

**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	)	21-3587-NMP
and operation of a 500 kW (AC) photovoltaic	)	
group net-metering system in Norwich, Vermont	)	

**REBUTTAL TESTIMONY OF
GEOFF MARTIN
ON BEHALF OF PETITIONER**

January 18, 2023

Mr. Martin’s rebuttal testimony responds to portions of Mr. Stephen Gorman’s direct prefiled testimony and exhibits regarding the Project’s potential carbon emissions impacts.

TABLE OF CONTENTS

1.	Introduction.....	1
2.	Rebuttal Testimony.....	2
3.	Conclusion	4

EXHIBITS

Exhibit NUL GM-1 Resume of Geoff Martin

Exhibit NUL GM-2 A:PET:Landowners.1-11

Exhibit NUL GM-3 ForestCarbon-Nov.2016

Exhibit NUL GM-4 Vermont 2021 Forest Carbon Inventory

Exhibit NUL GM-5 ANR Biography of Dr. Alexandria Kosiba

Exhibit NUL GM-6 UVM Extension Hires Dr. Alexandria Kosiba

Exhibit NUL GM-7 A:PET:Landowners.1-10 – Admission of Mr. Gorman

Exhibit NUL GM-8 A:PET:Landowners.1-14 – Admission of Mr. Gorman

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**REBUTTAL PREFILED TESTIMONY OF
GEOFF MARTIN
ON BEHALF OF PETITIONER**

1. Introduction

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

A1. My name is Geoff Martin. I am the Development Project Manager at Norwich Technologies, Inc. (“Norwich Solar”), which has offices at 15 Railroad Row, Suite 101, White River Junction, Vermont 05001.

Q2. Please describe your education, training and work experience.

A2. I have a B.A. in Development Studies from Brown University and a M.S. in Environmental Sciences from Emory University. Before my position as Development Project Manager at Norwich Solar, I was the Intermunicipal Regional Energy Coordinator (IREC) at the Two Rivers-Ottawaquechee Regional Commission (TRORC) where I worked with seven of TRORC’s member towns (Barnard, Bradford, Norwich, Sharon, Strafford, Thetford, and Woodstock) to help them lower both their overall energy use and greenhouse gas emissions. Prior to working at TRORC, I served as the Town of Hartford Energy Coordinator and worked as a BPI-certified energy auditor. I am Chair of the Board for Sustainable Woodstock. My resume is included with this filing as Exhibit NUL GM-1.

1 Q3. What is the purpose of your rebuttal prefiled testimony?

2 A3. My testimony rebuts portions of Mr. Gorman's prefiled testimony and exhibits regarding
3 the proposed Norwich Upper Loveland LLC's (the "Petitioner") 500 kW solar project (the
4 "Project").

5
6 **2. Rebuttal Testimony**

7 Q4. At page 17 of Exhibit NN-SG-2 Mr. Gorman states "[O]ne acre of Vermont forest absorbs
8 the carbon dioxide emissions of 62 automobiles each year. The 8.2+ acres that will be cut
9 to make room for the Upper Loveland Road solar project absorb the annual emissions of
10 514 automobiles each year." How do you respond?

11 A4. This portion of Mr. Gorman's exhibit attributes the statistics he cites to the Vermont
12 Department of Forests. However, he did not provide the citation. Petitioner asked Mr.
13 Gorman to produce the source for these assertions and he provided the following web
14 hyperlink: https://fpr.vermont.gov/sites/fpr/files/Forest_and_Forest. See Exhibit NUL
15 GM-2 (Landowners' response 1-11 to Petitioner's first set of discovery). This hyperlink
16 does not bring the reader to the Vermont Department of Forests, Parks & Recreation
17 ("FPR") website, but instead to a now outdated 2016 PDF prepared by the FPR labelled:
18 ForestCarbon-Nov.2016. See Exhibit NUL GM-3. However, the per acres sequestration
19 value used in the ForestCarbon-Nov.2016 PDF is inaccurate. This PDF can no longer be
20 located on the FPR website, apparently replaced by a correct and more current accounting
21 as part of the 2021 Vermont Forest Carbon Inventory.

1 Since 2016, the FPR hired a qualified scientist, Dr. Alexandra Kosiba, a forest ecologist
2 and tree physiologist, to prepare the 2021 Vermont Forest Carbon Inventory. See Exhibits
3 NUL GM-4 (Vermont 2021 Forest Carbon Inventory) and NUL GM-5 and GM-6
4 (professional biographies of Dr. Kosiba). I became familiar with Dr. Kosiba's forest
5 carbon accounting work when I was acting as the Intermunicipal Regional Energy
6 Coordinator ("IREC") for the Two Rivers-Ottawaquechee Regional Commission
7 ("TRORC"). At IREC, I provided staff support for seven towns in the TRORC region to
8 advance their energy and climate goals. As part of this effort, we discussed the role of
9 Vermont's forests in sequestering and storing carbon. We referenced Dr. Kosiba's work in
10 our conversations about the topic. Dr. Kosiba also presented on forest carbon management
11 at an event sponsored by Sustainable Woodstock, a non-profit organization of which I am
12 the Board Chair.

13
14 The last page of the 2021 Forest Carbon Inventory now correctly reports that the amount
15 that an average acre of VT forest sequesters is 1.3 MT CO₂e, not 293 MT CO₂e cited by
16 Mr. Gorman in Exhibit NN-SG-2. On page 23 of her report, Exhibit NN-JG-2, Ms. Goulet
17 cites this correct 2021 Forest Carbon Inventory. Based on the corrected carbon accounting
18 information provided by the State, the 8.2+ acres of forest to be cleared will sequester the
19 greenhouse gas emissions of approximately 2.2 average automobiles annually, not the 514
20 reported by Mr. Gorman.

1 Finally, I would add that in his discovery responses, Mr. Gorman admitted that he has not
2 prepared a lifecycle greenhouse gas emissions calculation for this Project or for any solar
3 project. See Exhibits NUL GM-7 and GM-8.

4
5 **3. Conclusion**

6 Q5. Does this conclude your testimony?

7 A5. Yes.

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