TABLE OF CONTENTS

1.0 BACKGROUND					
1.1 Facility Description					
2.0 IMPLEMENTATION OF DECOMMISSIONING PLAN					
2.1 Abandonment					
2.2 Discontinuance of Operations					
2.3 Expiration of Property Rights					
3.0 PERMITTING REQUIREMENTS FOR DECOMMISSIONING					
4.0 DECOMMISSIONING ACTIVITIES AND SCHEDULE					
5.0 DECOMMISSIONING ASSURANCE					
5.1 Form of Decommissioning Assurance					
5.2 Amount of Decommissioning Assurance					
5.3 Use of Decommissioning Assurance					
6.0 ACKNOWLEDGEMENT AND APPROVAL					

# **LIST OF ATTACHMENTS**

Attachment A – Decommissioning Bond Estimate (in progress as of 6/14/23 )

**BACKGROUND** 

On behalf of SV Cortland LLC (Operator/Owner), we have prepared this draft Decommissioning Plan (the Plan) for the proposed 3 -Megawatt ground-mounted solar energy facility (the Facility) located on a 18 -acre plot of land owned by the City of Cortland , in the City of Cortland , New York (the Site).

The intent of this Plan is to provide a general scope of decommission work as well as to act as a mechanism for decommissioning assurance.

### 1.1 FACILITY DESCRIPTION

The Facility will occupy roughly 10 acres of the Site described above. Proposed improvements consist primarily of ground-mounted photovoltaic solar panels supported on a concrete, ballasted, fixed-tilt racking system, eight-foot high perimeter fencing to provide a secure enclosed area for the facility, utility poles and pad-mounted electrical equipment, a gravel access drive, and a stormwater management system.

## **IMPLEMENTATION OF DECOMMISSIONING PLAN**

The Plan shall be implemented upon abandonment, discontinuance of operations at the Facility, or expiration of property rights, as defined herein, and issuance of written notice by the City of Cortland (the City ) to the Owner/Operator. The time periods stated herein may be extended by mutual consent of the City and the Owner/Operator.

#### 2.1 ABANDONMENT

Abandonment shall mean an eighteen (18) month period has elapsed since the commencement of construction and the Facility has not yet been completed and functioning and where such lack of completion is not the result of a casualty, equipment problem, permitting matter, natural disaster, interconnection with the local utility, upgrade by the utility company, or financial matter that the Owner/Operator is in good faith attempting to remedy.

#### 2.2 DISCONTINUANCE OF OPERATIONS

Discontinuance of operations shall mean a twelve (12) month period during which at least seventy-five percent (75%) of the photovoltaic solar panels are not producing commercially useful electricity and where such inactivity is not the result of a casualty, equipment problem or upgrade, permitting matter, natural disaster, interconnection with the local utility, upgrade by the utility company, or financial matter that the Owner/Operator is in good faith attempting to remedy.

#### 2.3 EXPIRATION OF PROPERTY RIGHTS

Expiration of property rights shall mean when the land lease between the Owner/Operator and landowner ends.

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## PERMITTING REQUIREMENTS FOR DECOMMISSIONING

The contractor tasked with decommissioning shall be responsible for meeting the requirements listed in the conditions of the original project approvals and for obtaining any required local or state permits or approvals.

### **DECOMMISSIONING ACTIVITIES AND SCHEDULE**

In the event the Project meets any of the above-referenced implementation of decommissioning plan definitions, the Owner/Operator, as provided for in its lease with the landowner, is responsible for restoring the property to pre-construction conditions shown the Special Use Permit plan set dated within twelve (12) months of abandonment, discontinuance of operations at the Facility, or expiration of property rights, as defined herein.

The Owner/Operator will coordinate with National Grid to determine schedule and procedure for disconnecting infrastructure from the point of interconnection, as well as removal and proper disposal of all utility-owned structures and equipment.

The Owner/Operator will have its qualified contractor(s) remove and properly dispose of all operator-owned above-ground structures (equipment, concrete, conduits, structures, fencing, and foundations). All concrete piers, footers, or other supports will be removed. The six utility poles will be removed.

Decommissioning and restoration will be performed in accordance with applicable provisions of the New York State Department of Agriculture and Markets Guidelines for Solar Energy Projects – Construction Mitigation for Agricultural Lands dated October 18, 2019.

#### **DECOMMISSIONING ASSURANCE**

Prior to the issuance of a building permit, SV Cortland , LLC shall enter into a security agreement with the City , approved by the City Board and City Attorney, as to form sufficiency and manner of execution, which shall require a surety bond to be issued by a bonding or surety company licensed and authorized to do business in the State of New York.

#### 5.1 FORM OF DECOMMISSIONING ASSURANCE

The Owner/Operator shall provide financial security in the form of a surety bond naming the City of Cortland as Obligee to guarantee that funds and access to the property are available for the decommissioning of the facility should the Owner/Operator fail to decommission the facility as required.

Although the Owner/Operator, currently SV Cortland , LLC, intends to perform the decommissioning required under this Plan, unforeseen circumstances are possible. In the event SV Cortland , LLC declares bankruptcy, goes out of business, or sells, transfers or assigns its right to another entity, the successor to SV Cortland , LLC shall be required by such sale, transfer or assignment to assume the obligations to decommission the facility in accordance with this Plan and to keep the surety bond described below in full force and effect during the useful life of the Facility.

#### 5.2 AMOUNT OF DECOMMISSIONING ASSURANCE

A decommissioning bond estimate, which was prepared using unit costs taken from the New York State Energy Research and Development Authority (NYSERDA) New York Solar Guidebook for Local Governments, is included as Attachment A. The Owner/Operator shall provide decommissioning assurance in this amount prior to issuance of a building permit. The decommissioning bond estimate shall be reviewed periodically, but no more than once every five (5) years, to ensure the adequacy of the amount.

#### 5.3 USE OF DECOMMISSIONING ASSURANCE

The City of Cortland shall have the right to make a claim against the decommissioning assurance in the event that the Owner/Operator fails to undertake decommissioning activities within twelve (12) months of abandonment, discontinuance of operations at the Facility, or expiration of property rights, as defined herein, and issuance of written notice by the City to the Owner/Operator. The City shall also be entitled to indemnification from the Owner/Operator for reasonable expenses and disbursements incurred by the City in connection with the enforcement, oversight, and administration of decommissioning the Facility.

#### ACKNOWLEDGEMENT AND APPROVAL

The City of Cortland Planning Board hereby acknowledges receipt of this Decommissioning Plan and affirm that the Decommissioning Plan satisfies the conditions of the Site Plan Approval and Recommendations to the Zoning Board of Appeals made in connection with its review of the SV Cortland Solar Project.

The parties acknowledge that SV Cortland, LLC may, without the consent of the City of Cortland , the Planning Board, or the Zoning Board of Appeals, assign its rights, interests and obligations under this Decommissioning Plan to any corporation, partnership, limited liability company or other business entity provided that such assignee agrees in writing to be bound by the terms of this Decommissioning Plan.

#### **City of Cortland Planning Board**

Name:	
Name:	
Name:	
Name:	<u></u>

Project	
Narrative	

Date:	_
Ву:	_
Title:	_

Decommissioning Bond Estimate Project Narrative SV Cortland LLC 136 Pendleton Street Cortland, NY

Item No.	Task		Project Size (x 2 MW)		Unit Cost (\$/2MW)	Cost
Reclamation	on					
001	Remove Rack Wiring		2.8		\$1,572.53	\$4,403.09
002	Remove Panels		2.8		\$1,566.78	\$4,386.97
003	Dismantle Racks		2.8		\$7,897.83	\$22,113.91
004	Remove Electrical Equipment		2.8		\$1,183.08	\$3,312.61
005	Remove Racks		2.8		\$1,151.10	\$3,223.08
006	Remove Cable		2.8		\$4,156.75	\$11,638.90
007	Remove Ground Screws and Power Poles		2.8		\$8,857.08	\$24,799.81
800	Remove Fence		2.8		\$3,165.53	\$8,863.47
009	Grading		2.8		\$2,558.00	\$7,162.40
010	Seed Disturbed Areas		2.8		\$159.88	\$447.65
011	Truck to Cortland County Landfill (tons)*		2.8		\$95.15	\$270,064.84
			•		Current Cost	\$360,416.72
	Bond Value (cost after 20 years at 2.8% inflation)				\$590,584.76	

<sup>\*</sup>Cost represents tons of material to be disposed of/recycled including racking, ballast, and modules.

Unit cost is the tipping fee at the landfill plus the cost of hauling. The tipping fee for an estimated 150 tons of steel has been removed - assume hauling to a recycling facility only.



September 25, 2023

Roy E. Everett
Assistant Director of Code Enforcement
City of Cortland
25 Court Street
Cortland, New York 13045

Re: SV Cortland LLC Solar Array

**Decommissioning Cost Review** 

File: 506.003.001

Dear Mr. Everett:

At the City's request, we have reviewed the Decommissioning Plan prepared for SV Cortland LLC as well as the estimated costs associated with the work. We provide the following comments on the plan narrative for the City's consideration:

- The plan does not contain sufficient detail regarding the special considerations associated with
  the nature of the site as a closed superfund site. There are many references to the removal of
  underground utilities which are not anticipated to be installed as part of the project, outside of
  the power poles. Information should be included in the decommissioning plan to address the
  special handling and disposal required for anything buried beneath the cap or demarcation
  layer.
- 2. It is recommended that the decommissioning plan be revised upon completion of construction of the array to reflect actual constructed conditions. This will allow the plan for removal of components to be specific to the installation conditions given the unique nature of the site. This will also allow for decommissioning costs to be refined further.
- 3. The decommissioning plan references NYS Department of Agriculture and Markets Guidelines for Solar Energy Projects; however, decommissioning and closure should also be performed in accordance with any change of use approvals which might be issued by the NYSDEC or USEPA for work on this site. It is anticipated that proper closure and removal of the system, including a written closure plan, may be a condition of these agency approvals. As simple reference to any closure documents issued or approved by the NYSDEC or USEPA would be sufficient.
- 4. We have reviewed the cost estimate for decommissioning, and generally agree with using the NYSERDA estimates for closure costs, however, we feel that they require one important modification, which is disposal costs. The NYSERDA estimates assume that all materials will be recyclable and include only costs for trucking. Although this is likely to be an option should the array remain in service for the next 20 years, there are currently very limited options for the



Roy E. Everett City of Cortland September 25, 2023 Page 2



recycling of the solar modules themselves. Furthermore, the proposed ballasted panel racking, fencing, and electrical conduits will result in additional waste materials which must be disposed of at the end of service of the array. Where more traditional ground mounted solar consists of ground driven components made of metal which can simply be pulled from the ground and recycled as scrap metal, there will be a considerable volume of concrete waste from the ballasting system which must be managed. Although it is possible to separate the concrete from other materials for crushing and recycling as aggregate, this is a much more labor intensive process which will have costs associated with it. To be conservative, we have assume that all waste material outside of the metal racking and fencing would be transported to the Cortland County Landfill for disposal. Trucking and tipping fees associated with this have been included in our estimate, which is attached. Based on our estimate, the decommissioning cost in 2023 dollars is \$360,416.00.

5. The submitted Decommissioning Plan recommends that the decommissioning cost estimate be revisited no more than every ten (10) years. Given the changing landscape of the solar panel disposal industry, we recommend that the estimate be revisited more frequently, every five (5) years at a maximum, to update it based on industry standards. This would allow the estimate to be updated for the actual rate of inflation and fuel costs. It is also possible that the cost estimate would be reduced based on advances in PV module recycling technology or extended producer responsibility legislation.

Should the City have any additional questions regarding our review or cost estimates, please do not hesitate to contact me at <a href="mailto:jblake@bartonandlogduidice.com">jblake@bartonandlogduidice.com</a>.

Sincerely,

BARTON & LOGUIDICE, D.P.C.

Jillian M. Blake, P.E.

Associate

JMB/jms

Attachment

#### SV Cortland LLC Solar Array Decommissioning Cost Estimate

	B&L Estimate Using Inflated Costs from NYSERDA Reference						
		Project Size (MW)	2023 Unit Cost (\$/MW)	Subtotal			
1	Remove Rack Wiring	2.8	\$1,572.53	\$4,403.09			
2	Remove Panels	2.8	\$1,566.78	\$4,386.97			
3	Dismantle Racks	2.8	\$7,897.83	\$22,113.91			
4	Remove Electrical Equipment	2.8	\$1,183.08	\$3,312.61			
5	Remove Racks	2.8	\$1,151.10	\$3,223.08			
6	Remove Cable	2.8	\$4,156.75	\$11,638.90			
7	Remove Ground Screws and Power Poles	2.8	\$8,857.08	\$24,799.81			
8	Remove Fence	2.8	\$3,165.53	\$8,863.47			
9	Grading	2.8	\$2,558.00	\$7,162.40			
10	Seed Disturbed Areas	2.8	\$159.88	\$447.65			
11	Truck to Cortland County Landfill (tons)*	2,971	\$95.15	\$270,064.84			
Current Total				\$360,416.72			
	\$590,584.76						

\*Cost represents tons of material to be disposed of/recycled including racking, ballast, and modules.

Unit cost is tipping fee at landfill plus the cost of hauling. The tipping fee for an estimated 150 tons of steel has been removed - assume hauling to a recycling facility only.