-2(Rev.).

Discussion

In the stipulation entered between the Vermont Agency of Natural Resources and Wallingford Solar, the parties agreed to proposed CPG conditions to ensure that construction and decommissioning activities avoid and do not affect any wetlands and their buffer zones. I recommend that the Commission include the proposed conditions in the CPG to ensure Project activities do not have an undue adverse effect on wetlands.

**Soil Erosion**

[10 V.S.A. § 6086(a)(4)]

58. 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 findings 59 through 64, below.

59. The Project will not require extensive site grading but will disturb approximately 5.7 acres. Fenner pf. at 8.

60. The Project will require a construction stormwater discharge permit from the Vermont Department of Environmental Conservation prior to commencement of site preparation and construction activities. Fenner pf. at 8; exh. WS-CF-2 at 9-10.

61. Under the construction stormwater discharge permit, the Project will have to comply with the Vermont Standards & Specifications for Erosion Prevention and Sediment Control and the Vermont Low Risk Site Handbook for Erosion Prevention and Sediment Control. Exh. WS-CF-2 at 9-10.

62. Compliance with the requirements of the construction stormwater discharge permit will minimize the potential for sediment-laden runoff to reach nearby receiving waters. Exh. WS-CF-2 at 9-10.

63. The Project will add approximately 0.6 acre of new impervious surface. Exh. WS-CF-2 at 5.

64. The Project will require an operational stormwater discharge permit because there is more than one acre of existing impervious surface on the Project parcel and the Project will add more than 5,000 square feet of impervious surface. Fenner pf. at 4; exh. WS-CF-2 at 4-5.

**Discussion**

In the stipulation entered between the Vermont Agency of Natural Resources and Wallingford Solar, the parties agreed to a proposed CPG condition requiring Wallingford Solar to obtain construction and operational stormwater discharge permits before commencing site preparation and construction. I recommend that the Commission include the proposed condition in the CPG to ensure Project activities avoid undue adverse effects related to stormwater and soil erosion.

**Transportation**

[10 V.S.A. § 6086(a)(5)]

65. The Project will not cause unreasonable congestion or unsafe conditions with respect to the use of highways, waterways, railways, airports, airways, or other means of transportation, existing or proposed. This finding is supported by findings 66 through 70, below.

66. Access to the Project site will be off Creek Road using the existing point of entry and access drive. Hand pf. at 18.

67. The Project will require approximately 50 trips by standard-width trucks to deliver solar panels, racking, and inverters over an approximately 16-week period. Hand pf. at 7 and 18.

68. Following the initial delivery of Project materials, construction-related traffic will be limited to more infrequent deliveries for smaller, necessary electrical supplies and workers entering and exiting the site. Hand pf. at 18.

69. Wallingford Solar does not expect to have any oversize or overweight deliveries requiring special permits. However, Wallingford Solar will obtain any required permits from the Vermont Agency of Transportation prior to construction. Hand pf. at 18.

70. During Project operation, traffic into and out of the Project will be limited to that necessary for maintenance and repairs. Hand pf. at 18.

**Educational Services**

[10 V.S.A. § 6086(a)(6)]

71. Pursuant to the Commission's Section 8007(b) Order, this criterion is conditionally waived for the Project, and no party presented any testimony that would warrant rescinding that waiver in this proceeding.

**Municipal Services**

[10 V.S.A. § 6086(a)(7)]

72. 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 any municipal water or sewer, nor any unique fire, police, or rescue services. Hand pf. at 19.

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

[10 V.S.A. § 6086(a)(8)]

73. 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 findings 74 through 92, below.

Aesthetics

74. The Project will not have an undue adverse impact on aesthetics or on the scenic or natural beauty of the area. Michael Willard, Petitioner (“Willard”) pf. at 3; Willard supp. pf. at 2; Jeremy Owens, Department (“Owens”) pf. at 2-3.

75. The parcel on which the Project will be built was formerly the site of a gravel pit and hot mix asphalt plant. The site has been reclaimed pursuant to the requirements of Vermont Land Use Permit #1R0807. The site now includes a cleared area for the solar array and an existing gravel access drive. An existing 3-phase utility line is also located nearby. Exh. WS-MW-2 pf. at 3, 5, and 8.

76. The Project will be in Wallingford’s “Industrial” zoning district and will be near other active industrial operations, including Ames True Temper Corporation approximately 650 feet to the east, the Wallingford Department of Public Works Town Garage approximately 500 feet to the northeast, and the neighboring Vermont Railway railroad. Willard pf. at 4; exh. WS-MW-2 at 4-5.

77. The Project parcel is surrounded by a mixture of mature trees and understory plants, and the areas to the north and west of the Project are wooded and undeveloped. Exh. WS-MW-2 at 4 and 7.

78. Otter Creek lies between the Project and the businesses and residences located to the east of the Project parcel. Exh. WS-MW-2 at 4 and 15.

79. The vegetation, topography, and structures surrounding the Project parcel will act as a visual buffer between the Project and most abutting residences and public roads and vantage points. Exh. WS-MW-2 at 7; exh. DPS-1 at 5.

80. Three residences, located immediately southeast of the Project site between 260 and 325 feet away and at a slightly higher elevation than the Project, will have views of the Project. The views will be limited by intervening trees and vegetation. The screening provided by the

trees will be more effective during times of the year when the trees have their leaves. Exhs. WS-MW-2, WS-MW-3, and DPS-1 at 2.

81. Views from residences located across the valley to the east of US Route 7 will be limited by distance and the intervening topography and vegetation. Exh. DPS-1 at 2-5.

82. Views of the Project from public roads and publicly accessible locations will be limited due to distance, vegetation, topography, and structures. Willard pf. at 3; Owens pf. at 2; exhs. WS-MW-2 and WS-MW-3.

83. The dark color of the solar panels and the metal racking will help the Project to better blend into the background and is contextually appropriate for the site, a former gravel pit located in an industrial area. Exh. WS-MW-2 at 5.

84. The Project will not result in the permanent loss of open space. The Project parcel, a former industrial site, is privately owned and is not currently an open space accessible to the public. Exh. WS-MW-2 at 6.

85. The Project does not violate any clear, written community standards intended to protect the scenic beauty of the area. In fact, the Project is located within an industrial district specifically designated by Wallingford as suitable for commercial scale solar. Hand pf. at 12; exh. WS-MW-3.

86. The Project will not be shocking or offensive to the average person given the nearby industrial facilities and the former use of the site as a gravel extraction and hot mix asphalt plant facility. Exh. WS-MW-3 at 5.

87. Wallingford Solar considered whether additional plantings were necessary to mitigate views of the Project from residences and determined that additional plantings would not significantly increase screening of the Project. Exh. DPS-2 at 5.

88. Additionally, Wallingford Solar provided notice to the adjoining landowners of the Project, but none requested any supplemental landscape mitigation. Exh. DPS-2 at 6.

### Historic Sites

89. There are no historic resources within the Project site. Within the area of potential effect, there are four State Register-listed properties (Exh. WS-KO-2, Location/APE Map ID#s 17-20, also see Table 1 and Figure 2 in Appendix B), which were listed on April 21, 1987 (VHSS 1125-37, 1125-38, 1125-39, and 1125-39). Additionally, the State Register-listed

Wallingford Village Historic District is eligible for expansion, and that expansion may include River Street and the manufacturing complex at Creek Road and River Street to the east of the Project parcel. Kaitlin O'Shea, Petitioner ("O'Shea") pf. at 5; exh. WS-KO-2.

90. The Project will have no direct impact on historic resources. While the Project has the potential to create minor changes to the viewshed within the area of potential effect, because of how the Project is sited with a buffer of trees between the Project and surrounding properties, the Project will not interfere with the public's ability to interpret the historic resources within the existing, or potentially expanded, Wallingford Village Historic District or the individually listed historic resources. O'Shea pf. at 5; exh. WS-KO-2.

91. The Vermont Division for Historic Preservation reviewed the Project for impacts to archaeological sites and above-ground historic sites and concluded that the Project does not present any archaeological concerns and will have no adverse effect on any historic sites. DHP Comments at 2.

#### 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. Fenner pf. at 9; exh. WS-CF-2 at 10-11.

#### Necessary Wildlife Habitat and Endangered Species

[10 V.S.A. § 6086(a)(8)(A)]

93. The Project will not have an undue adverse effect on any endangered species or critical wildlife habitat. This finding is supported by findings 94 and 95, below.

94. A rare, threatened, and endangered plant survey of the site was conducted on May 31 and July 17, 2018. The rare *Cardamine dentata*, or cuckoo flower, was identified in two locations in wetland 2018-1, near the northern edge of the Project. The Project has been designed to avoid the cuckoo flower and its on-site wetland habitat. Fenner pf. at 9; exh. WS-CF-2 at 12.

95. There is no necessary wildlife habitat present within or near the Project. Fenner pf. at 10; exh. WS-CF-2 at 12-13.

Discussion

In the stipulation entered between the Vermont Agency of Natural Resources and Wallingford Solar, the parties agreed to a proposed CPG condition requiring the fencing around the Project to have openings along the bottom of a minimum of six inches by six inches. I recommend that the Commission include the proposed condition in the CPG to ensure that small wildlife may travel through the Project site.

**Development Affecting Public Investments**

[10 V.S.A. § 6086(a)(9)(K)]

96. The Project will not unnecessarily or unreasonably endanger any public or quasi-public 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 because the closest public investment to the Project site is Elm Street, which will not be adversely affected by the limited and temporary traffic due to the Project's construction and operation. Hand pf. at 19.

**Public Health and Safety**

[30 V.S.A. § 248(b)(5)]

97. The Project will not have any undue adverse effects on the health, safety, and welfare of the public. This finding is supported by findings 98 through 102, below.

98. The Project will be installed to meet the applicable safety standards of the National Electrical Code and National Electrical Safety Code and utility interconnection standards for safe and reliable operation of solar electric plants. Hand pf. at 19.

99. All Project switchgear equipment will be inside a locked, UL-listed, code-approved electrical enclosure. Hand pf. at 20.

100. The electrical lines that connect the inverters and transformer to the GMP system will be located at an adequate height above the ground. Hand pf. at 20.

101. The electricity will be transmitted from the Project to the existing GMP system at a voltage and in a manner that does not pose undue risks related to electromagnetic fields. Hand pf. at 20.

102. A perimeter fence with a minimum height of seven feet will enclose the entire solar plant to deter vandals and trespassers. The fence will be posted with appropriate electrical warning signs. Hand pf. at 20.

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

103. The Project will not have any undue adverse effects on primary agricultural soils as defined in 10 V.S.A. § 6001. This finding is supported by findings 104 through 107, below.

104. Approximately 5,605 square feet of primary agricultural soils will be directly affected by the Project, of which approximately 1,728 square feet will be temporary impacts restored following construction. The 3,877 square feet of permanently affected primary agricultural soils will be due to excavation for the access road. Fenner pf. at 10; exh. WS-CF-3 at 3.

105. Approximately 1.4 acres of primary agricultural soils will be temporarily affected during construction due to tree clearing and trenching to install underground electric lines. Fenner pf. at 10; exh. WS-CF-3 at 3.

106. Based on observations made on site and review of detailed contour data across the Project site, it appears that the primary agricultural soils on site have been previously affected. The former gravel pit operation changed the landform on site significantly. The area in which primary agricultural soils are mapped near the western edge of the Project exhibits evidence of previous extraction and land shaping. There is currently an artificially uniform, level terrace-type landform with moderately to steeply sloping lands to both the east and west, and successional regeneration of shrub and tree cover in an area previously cleared. A review of aerial photography available through public databases found that the gravel extraction extended into this area of primary agricultural soils. Fenner pf. at 10-11; exh. WS-CF-3.

107. The Project's impacts on primary agricultural soils will be avoided and minimized to the greatest extent practicable. Further, the Wallingford Solar proposes to implement certain measures during construction and decommissioning that will address any temporary, permanent, and indirect impacts on primary agricultural soils within the Project site. Fenner pf. at 11; exh. WS-CF-3 at 3-4; exh. WS-TH-11.

Discussion

In the stipulation entered between the Vermont Agency of Agriculture, Food and Markets and Wallingford Solar, the parties agreed to proposed CPG conditions regarding how primary agricultural soils shall be dealt with during construction and decommissioning. I recommend that the Commission include the proposed conditions in the CPG to ensure the Project does not have undue adverse effects on primary agricultural soils.

**Consistency with Company's Least Cost Integrated Plan**

[30 V.S.A. § 248(b)(6)]

108. Pursuant to the Commission's Section 8007(b) Order, this criterion is conditionally waived for the Project, and no party presented any testimony that would warrant rescinding that waiver in this proceeding.

**Compliance with Twenty-Year Electric Plan**

[30 V.S.A. § 248(b)(7)]

109. Pursuant to the Commission's Section 8007(b) Order, this criterion is conditionally waived for the Project, and no party presented any testimony that would warrant rescinding that waiver in this proceeding.

**Waste-to-Energy Facility**

[30 V.S.A. §248(b)(9)]

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

**Existing or Planned Transmission Facilities**

[30 V.S.A. § 248(b)(10)]

111. 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 findings 112 and 113, below.

112. The Project will interconnect with GMP's existing 12 kV distribution line located on the Project parcel. Hand pf. at 23.

113. The costs of any electrical system modifications required to interconnect the Project to the GMP distribution system will be borne by Wallingford Solar. Hand pf. at 23.

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

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

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

115. The Project complies with Vermont's statutory setback requirements for ground-mounted solar electric generation facilities, which require that a facility be set back more than 100 feet from the nearest road and more than 50 feet from the nearest property boundary line. The Project is set back from the closet public highway by approximately 463 feet, and from the closest property line by approximately 71 feet. Hand pf. at 23; exh. WS-TH-2(Rev.).

**IV. DECOMMISSIONING COST ESTIMATE AND LETTER OF CREDIT**

116. At the end of the Project's expected useful life, a determination will be made whether the Project can be re-powered after any necessary regulatory approval, or whether it will be decommissioned and the site restored to its current condition. Hand pf. at 10.

117. At the time the Project is decommissioned, the Project equipment will be dismantled and removed from the site and sold, re-used, recycled, or disposed of in accordance with applicable waste laws and regulations in existence at that time, and the site will be restored to its condition prior to the installation of the facility to the greatest extent practicable in accordance with Wallingford Solar's decommissioning plan and cost estimate. Hand pf. at 10; exh. WS-TH-7.

118. Wallingford Solar submitted a detailed decommissioning cost estimate, which estimates that the cost of decommissioning will be \$121,500.00 at current rates. The cost estimate does not take any salvage value into account. Hand pf. at 10; exh. WS-TH-7.

119. Wallingford Solar filed a draft irrevocable standby letter of credit that names the Commission as the sole beneficiary, includes an auto-extension provision or "evergreen clause," and is bankruptcy remote. Hand pf. at 10; exh. WS-TH-7.

### Discussion

Commission Rule 5.900 establishes standard requirements for the decommissioning of electric generation 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.

Wallingford Solar's cost estimate and plan for decommissioning and the draft letter of credit and drawing certificate submitted with the cost estimate and plan are consistent with the requirements of Commission Rule 5.904(B). Therefore, 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).

### **V. STIPULATIONS**

120. Wallingford Solar entered into stipulations with the Vermont Agency of Natural Resources and the Vermont Agency of Agriculture, Food and Markets. Exhs. WS-TH-10 and WS-TH-11.

121. The Vermont Agency of Natural Resources stipulation includes proposed CPG conditions related to the protection of Otter Creek and its riparian buffer; the floodway boundaries; the Project's fencing; stormwater permitting; secondary containment for the transformer; wetland protection; and post-construction reporting. Exh. WS-TH-10.

122. The Vermont Agency of Agriculture, Food and Markets stipulation includes proposed CPG conditions regarding measures to protect and preserve primary agricultural soils found on the Project site. Exh. WS-TH-11.

123. Both stipulations provide that if the Commission does not approve the stipulations in their entirety, the agreements set forth in the stipulations shall terminate and the parties shall have the right to submit filings in the docket. Exhs. WS-TH-10 and WS-TH-11.

### Discussion

I have reviewed the stipulations and recommend that the Commission accept them with all their provisions and conditions without material change or condition and require Wallingford

Solar to comply with the terms and conditions of the stipulations as a condition of its approval of the Project.

## **VI. CONCLUSION**

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

(a) will not unduly interfere with the orderly development of the region with due consideration having been given to the recommendations of the municipal and regional planning commissions, and the recommendations of the municipal legislative bodies;

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

(c) is a non-utility renewable energy project with a plant capacity greater than 150 kW and no more than 2.2 MW and thus, pursuant to the Commission's Section 8007(b) Order, review of this Project under 30 V.S.A. § 248(b)(2) is conditionally waived;

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

(e) is a standard-offer project and thus, pursuant to the Commission's Section 8007(b) Order, review of this Project under 30 V.S.A. § 248(b)(4) is conditionally waived;

(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) 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 a renewable energy project with a plant capacity greater than 150 kW and no more than 2.2 MW and thus, pursuant to the Commission's Section 8007(b) Order, review of this Project under 30 V.S.A. § 248(b)(7) is conditionally waived;

(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.



Elizabeth Schilling, Esq.  
Hearing Officer

#### **VII. HEARING OFFICER DISCUSSION**

In response to the proposal for decision, I received comments from the Department on April 8, 2019. The Department requested that condition 21 of the CPG, regarding the fencing for the Project, be modified to require that the fencing have openings of 6 x 6 inches along the bottom, rather than a *minimum* of 6 x 6 inches. The Department requested this change for public health and safety reasons – to prevent the unauthorized access of persons, including small children, to energized equipment.

Also, on April 8, 2019, Wallingford Solar filed a comment letter stating that it had reviewed the proposal for decision and has no objection to issuance of a final order and CPG consistent with the proposal for decision. Additionally, Wallingford Solar stated that it had reviewed the Department's comments and has no objection to the Department's request regarding the specifications of the Project fencing.

While the stipulation between Wallingford Solar and the Vermont Agency of Natural Resources included language requiring that the openings along the bottom of the fence be a minimum of 6 x 6 inches, the Department's proposed change meets the requirements of the stipulation and is consistent with the proposed certificate of public good filed by Wallingford Solar in this proceeding on March 18, 2019. Therefore, I recommend that the Commission approve the CPG with the modification requested by the Department.

**VIII. ORDER**

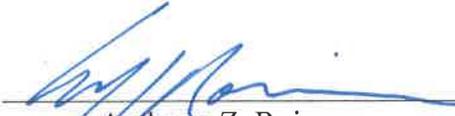
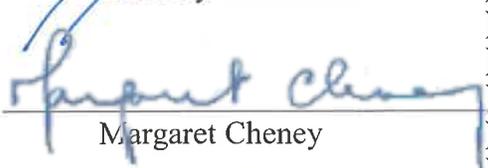
IT IS HEREBY ORDERED, ADJUDGED, AND DECREED by the Public Utility Commission (“Commission”) of the State of Vermont that:

1. The findings, conclusions, and recommendations of the Hearing Officer, including the Hearing Officer Discussion, are hereby 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 2.2 MW solar electric generation facility (the “Project”) proposed for construction and operation by Wallingford Solar LLC (the “Petitioner”) at 139 Creek Road in Wallingford, Vermont, will promote the general good of the State of Vermont pursuant to 30 V.S.A. § 248, and a certificate of public good to that effect shall be issued in this matter.

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

Dated at Montpelier, Vermont, this 12th day of April, 2019

 _____ Anthony Z. Roisman	) PUBLIC UTILITY
 _____ Margaret Cheney	) COMMISSION
 _____ Sarah Hofmann	) OF VERMONT

OFFICE OF THE CLERK

Filed: April 12, 2019

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: [puc.clerk@vermont.gov](mailto:puc.clerk@vermont.gov))*

*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.*

PUC Case No. 18-3084-PET - SERVICE LIST

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