

STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Case No. 20-____-NMP

Petition of Norwich Turnpike Solar, LLC for a certificate of public good pursuant to 30 V.S.A. §§ 248 and 8010, authorizing installation and operation of a 150 kW (AC) photovoltaic group net-metering system at 645 Turnpike Road, Norwich, Vermont	
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

Order entered: / /2020

FINAL ORDER GRANTING NET-METERING CERTIFICATE OF PUBLIC GOOD

The Vermont Public Utility Commission (“Commission”) adopts the following proposal for decision.

PROPOSAL FOR DECISION

I. INTRODUCTION

This case involves an application (“Application”) filed by Norwich Turnpike Solar, LLC (“Applicant”) with the Commission for a certificate of public good (“CPG”), pursuant to 30 V.S.A. §§ 248 and 8010, to install and operate a 150 kW solar net-metering system in Norwich, Vermont (the proposed “Project”).

Based on the findings made herein and subject to conditions, I recommend that the Commission conclude that the Project complies with the requirements of Commission Rule 5.100, the Application does not raise a significant issue with respect to the applicable criteria of 30 V.S.A. §§ 248 and 8010, and the Project will promote the general good of the State of Vermont.

II. PROCEDURAL HISTORY

On June 26, 2020, the Applicant filed the Application with the Commission.

On __, 2020, Commission deemed the application complete.

On __, 2020, the Vermont Division for Historic Preservation (“VDHP”) filed comments (the “DHP Comments”).

On __, 2020, the Vermont Agency of Natural Resources (“ANR”) filed comments on the Project (the “ANR Comments”).

On __, 2020, the Department of Public Service (the “Department” or “DPS”) filed comments on the Project (the “DPS Comments”).

III. CONDITIONAL WAIVER OF REVIEW UNDER CERTAIN CRITERIA FOR NET-METERING PROJECTS

Pursuant to 30 V.S.A. § 8010 and Commission Rule 5.111, the Commission has conditionally waived review of the following criteria, and I recommend that the Commission find that no party presented any testimony that warrants rescinding any part of that waiver in this proceeding:

- 30 V.S.A. § 248(b)(2) (need);
- 30 V.S.A. § 248(b)(4) (economic benefit);
- 30 V.S.A. § 248(b)(6) (integrated plan);
- 30 V.S.A. § 248(b)(7) (electric energy plan);
- 30 V.S.A. § 248(b)(9) (waste-to-energy facilities); and
- 30 V.S.A. § 248(b)(10) (transmission facilities).

Therefore, only the criteria applicable to the system under Rule 5.111 are addressed in this Order.

IV. FINDINGS

Pursuant to 30 V.S.A. § 8(c), and based on the record and evidence before me, I present the following proposed findings of fact and conclusions of law to the Commission.

Description of the Project

1. The Project is a 150 kW AC ground-mounted solar electric generation facility sited at the southern end of the larger 8.5+/- acre parcel of land located at 645 Turnpike Road, Norwich, Vermont. Staskus pf. at 3.

2. The land parcel is not subject to an Act 250 Land Use permit. Staskus pf. at 3.

3. The Project will be interconnected with Green Mountain Power Corporation’s (“GMP”) electric distribution circuit, with a line extension to a new GMP 150 kVA pole-mounted transformer, typical of transformers used throughout GMP’s distribution system. Staskus pf. at 5-6; exh. MS-2.

4. The Project will include the following principal Project components:

- Multiple rows of solar panels mounted on a racking system anchored to the ground;
- Twelve (12) string inverters each having a capacity of 12.5 kW (AC), for an aggregate nameplate capacity of 150 kW (AC) mounted on the racking system;
- Underground electric cable in conduit connecting the panel rows, string inverters, AC combiner panel and AC disconnect pedestal;
- A 150 kVA pole-mounted transformer on a GMP distribution pole and connection to the existing GMP distribution system;
- Access off Turnpike Road; and
- All energized equipment rated for outdoor use, securely shielded by locked enclosure covers and otherwise compliant with NEC code "Guarding of Live Parts".

Staskus pf. at 6-7; exh. MS-2.

5. Installation activities and related deliveries will occur between 7:00 AM and 7:00 PM Monday through Friday, and on Saturdays from 8:00 AM to 5:00 PM, if required to meet the Project schedule. No construction activities or deliveries will occur on Sundays or on state or federal holidays. Staskus pf. at 8.

Applicable Rate Adjustors

6. The Applicant has elected to transfer the Project's renewable energy credits ("RECs") to GMP. Application at 5.

7. The Town of Norwich has designated the Project site as a preferred site for solar. Staskus pf. at 11.

8. While not required, the Two-Rivers Ottauquechee Regional Planning Commission ("TRORPC") has also designated the Project site as a Preferred Site. Staskus pf. at 11; exhibit MS-5.

Discussion

Because the Applicant has elected to transfer the ownership of the RECs generated by the net-metering system, the Project is entitled to receive a REC adjustor of plus three cents per

kilowatt hour for 10 years from the date the system is commissioned, pursuant to Commission Rule 5.127(B).

The siting and REC adjustors will be stated in the Project's CPG, pursuant to Commission Rule 5.127(B)(2) and (C)(1).

Orderly Development of the Region

[30 V.S.A. § 248(b)(1)]

9. 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 10 through 13, below.

10. Section 248(b)(1) "relates to the orderly development of the region, not to a particular municipality within the region." *In re Petition of Rutland Renewable Energy, LLC for Certificate of Public Good Pursuant to 30 V.S.A. § 248*, 2016 Vt. 50, ¶ 9. Nevertheless, the Project is consistent with the planning policies outlined in the Norwich Town Plan. Exh. MDK-2 at 8-10.

11. The Project will not violate any land conservation measures contained in the Norwich Town Plan or the TRORC Regional Plan. Kane pf. at 2.

12. The Project will further the goals of each plan to encourage the development of renewable energy sources. Kane pf. at 2.

13. The Project location has also been designated as a Preferred Site and therefore is suitable for solar development. Kane pf. at 2; exh. MS-5.

Municipal Screening Requirements

[30 V.S.A. § 248(b)(1)(B)]

14. The Town of Norwich has not adopted municipal screening requirements for ground-mounted solar electric generation facilities pursuant to either 24 V.S.A. §§ 2291(28) or 4414(15). Kane pf. at 3.

Impact on System Stability and Reliability & Transmission

[30 V.S.A. § 248(b)(3) & § 248(b)(10)]

15. The Project will not have an undue adverse impact on system stability or reliability or adversely impact the transmission system. This finding is supported by findings 16 and 17, below.

16. On May 28, 2020, GMP issued the results of the Fast Track Analysis for interconnection of the Project, which concludes the need to conduct a Feasibility Study. Staskus pf. at 12.

17. On June 4, 2020, the Applicant executed a Feasibility Study Agreement with GMP. The Applicant has agreed to pay for all necessary interconnection costs required by the Feasibility Study per Rule 5.507(E). Staskus pf. at 13.

**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)]

18. 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 findings 19 through 68, below.

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

19. 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 at or near the Project. Exh. DB-2 at Section VI.

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

20. As a renewable energy source powered by the sun, this Project will contribute to reducing greenhouse gas emissions to the extent it displaces fossil-fueled generating resources. Staskus pf. at 12.

21. As a renewable energy source powered by the sun, the Project will contribute to reducing greenhouse gas emissions to the extent it displaces fossil-fueled generation resources. Staskus pf. at 14.

22. Any limited air emissions or greenhouse gas emissions associated with installation will be primarily from any fossil-fueled vehicles and equipment used for deliveries, worker

transportation, and installation activities. The emissions will be typical of small construction projects, will be short-term, and will not be adverse. Staskus pf. at 14.

23. The Project will not cause undue noise. The combined impact of all noise-emitting equipment is 29.4 dBA from the nearest residence. Staskus pf. at 14; exh. MS-7.

24. During the limited construction period, during the hours of construction, some noise typical of construction equipment will be generated by light construction activities. Staskus pf. at 13.

Water Pollution

[10 V.S.A. § 6086(a)(1)]

25. The Project will not result in undue water pollution. This finding is supported by findings 26 through 43, below.

Headwaters

[10 V.S.A. § 6086(a)(1)(A)]

26. The Project is located in a headwater as its watershed area is less than 20 square miles. The Project area is however below 1,500 ft. in elevation and the Project site is not for public water supplies and does not provide significant recharge to aquifers (ANR Natural Resources Atlas). Exh. DB-2 at Section IV.

27. The Project will obtain an Agency of Natural Resources, Department of Environmental Conservation construction stormwater permit prior to commencement of installation and be performed in accordance with the Vermont Standards & Specifications for Erosion and Prevention and Sediment Control, 2019. Staskus pf. at 15.

28. The Project site, including space between the solar panels, will remain vegetated and the Project transformers will utilize non-toxic mineral oil. Exh. DB-2 at Section IV.

29. The Project will not result in a reduction of the quality of ground or surface waters in the area. Exh. DB-2 at Section IV.

Waste Disposal

[10 V.S.A. § 6086(a)(1)(B)]

30. 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. Staskus pf. at 14-15.

Water Conservation & Burden on Existing Water Supply
[10 V.S.A. § 6086(a)(1)(C) & § 6086(a)(2) & (3)]

31. The Project itself will not utilize water. Use of water will be limited to what is necessary to control dust during installation and to promote germination of seed. Staskus pf. at 16.

32. The Project will not unreasonably burden existing water supply. Staskus pf. at 16.

Floodways
[10 V.S.A. § 6086(a)(1)(D)]

33. The proposed Project is not located within a floodway or a floodway fringe and will not restrict or divert the flow of floodwaters or significantly increase the peak discharge of a river or stream within or downstream from the Project, or endanger health, safety, or welfare of the public or of riparian owners during flooding. Exh. DB-2 at Section V.

Streams
[10 V.S.A. § 6086(a)(1)(E)]

34. The Project will not adversely impact any streams. There are no surface waters within the Project footprint. The closest stream is a tributary to Bloody Brook approximately 100' to the west of the Project area. Exh. DB-2 at Section V.

Shorelines
[10 V.S.A. § 6086(a)(1)(F)]

35. The Project is not located on or near a shoreline. Exhibit DB-2 at Section VII.

Wetlands
[10 V.S.A. § 6086(a)(1)(G)]

36. The Project will not violate the rules of the Secretary of Natural Resources, as adopted under chapter 37 of Title 10, Vermont Statutes Annotated, relating to significant wetlands. This finding is supported by findings 37 through 40, below.

37. There are two Class 2 wetlands in the Project area. Exh. DB-2 at Section VIII.

38. The Project has been designed to avoid impacts to the Class 2 wetlands and associated 50' buffer zones in the vicinity of the Project. Exh. DB-2 at Section VIII.

39. The Project area also contains two additional wetland resources, but due to size and lack of significant functions and values, these wetlands are classified as Class 3. Exh. DB-2 at Section VIII.

40. The Project will result in no tree clearing in these small wetland areas. The Project access road will result in less than 3,000 sf of impact to Class 3 wetland resources and therefore does not trigger the need for a reporting Army Corps of Engineers permit. Exh. DB-2 at Section VIII.

Soil Erosion

[10 V.S.A. § 6086(a)(4)]

41. The Project will not cause undue soil erosion or reduce the capacity of the land to hold water so that a dangerous or unhealthy condition results. This finding is supported by findings 42 and 43, below.

42. The Total Limit of Disturbance from installation activities will be approximately 1.25± acres. Staskus pf. at 17; exh. MS-2.

43. Project installation will be performed in accordance with the *Vermont Standards and Specifications for Erosion Prevention and Sediment Control* (2019). The Project will apply for coverage under Construction General Permit 3-9020. Staskus pf. at 16-17.

Transportation

[10 V.S.A. § 6086(a)(5)]

44. There will not be any long-term transportation impacts from the Project, and only short-term periodic traffic impacts due to deliveries of Project equipment to the site during installation. Staskus pf. at 17.

45. Such deliveries will use existing roads with vehicles that commonly use public roads. No oversized or overweight trucks or permits are necessary. Staskus pf. at 17.

Educational Services

[10 V.S.A. § 6086(a)(6)]

46. 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. Staskus pf. at 18.

Municipal Services

[10 V.S.A. § 6086(a)(7)]

47. The Project will not place an unreasonable burden on the ability of the affected municipality to provide municipal or government services. Use of municipal roads to transport

equipment and materials will be limited in duration and similar to many other small-scale projects. Staskus pf. at 18.

Aesthetics, Historic Sites, and Rare and Irreplaceable Natural Areas

[10 V.S.A. § 6086(a)(8)]

48. 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 49 through 57, below.

Aesthetics

49. The Project will not have an adverse aesthetic impact because it is in harmony with its surroundings and largely avoids off-site visual impacts. The level of visibility is modest, and the Project will create only a modest change to the surrounding landscape. Kane pf. at 2; exh MDK-2 at 5-6.

50. Even if adverse, the impacts are not undue because the Project does not violate a clear community standard, would not violate the sensibilities of the average person, and the location chosen for the Project limits direct views. Kane pf. at 2; exh. MDK-2 at 7-10.

Historic Sites

51. There are no above-ground historic structures on or near the Project site. Exh. MDK-2 at 15.

52. The Applicant submitted a complete Project Review Form to VDHP on March 10, 2020. If any significant archeological areas are identified, they will either be avoided, or adverse effects will be mitigated as specified in the VDHP Guidelines for Conducting Archeology in Vermont (2017). Staskus pf. at 13.

Rare and Irreplaceable Natural Areas (“RINA”)

53. The Project site does not contain a significant natural community or a Rare and Irreplaceable Natural Area (RINA). Exh. DB-2 at Section IX.

Necessary Wildlife Habitat and Endangered Species

[10 V.S.A. § 6086(a)(8)(A)]

54. The Project will not destroy or significantly imperil necessary wildlife habitat or any endangered species. This finding is supported by findings 55 through 57, below.

55. There is no necessary wildlife habitat in proximity to the Project. Exh. DB-2 at Section X.A.

56. There are not rare, threatened or endangered (“RTE”) animal species in the Project area. Exh. DB-2 at Section X.B.21.

57. A plant survey will be conducted during the field season of 2020 to verify the Agency of Natural Resources database results, which do not identify any RTE plant species. If a threatened or endangered plant species is identified, it will either be avoided or the Applicant will obtain a takings permit from the Agency of Natural Resources. Exh. DB-2 at Section X.B.2.

Development Affecting Public Investments

[10 V.S.A. § 6086(a)(9)(K)]

58. The Project will not unnecessarily or unreasonably endanger the public or quasi-public investment in any 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 based upon findings 59 through 63, below.

59. Due to the limited amount of time required for installation, the Project will not adversely impact Turnpike Road or the public’s use of those roadways. Staskus pf. at 19.

60. The Project will not result in an undue adverse impact to aesthetics from public views. Exh. MDK-2.

61. The Project has been designated a Preferred Site for solar. Staskus pf. at 19.

62. The Project creates a number of benefits with local, statewide, and regional significance. For example, the RECs will be transferred to GMP to be retired, and thus will contribute to Vermont’s statewide renewable energy goals and reduce dependence on out-of-state electricity sources and regional electric transmission system. Staskus pf. at 19.

63. The Project will also benefit public investments, in that it will generate new tax revenues to the Town of Norwich and State of Vermont. Staskus pf. at 19.

Public Health and Safety

[30 V.S.A. § 248(b)(5)]

64. The Project will not have any undue adverse effects on the health, safety, and welfare of the public. This finding is supported by findings 65 through 68, below.

65. Unlike fossil-fueled electric generation resources, the Project does not create any waste or other emissions that would be harmful to the public health and safety. Staskus pf. at 14.

66. The Project equipment and design satisfies all applicable safety codes, including NEC and NESC. The Project transformers will be in compliance with GMP's specifications (Distribution Standard #T-01, 3.1, 12/13) that meet or exceed ANSI C57.12.00-2010, C57.12.20-2005, C57.12.90-2006, and all other applicable ANSI, IEEE, EEI, NEMA, and OSHA Standards. Staskus pf. at 14.

67. The Project inverters will be compliant with IEEE 1547 Standard for Interconnection and Interoperability of Distributed Resources with Associated Electrical Power Systems Interfaces (2018) and UL 1741 SA. Staskus pf. at 14-15; exh. MS-4.

68. All energized equipment will be rated for outdoor use, securely shielded, include locked enclosure covers, and otherwise compliant with NEC code "Guarding of Live Parts". Staskus pf. at 15; exh. MS-4.

Primary Agricultural Soils

[30 V.S.A. § 248(b)(5)]

69. The Project will impact only 0.01 acres of prime agricultural soils on the eastern side of the array in the area where the underground line extension is planned and a small portion of vegetation clearing (no stumping). Staskus pf. at 17; exh. MS-2.

70. Prime agricultural soils will be excavated and backfilled in the same soil layers following trenching to preserve the prime agricultural soils. Staskus pf. at 17.

Setbacks

[30 V.S.A. § 248(s)]

71. The Project meets the setback requirements of Section 248(s) because it is more than 40 feet from the nearest public road and 25 feet from the nearest property boundary. Staskus pf. at 15; exh. MS-2.

CONCLUSION

Based upon the certifications of the Applicant and the findings made herein, I recommend that the Commission conclude that, subject to conditions, the Project will comply with the requirements of Commission Rule 5.100 and will promote the general good of the State.

This Proposal for Decision has not been circulated to the parties pursuant to 3 V.S.A. § 811 because it is not adverse to any party.

Hearing Officer

V. 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 hereby adopted. All findings proposed by parties that were not adopted in this Order are expressly rejected.

2. In accordance with the evidence and plans submitted in this proceeding, the 150 kW AC photovoltaic group net-metering system (the “Project”) proposed for installation and operation by Norwich Turnpike Solar, LLC (the “CPG Holder”) at 645 Turnpike Road, Norwich, Vermont, will promote the general good of the State of Vermont pursuant to 30 V.S.A. §§ 248 and 8010, and a certificate of public good (“CPG”) to that effect shall be issued in this matter.

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

Dated at Montpelier, Vermont this ____ day of _____ 2020.

_____) PUBLIC
_____) UTILITY COMMISSION
_____) OF VERMONT

OFFICE OF THE CLERK

FILED: _____

ATTEST: _____

Clerk of Commission

PUC Case No. 20 - _____ - NMP – Service List

Parties

Kimberly K. Hayden, Esq. (for the Applicant)
Paul Frank + Collins PC
One Church Street 05402
P.O. Box 1307
Burlington, VT 05401
khayden@pfclaw.com

Vermont Agency of Natural Resources (for Vermont Agency of Natural Resources)
1 National Life Drive, Davis 2
Montpelier, VT 05620-3901

Vermont Department of Public Service (for Vermont Department of Public Service)
112 State St
Montpelier, VT 05620

Non-Party Recipients

Net-Metering Notices (for Green Mountain Power Corporation)
Green Mountain Power Corporation
DR@greenmountainpower.com