

**STATE OF VERMONT
PUBLIC UTILITY COMMISSION**

Case No.

Petition of Essex A North Lot Solar, LLC for a
certificate of public good pursuant to 30 V.S.A. §
248 for a 3.5 MW ground-mounted solar array off
Robinson Parkway in Essex Junction, Vermont

**PREFILED TESTIMONY AND DECLARATION OF
ADAM CRARY
ON BEHALF OF
ESSEX A NORTH LOT SOLAR, LLC**
This document and associated exhibits have been filed ePUC

Summary of Testimony

Mr. Crary's testimony assesses the Project's impacts to the following 30 V.S.A. § 248(b)(5) natural environment criteria, including: water pollution, 10 V.S.A. § 1424a(d) outstanding resource waters, headwaters, floodways, streams, shorelines, wetlands, rare and irreplaceable natural areas, necessary wildlife habitat and endangered species, sufficiency of water, burden on existing water supply, and existing water supply.

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Introduction

- Q1. Please state your name, current employer, business address, and position.
- A1. My name is Adam Crary, employed at Vanasse Hangen Brustlin, Inc. (VHB), and my business address is 40 IDX Drive, Building 100, Suite 200, South Burlington, Vermont. I am currently the Renewable Energy Team leader for VHB in Vermont.
- Q2. What is your education background, qualifications, and work experience?
- A2. I have a B.S. in Natural Resources (Natural History and Ecology concentration) from the University of Maine. I have been a Senior Ecologist and then Director of Natural Sciences at VHB since 2009, where I am responsible in part for managing projects, technical staff, and technical work in conduct of various ecological surveys and reporting, typically under the requirements of federal, state, and local environmental regulatory programs. I also manage and coordinate the work of various other VHB services with a particular focus on energy-related projects. I have been a professional environmental consultant since 2001, specializing in natural resources identification and assessments. In addition to assessments conducted for numerous projects under 30 V.S.A. Section 248(b)(5) review, I have prepared and coordinated applications for the acquisition of numerous federal and state environmental impact permits, which involve application of expert ecological and natural resource assessment disciplines. My resume is attached as Exhibit EANL-AC-1.

1 Q3. Have you testified previously before the Public Utility Commission?

2 A3. Yes. I have testified (through prefiled testimony and/or live hearings) for numerous
3 projects located across Vermont, particularly those related to electric infrastructure
4 upgrades or replacement, or new energy generation, particularly renewables. I have also
5 provided technical support to expert witnesses providing testimony for other projects under
6 PUC review, including utility-scale projects, a sample of which are listed on my resume.

7
8 Q4. What is the purpose of your testimony?

9 A4. My testimony supports Essex A North Lot Solar, LLC (Petitioner) petition for a
10 Certificate of Public Good (CPG) pursuant to 30 V.S.A § 248 with respect to their
11 proposal to construct and operate an approximately 3.5-megawatt (MW) alternating-
12 current solar electric generation facility to be installed on fixed-tilt racking systems
13 within an approximately 13.2-acre area within a perimeter fence on private property
14 located off Robinson Parkway in Essex Junction, Vermont (the “Project”). Specifically, I
15 examine whether the construction and operation of the Project complies with the
16 following criteria:

- 17 • Outstanding Resource Waters (10 V.S.A. § 1424a(d));
- 18 • Water Pollution (10 V.S.A. § 6086(a)(1));
- 19 • Headwaters (10 V.S.A. § 6086(a)(1)(A));
- 20 • Floodways (10 V.S.A. § 6086(a)(1)(D));
- 21 • Streams (10 V.S.A. § 6086(a)(1)(E));
- 22 • Shorelines (10 V.S.A. § 6086 (a)(1)(F));

- 1 • Wetlands (10 V.S.A. § 6086(a)(1)(G));
- 2 • Rare and Irreplaceable Natural Areas (10 V.S.A. § 6086(a)(8));
- 3 • Necessary Wildlife Habitat and Endangered Species (10 V.S.A. § 6086 (a)(8)(A));
- 4 and
- 5 • Water Conservation, Sufficiency of Water Supply, and Burden on Existing Water
- 6 Supply (10 V.S.A. § 6086(a)(1),(2),(3)).

7 Under my direction, VHB prepared a Natural Resource Assessment Memorandum ("NR
8 Memo"), provided as Exhibit EANL-AC-2, on which I rely when making my assessments
9 per most of these criteria.

10 As described in the NR Memo, natural resources assessments were conducted within an
11 overall approximately 38.6 acre "Study Area," which includes the Project components
12 (*e.g.*, the array, access, perimeter fence, staging, and electrical connection, etc.). In
13 addition, the Project will require 5 new poles (1 riser pole, and 4 more poles) and new
14 overhead lines to connect with the existing GMP owned pole on the east side of the Police
15 Station access road, where the Project will interconnect with GMP's existing distribution
16 network. All proposed utility poles and overhead electrical lines will be owned and
17 installed by GMP. VHB understands that the Petitioner has agreed to accept responsibility
18 for ensuring adequate steps are taken during the installation of the GMP components to
19 avoid undue adverse impacts to protected natural resources.

1 In making my assessments, Project support staff at VHB and I have relied upon the Project
2 plans developed by VHB using information provided by Petitioner and its
3 design/consultant team. In making my assessments, I also rely on the Project description
4 supplied by the Petitioner's Project Manager, Jake Clark. Project support staff and I have
5 also reviewed the site plans for the Project (Exhibit EANL-JC-2). The results of VHB's
6 specific assessments are included in detail in the above-referenced memorandum, and
7 generally summarized below.

8 **SECTION 248 CRITERIA**
9 **Outstanding Resource Waters**
10 (10 V.S.A. §1424a(d)(2) & (13))

11 Q5. Is this Project located on or would it affect any segment of the waters of the state that have
12 been designated as outstanding resource waters by the Water Resources Board, former
13 Water Resources Panel, or the Agency of Natural Resources?

14 A5. No. As described in Exhibit EANL-AC-2, page 3, the Project is not located in the vicinity
15 of waters that have been designated outstanding resource waters.

16 **Water Purity, the Natural Environment**
17 **and Water Pollution**
18 (30 V.S.A. § 248(b)(5) & 10 V.S.A. § 6086(a)(1)-(8))
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20 Q6. Will this Project result in undue water pollution?

21 A6. No, for the reasons enumerated under the specific water-related criteria discussed below,
22 and as also discussed in the prefiled testimony of Project witness Stephanie Wyman.
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Headwaters

(10 V.S.A. § 6086(a)(1)(A))

Q7. Is the Project located in a Headwaters area, and if so, will it reduce the quality of ground or surface water?

A7. No. It is VHB's opinion that the site is within lands devoted to intense development and therefore is not in a Headwaters location. Exhibit EANL-AC-2 at page 4 provides further detail however, how the Project will nevertheless be constructed to not adversely impact ground or surface water quality and meet applicable health and DEC regulations.

Floodways

(10 V.S.A. § 6086(a)(1)(D) & 1424a(d)(3))

Q8. Is the Project within a floodway, floodway fringe, or river corridor, and if so, will it have an undue adverse effect on such areas, or endanger the health, safety, and welfare of the public or riparian owners during flooding?

A8. No. There are no floodway, floodway fringe, or river corridor areas within the Project's Study Area. Exhibit EANL-AC-2, page 5 provides further details behind VHB's assessment and these results.

Streams

(10 V.S.A. § 6086(a)(1)(E))

Q9. Please describe any streams or waterways in the Project vicinity.

A9. As described in detail in Exhibit EANL-AC-2 at page 5, VHB conducted on-site investigations for and delineations of streams and surface waters within the Project Study Area. VHB delineated segments of two intermittent stream channels, unnamed tributaries to the Winooski River. The Project is designed to avoid any construction activity within

1 stream channels. There will be minor tree clearing within the associated riparian wetland
2 buffer of wetland 2022-1, which is needed to mitigate shading over the solar array. As the
3 clearing is minor in nature and consist only of 6,500 square feet of riparian wetland buffer,
4 does not occur within 50-feet of the ordinary high water of the associated intermittent
5 stream bank, the Project will maintain the natural condition of the corresponding stream,
6 and will not endanger the health, safety, or welfare of the public or of adjoining landowners.
7 Therefore, the Project will not alter the natural condition of any streams. A complete
8 description of methodologies and findings from VHB's natural resources assessments,
9 including details of on-site stream delineations, is included in Exhibit EANL-AC-2.

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11 Q10. Will the Project maintain the natural condition of streams?

12 A10. Yes. See Exhibit EANL-AC-2 and my answer above for more details.
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14 Q11. Will the Project impact stream buffers?

15 A11. Yes. See Exhibit EANL-AC-2 and my answer above for more details .

16 **Shorelines**

17 (10 V.S.A. § 6086(a)(1)(F))

18 Q12. Does the Project involve the development of any shorelines?

19 A12. No, as there are no shoreline areas within the Project site. See Exhibit EANL-AC-2 at page
20 6 for more details.

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Wetlands

(10 V.S.A. § 6086(a)(1)(G))

Q13. Will the Project result in undue adverse effects to wetlands?

A13. No. VHB conducted wetland assessments and delineations within the Study Area and delineated wetland complexes that have been reviewed with the DEC Wetlands Program. The Petitioner has designed the Project to avoid any activity within wetlands and minimize activity within Class II wetland buffers. Complete avoidance of Class II wetland buffers is not practicable to meet the Project's purpose of installing 3.5 MW as set forth in Jake Clark's testimony. The Project will require approximately 7,800 sf of impact to two Class II wetland buffers to reduce array shading impact, install four new overhead utility poles, and temporary activity from installing Project construction controls. The Petitioner will be required to obtain a Vermont Wetlands Permit authorization for those buffer activities that are regulated under the Vermont Wetland Rules. All Project work will be conducted in accordance with those permit conditions, which will protect on-site wetland functions. Accordingly with permit issuance, the Project will conform to the Vermont Wetland Rules—the rules of the Secretary of Natural Resources as adopted under chapter 37 of title 10 relating to significant wetlands — and will not have an undue adverse impact on the wetland complex functions. A USACE Section 404 Permit is not required as there is no proposed fill or dredge within Waters of the US (including wetlands) that would trigger federal review. See Exhibit EANL-AC-2 at page 6 for further details regarding the delineations and this assessment, including the minimization measures that will be further developed as part of the collateral wetland impact permit application.

Rare and Irreplaceable Natural Areas, Necessary Wildlife Habitat,
Endangered Species

(10 V.S.A. § 6086(a)(8) & 1424a(d)(4)-(9))

Q14. Is the Project located in any significant natural communities or rare and irreplaceable natural area (RINA), or will it have any impact on any such areas?

A.14 No. As described in Exhibit EANL-AC-2 at page 7, there are no areas that would be considered RINA within the Project Study Area.

Q15. Will the Project destroy or significantly imperil any necessary wildlife habitat?

A15. No. As described in more detail in Exhibit EANL-AC-2 at page 9, there are no areas within the Project's Study Area that should be considered necessary wildlife habitat.

Q16. Will the Project destroy or significantly imperil any rare, threatened, or endangered (RTE) species?

A16. No. As described in more detail in Exhibit EANL-AC-2 at page 8, from database and field reviews, there are no RTE plants known or found on the Project site. The Vermont Natural Heritage Inventory database maps an occurrence of the federal and state endangered northern long-eared bat (*Myotis septentrionalis*) (MYSE) approximately 0.88 mile from the western Study Area boundary. Due to this documented occurrence of MYSE, it is VHB's understanding that the tree clearing for the Project, approximately 2.7 acres, would be seasonally restricted from April 15 to September 30 of any given year, to avoid cutting during the bat roosting seasons. If time of year clearing is not conducive to construction timeline, acoustic surveying for MYSE will be performed to detect presence

1 or absence in the Project vicinity to ensure roost protection prior to cutting. Based on the
2 restrictions/measures proposed that are related to forested bats, there will be no adverse
3 undue impact on endangered species. As such, the Project will not affect any RTE species.

4 **Sufficiency of Water/Burden & Conservation**
5 (10 V.S.A. § 6086(a)(1),(2),(3))

6 Q17. Will the project require a temporary or permanent water supply?

7 A17. No. The Project will not require a water supply during construction or operation and thus
8 has no need to incorporate water conservation measures.

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10 Q18. Does this conclude your testimony?

11 A18. Yes.

EXHIBIT LIST

Exhibit EANL-AC-1	Resume of Adam Crary
Exhibit EANL-AC-2	Section 248 Natural Resources Assessment Memorandum

WITNESS DECLARATION

I, Adam Crary, being over 18 years of age, and competent to testify on these matters declare that on behalf of Petitioner, I prepared my prefiled testimony and exhibits in the above captioned matter and I have the necessary expertise to testify to the same information. I declare that the testimony and exhibits that I have sponsored are true and accurate to the best of my knowledge and belief and were prepared by me or under my direct supervision. I understand that if the above statement is false, I may be subject to sanctions by the Commission pursuant to 30 V.S.A. § 30.

Dated at South Burlington, Vermont, this 18th day of June, 2024.

/s/ Adam Crary

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