STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Petition of Norwich Upper Loveland Solar LLC for a certificate of public good pursuant to 30 V.S.A. §§ 248 and 8010, authorizing installation and operation of a 500 kW (AC) photovoltaic group net-metering system in Norwich, Vermont	)))))	Case No. 21-3587-NMP

REBUTTAL TESTIMONY OF SCOTT W. HOMSTED ON BEHALF OF PETITIONER

January 17, 2023

Mr. Homsted rebuts the testimony of Jenn Goulet regarding the Project's potential erosion and stormwater impacts.

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REBUTTAL PREFILED TESTIMONY OF
SCOTT W. HOMSTED, P.E.
ON BEHALF OF PETITIONER

1. Introduction

Q1. Please state your name, occupation, and business address.

A1. My name is Scott W. Homsted. I am the Vice President of Krebs and Lansing Consulting Engineers, Inc. ("K&L"), State of Vermont Professional Engineer #7893. My business address is 164 Main Street, Suite 201, Colchester, Vermont 05446.

I received a B.S. in Civil Engineering from the University of Vermont in 1995. In 1995, I joined Krebs and Lansing Consulting Engineers, Inc. In 2007, I became an owner of K&L. As Vice President, I perform extensive work in civil engineering design, permitting, and construction services for many commercial, industrial, residential, and institutional civil site design projects. These projects include the design of roads, construction access roads, utility systems, storm control and treatment systems, on site sanitary sewer systems, municipal sanitary sewer, domestic water supply, municipal water supply systems, mass earthworks, grading, and erosion control measures. A copy of my resume is included as Exhibit NUL SWH-1.

Q2. What is the purpose of your rebuttal prefiled testimony?

A2. My rebuttal testimony rebuts Ms. Goulet's statements at pages 24-27 of her report, Exhibit NN-JG-2, regarding the Norwich Upper Loveland Solar Project's ("Project") potential erosion and stormwater impacts.

Q3. Please explain what work you and your firm have conducted in connection with the Project.

A3. We have worked with the Petitioner to develop the site plan, elevation drawing and civil engineering details for the Project, Exhibits NUL MS-2 and MS-3, and to obtain an Authorization to Proceed under the Department of Environmental Conservation ("DEC") Construction General Permit 3-9020, issued and effective December 27, 2022 (the "Construction General Permit"), and the Vermont Low Risk Handbook for Erosion Prevention and Sediment Control dated February, 2020 (the "Low Risk Handbook"). The DEC Authorization to Proceed was submitted as Exhibit NUL MS-17. Please note that we updated the site plan to reduce total impervious surface to 0.10. See Exhibit NUL MS-2 (rev 1-17-23). This is accomplished by top-dressing, seeding and mulching the temporary staging area.

As part of this work, we also prepared the erosion prevention and sediment control ("EPSC") design and details necessary for the construction of the Project. Sheet C-103 of Exhibit NUL MS-2 incudes the extensive variety of EPSC measure options available to be employed throughout the Project area during construction to prevent erosion and keep sediment from leaving the site and reaching receiving waters. These measures include perimeter controls such as silt fence and Silt Soxx. These practices will be installed

downslope of all disturbed areas to prevent sediment from leaving the site. A stabilized construction entrance and gravel staging area will prevent construction vehicles from tracking sediment onto adjacent roads. Various mulching materials and rates will be used to limit the amount of concurrent ground disturbance at any one time, and to provide temporary ground stabilization while vegetation is established. These practices conform with the Vermont regulatory standards for erosion prevention and sediment control, which I discuss in more detail in A4, below.

Q4. Please describe the applicable standards that apply in Vermont to address erosion prevention and sediment control for this Project.

A4. The applicable regulations and standards include the DEC Construction General Permit and the Low Risk Handbook. See Exhibit NUL MS-18. The Construction General Permit 3-9020 authorizes permittees to discharge stormwater runoff from construction activities provided the project is in compliance with the requirements of the permit. The permitting requirements for projects authorized under this general permit depend upon the risk of having a discharge of stormwater from the construction site. There are two risk categories authorized by the general permit: Low Risk and Moderate Risk. Projects that pose a higher risk are ineligible to use the general permit and must file an application for an Individual Permit.

To determine the risk category for a proposed project, applicants must complete Appendix A of the permit. Appendix A is a risk evaluation procedure to determine the risk category for a project.

Q5. Does the Project qualify as a Low Risk or Moderate Risk construction project under the Vermont standards?

A5. The Project qualifies as a Low Risk project, as evidenced by the DEC Authorization to Proceed, Exhibit NUL MS-17.

2. Rebuttal Testimony

Q6. Please address the erosion and stormwater concerns raised at pages 24-27 of Exhibit NN-JG-2.

A6. The design and implementation of erosion and sediment control practices during construction address this concern. Even with areas of steep slopes, the Project still scores "Low Risk" in terms of State of Vermont Construction General Permit 3-9020. The EPSC measures to be employed at the Project site per Sheet C-103 of Exhibit NUL MS-2, which have been approved on many projects by the DEC, will avoid undue erosion and stormwater impacts. Downslope measures such as silt fence and Silt Soxx will be installed to prevent sediment from leaving the site. In addition, all disturbed areas will be temporarily stabilized with mulch within 14 days of initial ground disturbance. Aggressive seeding and/or stabilization with stump grindings will be performed to ensure a permanent vegetative cover in the area of the array and other disturbed areas. The implementation of

EPSC measures during installation as described above, along with the existing vegetated buffers between the site and the Connecticut River will prevent sediment from leaving the site and impacting the receiving water. All disturbed areas must be completely stabilized with vegetation, stone, mulch, stump grindings or gravel prior to completion of the Project. Furthermore, the leading cause of increased runoff from any site is typically the addition of impervious surfaces. This site adds 0.10 acres of impervious surface, which is below the 0.50-acre threshold for requiring an operational stormwater permit. The State of Vermont has maintained that solar panels are not jurisdictional impervious surface. The ground under the panels remains able to infiltrate runoff and grow vegetation.

We have worked on dozens of sites that required State of Vermont Construction Stormwater Permits since the program was implemented in 2003. It is our experience that the measures implemented on sites to be in compliance with these permits are effective at preventing erosion and preventing sediment laden stormwater from leaving the site. The EPSC measures to be implemented at the Project site will prevent unreasonable soil erosion or a reduction in the capacity of the land to hold water resulting in a dangerous or unhealthy condition.

3. Conclusion

Q7. Does this conclude your testimony?

A7. Yes.

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