January 29, 2018

Town of Farmington Planning Board 1000 County Road 8 Farmington, NY 14425



Re: Yellow Mills Road Solar Projects – Updated Decommissioning Plan

Dear Members of the Planning Board,

Please find enclosed the proposed decommissioning for the Yellow Mills Solar Projects. The information provided herein updates the previous Draft Decommissioning Plan submitted in June 2018 to reflect the current Site Plan as of January 28, 2019, and comments received by the Planning Board on January 15, 2020. This plan reflects the Town Code requirements under "§165.65.3 H. Abandonment and decommissioning", including "(6) Special Permit Criteria".

Sincerely,

Daniel Compitello

Project Developer

R

DELAWARE RIVER SOLAR
130 North Winton Road #415

Rochester, NY 14610



# New York Community Solar Facilities Decommissioning Plan

February 2020

Prepared For:

**Town of Farmington** 

Prepared By:

**Delaware River Solar, LLC** 33 Irving Place, Suite 1090 New York, NY 10003

And its affiliates:

NY Farmington I, LLC, NY Farmington II, LLC, and NY Farmington III, LLC

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#### 1. Introduction

Delaware River Solar ("**DRS**"), and its affiliates NY Farmington I, LLC, NY Farmington II, LLC, and NY Farmington III, LLC, propose to build three 2.338 Mega Watt ("**MW**") ac photovoltaic ("**PV**") solar facilities ("**Solar Facilities**") at 466 Yellow Mills Road in the Town of Farmington ("**Town**") under New York State's Community Solar initiative. The Solar Facilities are planned to have a nameplate capacity of approximately 7.0 megawatts (MW) alternating current (AC) and be built on private land ("**Project Site**") leased by from the property owner ("**Property Owner**").

This Decommissioning Plan ("Plan") provides an overview of activities that will occur during the decommissioning phase of the Solar Facilities, including; activities related to the restoration of land, the management of materials and waste, projected costs, and a proposed decommissioning fund agreement overview. These activities are in adherence to Town Code §165.65.3 H. Abandonment and Decommissioning.

The Solar Facilities will have a useful life of thirty (30) years and the lease agreement between DRS and the Property Owner will have a thirty (30) year lease term, subject to five (5) year extensions. This Plan assumes that the Solar Facilities will be dismantled, and the Project Site restored to a state similar to its pre-construction condition, at the thirty (30) year anniversary of the Solar Facilities' commercial operation date ("Expected Decommissioning Date"). This Plan also covers the case of the abandonment of the Solar Facilities, for any reason, prior to the Expected Decommissioning Date.

Decommissioning of the Solar Facilities will include the disconnection of the Solar Facilities from the electrical grid and the removal of all Solar Facilities components, including:

- Photovoltaic (PV) modules, panel racking and supports;
- Inverter units, substation, transformers, and other electrical equipment;
- Access roads, wiring cables, communication tower, perimeter fence; and,
- Concrete foundations.

This Plan is based on current best management practices and procedures. This Plan may be subject to revision based on new standards and emergent best management practices at the time of decommissioning. Permits will be obtained as required and notification will be given to stakeholders prior to decommissioning.

#### 2. Conditions to the Issuance of a Special Use Permit

The conditions of the decommissioning plan for the issuance of a Special Use Permit granted by the Town of Farmington Planning Board shall include as per Town Code §165.65.3 H. Abandonment and Decommissioning:

- 1. A licensed engineer's estimate of the anticipated operational life of the Solar Facilities.
  - See Project Memorandum the projects will have an estimated operational life of 30 vears.
  - See Bergmann Associates letter, January 29, 2020

- 2. Identification of the party responsible for the decommissioning.
  - DRS has created project specific entities for each of the three Solar Facilities, NY Farmington I, LLC, NY Farmington II, LLC and NY Farmington III, LLC, respectively. Each project specific entity (each an affiliate of DRS) will be the entity responsible for decommissioning of the respective Solar Facility, and each will enter a separate decommissioning agreement with the Town.
  - Attached as Appendix II is a draft decommissioning agreement that DRS (or the respective affiliate) would typically execute with a town hosting a solar facility. The attached draft decommissioning agreement contemplates the option of a cash deposit being made.
- 3. A description of any decommissioning agreement between the responsible party and the landowner.
  - The lease agreement that DRS has executed with the Property Owner contains conditions regarding the removal of the Solar Facilities and restoration of the Project Site. This lease agreement has been provided to the Town Attorney for review.
- 4. A schedule showing the time frame for the decommissioning and restoration work to occur.
  - Due to January 15, 2020 Planning Board request to approve all decommissioning activities prior to the start of site work, mobilization for decommissioning and restoration work will commence within 180 days of (a) the Expected Decommissioning Date, (b) the termination date of the lease, or (c) abandonment of the Solar Facility. Mobilization will include notice to the Town of Farmington to decommission the system, and an application to the Planning Board by the applicant responsible for decommissioning seeking approval of the Decommissioning Plan work to commence site activity. The schedule for Decommissioning will be outlined in the application to the Planning Board. The intention of this process is to ensure all local, State and Federal permitting requirements are met during the site work of decommissioning. Section 4. "Decommissioning of the Solar Facilities" herein contains details of work to be performed during decommissioning.
- 5. A cost estimate prepared by a licensed engineer estimating the full cost of the decommissioning and removal of the Solar Facilities.
  - Section 5 "Cost of Decommissioning" herein contains the estimated costs to decommission the Solar Facilities based on the January 28, 2020 Site Plan, provided by a licensed engineer. DRS will provide a "final" estimate of the decommissioning cost from a licensed engineer based on the Final Site Plan approved by the Planning Board.

- 6. A financial plan to ensure that financial resources will be available to fully decommission the Solar Facilities.
  - Section 6 "Decommissioning Financial Assurance" herein describes financial assurances in the form of a bond or upfront deposit with annual payments thereafter.
- 7. An acceptable form of surety to be approved by the Planning Board, accepted by the Town Board and filed with the Town Clerk in an amount specified in the financial plan.
  - As indicated in item 6, DR is proposing either a bond or upfront deposit to the town with annual contributions thereafter. Once the form of surety is agreed upon by all parties, DRS (or the Town) will file with the Town clerk.
- 8. Before obtaining a Building Permit and every 3 years thereafter the Solar Facilities owner is required to file with the Town Clerk evidence of financial surety to provide for the full cost of decommissioning and removal of the Solar Facilities.
  - If the Town selects an upfront deposit with annual contributions thereafter, the Town
    would be the controlling party of the "decommissioning account." Upon receipt by the
    Town of any deposits, the cumulative amount in the decommissioning account
    matching (or exceeding) the agreed-upon schedule of payments can be confirmed by
    the Town clerk.
  - If the Town selects a bond, DRS will provide evidence of such bond being in effect, and will renew said bond every three years based on decommissioning cost estimates.
- 9. The amount of surety is determined by the Town Engineer based upon a current estimate of the decommissioning and removal costs as provided by the Solar Facilities owner in the Decommissioning Plan.
  - It is assumed that in the event the estimate of the decommissioning and removal costs increases, based on the annual report described in the following item, DRS will (a) contribute an additional deposit to the decommissioning account to ensure that such additional amount, plus the annual deposits is sufficient to cover such increase, or (b) increase the amount of the decommissioning bond.
- 10. The Solar Facilities owner will provide, on a yearly basis, to the Code Enforcement Officer a written report showing the rate capacity of the Solar Facilities and the amount of electricity that was generated by the Solar Facilities and transmitted to the grid in the most recent 12 month period. Every third year the annual report shall also include a recalculation of the estimated cost of decommissioning and removal of the system. The Town Board may then require the amount of surety to be changed to reflect any changes in the decommissioning costs.

- 11. Abandonment. A large scale solar PV system shall be deemed abandoned if the system fails to generate and transmit electricity at a rate of more than 10% of its rated capacity over a continuous period of oneyear. A commercial solar PV system also shall be deeded abandoned if following site plan approval initial construction of the system has commenced and is not completed within 18 months of issuance of the first building permit for the project.
- 12. Extension of time. The time at which a commercial solar PV system shall be deemed abandoned may be extended by the Planning Board for one additional period of one year, provided the system owner presents to the Board a viable plan outlining the steps and schedules for placing the system in service or back in service, within the time period of the extension. An application for an extension of time shall be made to the Planning Board by the commercial solar PV system owner prior to abandonment as defined herein. Extenuating circumstances as to why the commercial solar PV system has not been operating or why construction has not been completed may be considered by the Board in determining whether to gain an extension.
- 13. Decommissioning and removal by Town. If the commercial solar PV system owner and/or landowner fails to decommission and remove an abandoned facility in accordance with the requirements of §165.65.3 H, the Town may enter upon the property to decommission and remove the system.

#### 3. The Proponent

Delaware River Solar LLC ("**DRS**") and its affiliates NY Farmington I, LLC, NY Farmington II, LLC, and NY Farmington III, LLC will manage and coordinate the approvals process during decommissioning. DRS will obtain all necessary regulatory approvals that vary depending on the jurisdiction, project capacity, and site location. DRS will build a long-term relationship with the community hosting the Solar Facilities and DRS will be committed to the safety, health, and welfare of the townships.

Contact information for the proponent is as follows:

Full Name of Company: Delaware River Solar, LLC and its affiliates NY Farmington I, LLC,

NY Farmington II, LLC, and NY Farmington III, LLC

Contact: Peter Dolgos

Address: 33 Irving Place Suite 1090, New York, NY 10003

**Telephone:** (646) 998-6495

Email: peter.dolgos@delawareriversolar.com

## 3.1 **Project Information**

Address: 466 Yellow Mills Road, Farmington NY 14522

Tax ID: <u>10.00-1.37.110</u>

Project Size (estimated): Three Projects totaling approximately 7.0 MW ac

**Landowner:** Roger Smith and Carol Smith

Own / Lease: Lease

#### 4. <u>Decommissioning of the Solar Facilities</u>

At the time of decommissioning, the installed components will be removed, reused, disposed of, and recycled, where possible. All applicable permits will be acquired for site work during decommissioning, and decommissioning notes are shown in the Site Plan. The Project Site will be restored to a state similar to its pre-construction condition. All removal of equipment will be done in accordance with any applicable regulations and manufacturer recommendations, including adherence to the decommissioning suggestions of the New York State Division of Agriculture and Markets "Guidelines for Agricultural Mitigation of Solar Energy Projects".

## 4.1 **Equipment Dismantling and Removal**

Generally, the decommissioning of a Solar Facilities proceeds in the reverse order of the installation.

- 1. The Solar Facilities shall be disconnected from the utility power grid.
- 2. PV modules shall be disconnected, collected, and disposed at an approved solar module recycler or reused / resold on the market.
- 3. All aboveground and underground electrical interconnection and distribution cables shall be removed and disposed off-site by an approved facility.
- 4. Galvanized steel PV module support and racking system support posts shall be removed and disposed off-site by an approved facility.
- 5. Electrical and electronic devices, including transformers and inverters shall be removed and disposed off-site by an approved facility.
- 6. Concrete foundations shall be removed and disposed off-site by an approved facility.
- 7. Fencing shall be removed and will be disposed off-site by an approved facility.
- 8. Landscaping will be removed if desired by landowner, and approved by the Town.

#### 4.2 <u>Environmental Effects</u>

Decommissioning activities, particularly the removal of project components could result in environmental effects similar to those of the construction phase. For example, there is the potential for disturbance (erosion/sedimentation) to adjacent watercourses or significant natural features. Mitigation measures similar to those employed during the construction phase of the Solar

Facilities will be implemented. These will remain in place until the site is stabilized in order to mitigate erosion and silt/sediment runoff and any impacts on the significant natural features or water bodies located adjacent to the Project Site.

Road traffic will temporarily increase due to the movement of decommissioning crews and equipment. There may be an increase in particulate matter (dust) in adjacent areas during the decommissioning phase. Decommissioning activities may lead to temporary elevated noise levels from machinery and an increase in trips to the Project Site. Work will be undertaken during daylight hours and conform to any applicable restrictions.

## 4.3 <u>Site Restoration</u>

Through the decommissioning phase, the Project Site will be restored to a state similar to its preconstruction condition, as described in Site Plan notes, Sheet S-2 — Abandonment and Decommissioning Notes. As noted in the April 8, 2019 Department of Agriculture and Markets Notice of Intent mitigations, the Project Companies will:

- 1. Follow the Departments *Guidelines for Agricultural Mitigation for Solar Energy Projects*, dated April 19, 2018.
- 2. The Project Companies will restore the site to a state similar to its preconstruction condition of pasture land.
- 3. The Project Companies shall, after decommissioning and to the maximum extent possible, assist the landowner in merging the subdivided parcels into a single parcel.

All project components (discussed in **Table 1, and as shown in Final Construction Drawings submitted for Building Permit**) will be removed, as required, except as noted in the *Guidelines for Agricultural Mitigation for Solar Energy Projects*, dated April 19, 2018. Restored lands may be seeded with a low-growing species such as clover to help stabilize soil conditions, enhance soil structure, and increase soil fertility.

Upon petition to the Planning Board, the Board may permit the system owner to leave certain underground or aboveground improvements in place, provided the owner can show that such improvements are part of a plan to redevelop the site, are not detrimental to such redevelopment and to not adversely affect community character or the environment.

### 4.4 Managing Materials and Waste

During the decommissioning phase a variety of excess materials and wastes (listed in Table 1 attached hereto) will be generated. Most of the materials used in a Solar Facilities are reusable or recyclable and some equipment may have manufacturer take-back and recycling requirements. Any remaining materials will be removed and disposed of off-site at an appropriate facility. DRS will establish policies and procedures to maximize recycling and reuse and will work with manufacturers, local subcontractors, and waste firms to segregate material to be disposed of, recycled, or reused. Disposal of all solid and hazardous waste will be in accordance with local, state and federal waste disposal regulations.

DRS will be responsible for the logistics of collecting and recycling the PV modules and to minimize the potential for modules to be discarded in the municipal waste stream. Currently, some manufacturers and new companies are looking for ways to recycle and/or reuse solar modules when they have reached the end of their lifespan. Due to a recent increase in the use of solar energy technology, a large number of panels from a variety of projects will be nearing the end of their lifespan in 25-30 years. It is anticipated there will be more recycling options available for solar modules at that time. DRS will dispose of the solar modules using best management practices at the time of decommissioning.

#### 4.5 Decommissioning During Construction or Abandonment Before Maturity

In case of abandonment of the Solar Facilities during construction or before its estimated maturity, the same decommissioning procedures as for decommissioning after ceasing operation will be undertaken and the same decommissioning and restoration program will be honored, in as far as construction proceeded before abandonment. The Solar Facilities will be dismantled, materials removed and disposed, the soil that was removed will be graded and the site restored to a state similar to its preconstruction condition.

#### 4.6 Decommissioning Notification

Decommissioning activities may require the notification of stakeholders given the nature of the works at the Facility Site. The Town of Farmington will approve final plans for the commencement of any decommissioning activities. Six months prior to decommissioning, DRS will update their list of stakeholders and notify appropriate municipalities of decommissioning activities. Federal, county, and local authorities will be notified as needed to discuss the potential approvals required to engage in decommissioning activities.

#### 4.7 Approvals

Well-planned and well-managed renewable energy facilities are not expected to pose environmental risks at the time of decommissioning. Decommissioning of a Solar Facilities will follow standards of the day. DRS will ensure that any required permits are obtained prior to decommissioning, including approval of the Decommissioning Plan by the Town Planning Board and Town Engineer prior to commencement of decommissioning activity.

This Decommissioning Report will be updated as necessary in the future to ensure that changes in technology and site restoration methods are taken into consideration.

#### 5. <u>Decommissioning Cost Estimate</u>

Appendix I attached hereto contains the current estimated costs to decommission the Solar Facilities, based on an independent engineer cost estimate (such engineers are different than the engineers that prepared the site plans for the Town approval process in order to be "independent"). The salvage values of valuable recyclable materials (solar panels, aluminum, steel, copper, etc.) are not factored into the below costs. The scrap value will be determined on current market rates at the time of salvage.

#### 6. <u>Decommissioning Financial Assurance</u>

On or prior to the commencement of construction, NY Farmington I, LLC, NY Farmington II, LLC, and NY Farmington III, LLC will provide financial assurance to the Town that funds will be available to decommission the Solar Facilities.

DRS requires the Town of Farmington to indicate in writing below which form is preferred in order to source and prepare the form of financial surety. The forms of financial assurance that can be provided are as follows:

- (a) <u>Decommissioning Option A</u> NY Farmington I, LLC, NY Farmington II, LLC, and NY Farmington III, LLC may obtain a decommissioning bond with the Town as a party, in an amount at least equal to the estimated cost to decommission the Solar Facility as indicated in the "5. Decommissioning Cost Estimate". The decommissioning bond will be updated every three years based on an engineer cost estimate of decommissioning, as noted in "5. Decommissioning Cost Estimate" above, in adherence to Town Code §165.65.3 H. Abandonment and Decommissioning.
- (b) <u>Decommissioning Option B</u> NY Farmington I, LLC, NY Farmington II, LLC, and NY Farmington III, LLC may deposit with the Town and amount at least equal to the estimated cost to decommission the Solar Facility as noted in "5. Decommissioning Cost Estimate" above, and then adjust such deposits based on Decommissioning cost estimates provided every three years in adherence to Town Code §165.65.3 H. Abandonment and Decommissioning.

Although NY Farmington I, LLC, NY Farmington II, LLC, and NY Farmington III, LLC intend to perform the decommissioning, unforeseen circumstances such as NY Farmington I, LLC, NY Farmington III, LLC going out of business are possible. Each of the financial assurance options indicated above should assure the Town that adequate financial resources are available to decommission the Solar Facility in event of a default of NY Farmington I, LLC, NY Farmington II, LLC, and NY Farmington III, LLC decommissioning obligations, in adherence to Town Code §165.65.3 H. Abandonment and Decommissioning.

The Town's acknowledgement below of the preferred decommissioning option will allow DRS and its affiliates NY Farmington I, LLC, NY Farmington II, LLC, and NY Farmington III, LLC to source and prepare the preferred financial surety method for the Town of Farmington.

	<ul> <li>Decommissioning Option A</li> </ul>	as form of Decommissioning Surety;				
	Decommissioning Option B	as form of Decommissioning Surety;				
NY FARMING	GTON I, LLC	TOWN OF FARMINGTON				
Ву:		Ву:				
Name:		Name:				
Title:		Title:				
Date:		Date:				
NY FARMINO	GTON II, LLC	TOWN OF FARMINGTON				
Ву:		Ву:				
Name:		Name:				
Title :		Title:				
Date:		Date:				
NY FARMING	GTON III, LLC	TOWN OF FARMINGTON				
Ву:		Ву:				
Name:		Name:				
Title:		Title:				
Date:		Date:				
Acknowledg	red by:					
Landowner		Landowner				
Ву:		Ву:				
Name:		Name:				
Date:		Date:				

The Town of Farmington selects (check one option, and sign below):

Table 1: Management of Excess Materials and Waste

Material / Waste	Means of Managing Excess Materials and Waste
PV panels	If there is no possibility for reuse, the panels will either be returned to the manufacturer for appropriate disposal or will be transported to a recycling facility where the glass, metal and semiconductor materials will be separated and recycled.
Metal array mounting racks and steel supports	These materials will be disposed off-site at an approved facility.
Transformers and substation components	The small amount of oil from the transformers will be removed on-site to reduce the potential for spills and will be transported to an approved facility for disposal. The substation transformer and step-up transformers in the inverter units will be transported off-site to be sent back to the manufacturer, recycled, reused, or safely disposed off-site in accordance with current standards and best practices.
Inverters, fans, fixtures	The metal components of the inverters, fans and fixtures will be disposed of or recycled, where possible. Remaining components will be Disposed of in accordance with the standards of the day.
Gravel (or other granular)	It is possible that the municipality may accept uncontaminated material without processing for use on local roads, however, for the purpose of this report it is assumed that the material will be removed from the project location by truck to a location where The aggregate can be processed for salvage. It will then be reused As fill for construction. It is not expected that any such material will be contaminated.
Geotextile fabric	It is assumed that during excavation of the aggregate, a large portion of the geotextile will be "picked up" and sorted out of The aggregate at the aggregate reprocessing site. Geotextile fabric that is remaining or large pieces that can be readily removed from the excavated aggregate will be disposed of off-site at an approved disposal facility.
Concrete inverter/transformer Foundations	Concrete foundations will be broken down and transported by certified and licensed contractor to a recycling or approved disposal facility.
Cables and wiring	The electrical line that connects the substation to the point of common coupling will be disconnected and disposed of at an approved facility. Support poles, if made of untreated wood, will be chipped for reuse. Associated electronic equipment (isolation switches, fuses, metering) will be transported off-site to be sent back to the manufacturer, recycled, reused, or safely disposed off-site in accordance with current standards and best practices.
Fencing	Fencing will be removed and recycled at a metal recycling facility.
Debris	Any remaining debris on the site will be separated into recyclables/residual wastes and will be transported from the site and managed as appropriate.

# **APPENDIX I - Independent Engineers Decommissioning Estimate**



# 466 Yellow Mills Road - Solar Project #1 Town of Farmington, NY

#### **OPINION OF PROBABLE COST - PV DECOMMISSIONING**

	DISASSEMBLY & DISPOSAL					
ltem	Description	Qty	Unit	Unit Price		Total
1	PV Modules	7,000	Each	\$0.50	\$	3,500
2	Inverter	1	Each	\$1,000	\$	1,000
3	Transformer	1	Each	\$870	\$	870
4	Racking Frame	150	Each	\$125	\$	18,750
5	Racking Posts	1,650	Each	\$7.10	\$	11,715
6	Racking Wiring	33,400	per LF	\$0.07	\$	2,338
7	Underground Cables	12,200	per LF	\$0.48	\$	5,856
. 8	Deer Fence	3,150	per LF	\$2.00	\$	6,300
9	Concrete Pads	24	per SF	\$104	\$	2,496
10	Gravel	80	per CY	\$20.10	\$	1,608
11	Geotextile for Limited Use Pervious Road	2,010	per SF	\$0.20	\$	402
12	Offsite Disposal & Hauling	1	Lump Sum	\$5,000.00	\$	5,000
13	Moblization & Demobilization	1	Lump Sum	\$5,000.00	\$	5,000
				Subtotal	\$	64,835
22	SITE RESTORATIO	N		(All Annual Market	0.013	
14	Re-Grading and Decompaction	1,160	per CY	\$2.00	\$	2,320
15	Re-Seeding Disturbed Areas	24,600	per SF	\$0.20	\$	4,920
16	Erosion and Sediment Control	1	Lump Sum	\$5,000.00	\$	5,000
17	SWPPP Preparation & Permit Fee	1	Lump Sum	\$3,500.00	\$	3,500
18	SWPPP Inspections & File Notice of Termination	1	Lump Sum	\$2,000.00	\$	2,000
	Subtotal					17,740
	TOTAL DISASSEMBLY, DISPOSAL & SITE RESTORATION COST				\$	82,575

This opition of probable cost is based on the engineer's experience in the design and construction of energy facilities and are subject to final engineering. As the design plans have been prepared by others, the engineer accepts no liability of errors, omissions or the accuract and adequacy of this opinion. It is a violation of state law for any person, unless they are acting under direction of a licensed professional engineer to alter this document in any way.

Bergmann

Robert Switala, PE, CPESC, CPSWQ

Principal

1/29/2020 Date





# 466 Yellow Mills Road - Solar Project #2 Town of Farmington, NY

#### OPINION OF PROBABLE COST - PV DECOMMISSIONING

	DISASSEMBLY & DISPOSAL					
ltem	Description	Qty	Unit	Unit Price		Total
1	PV Modules	7,000	Each	\$0.50	\$	3,500
2	Inverter	1	Each	\$1,000	\$	1,000
3	Transformer	1	Each	\$870	\$	870
4	Racking Frame	150	Each	\$125	\$	18,750
5	Racking Posts	1,650	Each	\$7.10	\$	11,715
6	Racking Wiring	33,400	per LF	\$0.07	\$	2,338
7	Underground Cables	9,000	per LF	\$0.48	\$	4,320
8	Deer Fence	2,625	per LF	\$2.00	\$	5,250
9	Concrete Pads	24	per SF	\$104	\$	2,496
10	Gravel	45	per CY	\$20.10	\$	905
11	Geotextile for Limited Use Pervious Road	1,570	per SF	\$0.20	\$	314
12	Offsite Disposal & Hauling	1	Lump Sum	\$5,000.00	\$	5,000
13	Moblization & Demobilization	1	Lump Sum	\$5,000.00	\$	5,000
				Subtotal	\$	61,458
	SITE RESTORATIO	N		3	-	
14	Re-Grading and Decompaction	550	per CY	\$2.00	\$	1,100
15	Re-Seeding Disturbed Areas	16,000	per SF	\$0.20	\$	3,200
16	Erosion and Sediment Control	11	Lump Sum	\$5,000.00	\$	5,000
17	SWPPP Preparation & Permit Fee	11	Lump Sum	\$3,500.00	\$	3,500
18	SWPPP Inspections & File Notice of Termination	1	Lump Sum	\$2,000.00	\$	2,000
	Subtotal \$ 14,800					14,800
	TOTAL DISASSEMBLY, DISPOSAL & SITE RESTORATION COST \$ 76,258					

This opition of probable cost is based on the engineer's experience in the design and construction of energy facilities and are subject to final engineering. As the design plans have been prepared by others, the engineer accepts no liability of errors, omissions or the accuract and adequacy of this opinion. It is a violation of state law for any person, unless they are acting under direction of a licensed professional engineer to alter this document in any way.

Bergmann

Robert Switala, PE, CPESC, CPSWQ

Principal

1/24/2020 Date





# 466 Yellow Mills Road - Solar Project #3 Town of Farmington, NY

#### **OPINION OF PROBABLE COST - PV DECOMMISSIONING**

DISASSEMBLY & DISPOSAL						
Item	Description	Qty	Unit	Unit Price		Total
1	PV Modules	7,000	Each	\$0.50	\$	3,500
2	Inverter	1	Each	\$1,000	\$	1,000
3	Transformer	1	Each	\$870	\$	870
4	Racking Frame	150	Each	\$125	\$	18,750
5	Racking Posts	1,650	Each	\$7.10	\$	11,715
6	Racking Wiring	33,400	per LF	\$0.07	\$	2,338
7	Underground Cables	11,000	per LF	\$0.48	\$	5,280
8	Deer Fence	4,975	per LF	\$2.00	\$	9,950
9	Concrete Pads	24	per SF	\$104	\$	2,496
10	Gravel	5	per CY	\$20.10	\$	101
11	Geotextile for Limited Use Pervious Road	0	per SF	\$0.20	\$	-
12	Offsite Disposal & Hauling	1	Lump Sum	\$5,000.00	\$	5,000
13	Moblization & Demobilization	1	Lump Sum	\$5,000.00	\$	5,000
				Subtotal	\$	66,000
	SITE RESTORATIO	N				
14	Re-Grading and Decompaction	550	per CY	\$2.00	\$	1,100
15	Re-Seeding Disturbed Areas	20,000	per SF	\$0.20	\$	4,000
16	Erosion and Sediment Control	1	Lump Sum	\$5,000.00	\$	5,000
17	SWPPP Preparation & Permit Fee	1	Lump Sum	\$3,500.00	\$	3,500
18	SWPPP Inspections & File Notice of Termination	1	Lump Sum	\$2,000.00	\$	2,000
	Subtotal \$ 15,600					15,600
	TOTAL DISASSEMBLY, DISPOSAL & SITE RESTORATION COST \$ 81,600					

This opition of probable cost is based on the engineer's experience in the design and construction of energy facilities and are subject to final engineering. As the design plans have been prepared by others, the engineer accepts no liability of errors, omissions or the accuract and adequacy of this opinion. It is a violation of state law for any person, unless they are acting under direction of a licensed professional engineer to alter this document in any way.

Bergmann

Robert Switala, PE, CPESC, CPSWQ

Principal

1/29/2020

#### **OPINION OF PROBABLE COST - PV DECOMMISSIONING**

	DISASSEMBLY & DIS	SPOSAL				
Item	Description	Qty	Unit	Unit Price		Total
1	PV Modules	21,000	Each	\$0.40	\$	8,400
2	Inverter	3	Each	\$1,000	\$	3,000
3	Transformer	3	Each	\$870	\$	2,610
4	Racking Frame	450	Each	\$120	\$	54,000
5	Racking Posts	4,950	Each	\$7.00	\$	34,650
6	Racking Wiring	100,200	per LF	\$0.05	\$	5,010
7	Underground Cables	32,200	per LF	\$0.45	\$	14,490
8	Deer Fence	10,750	per LF	\$1.80	\$	19,350
9	Concrete Pads	72	per SF	\$100	\$	7,200
10	Gravel	2,060	per CY	\$20.00	\$	41,200
11	Geotextile for Limited Use Pervious Road	3,580	per SF	\$0.15	\$	537
12	Offsite Disposal & Hauling	1	Lump Sum	\$10,000.00	\$	10,000
13	Moblization & Demobilization	1	Lump Sum	\$5,000.00	\$	5,000
				Subtotal	\$	205,447
	SITE RESTORAT	ION				
14	Re-Grading and Decompaction	2,260	per CY	\$1.90	\$	4,294
15	Re-Seeding Disturbed Areas	60,600	per SF	\$0.18	\$	10,908
16	Erosion and Sediment Control	1	Lump Sum	\$7,000.00	\$	7,000
17	SWPPP Preparation & Permit Fee	1	Lump Sum	\$3,500.00	\$	3,500
18	SWPPP Inspections & File Notice of Termination	1	Lump Sum	\$2,500.00	\$	2,500
	Subtota					28,202
	TOTAL DISASSEMBLY, DISPOSAL & SITE RESTORATION COST					233,649

Note: For combined estimate, unit rates have been reduce where applicable to account for savings associated with volume.

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Robert Switala, PE, CPESC, CPSWQ Principal 1/29/2020

## APPENDIX II – DRAFT DECOMISSIONING AGREEMENT (Deposit)

#### **DECOMMISSIONING AGREEMENT**

	This DECOMMISSIONING agreement (this "Agreement") dated as of	
	_ (the " <u>Effective Date</u> ") is made by and among the Town of	(the " <u>Town</u> ")
and _	, LLC (" <u>Owner</u> ", together with the Town, the " <u>Parti</u>	<u>es</u> ").
in the	Whereas, Owner intends to build a solar energy generation project one Town (the "Project");	

Whereas, the Parties wish to enter into this Agreement to set forth terms and conditions of having funds available to pay for the costs of any decommissioning of the Project; and

NOW, THEREFORE, in consideration of the premises and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. At the start of construction of the Project, Owner agrees to deposit [ ] dollars (\$ in a special purpose account designated in writing by the Town (the "Decommissioning Account"). At the end of each three year anniversary year of operation of the Project (the "Anniversary Date"), Owner agrees to deposit the greater of (a) an additional 2.5% of the then existing amount in the Decommissioning Account on the Anniversary Date, as described in greater detail on Schedule I attached hereto, or (b) an amount equal to replenish the difference between the existing amount and an amount determined by a third party professional engineer estimate of decommissioning cost in the year of such estimate, as shown in Schedule I and Schedule II respectively herein. The Parties agree that the amount in the Decommissioning Account shall be used solely to pay for any decommissioning costs of the Project. Provided Owner complies with its obligations to deposit funds into the Decommissioning Account in accordance with this Agreement, Owner shall have no further payment obligations in connection with funding the Decommissioning Account during the operation of the Project; provided, however, in the event the actual decommissioning costs exceed the amount in the Decommissioning Account, Owner shall be responsible for any such excess costs, provided such excess costs are not as a result of the Town using any amount in the Decommissioning Account for any reason other than to pay for decommissioning costs of the Project. In the event the Town uses any amount in the Decommissioning Account for any reason other than to pay for decommissioning costs, the Town shall be responsible to pay for such amount used and shall indemnify and hold harmless the Owner and the landowner of the Project, if different from the

Owner, from any claim, loss, damage, liability or costs (including any reasonable attorney costs) arising from such use of funds for reasons other than to pay for decommissioning costs.

- 2. The Parties agree that the decommissioning process of the Project may commence (and the funds to pay for the cost of any such decommissioning from the Decommissioning Account may be used) for the following reasons: (a) Owner provides written notice to the Town of its intent to retire or decommission the Project (the "Owner Decommissioning Notice"), (b) construction of the Project has not started within eighteen (18) months of site plan being approved by the Town, or (c) the Project ceases to be operational for more than twelve (12) consecutive months. The Town shall provide Owner thirty (30) days written notice (the "Town Decommissioning Notice") prior to the commencement of any decommissioning of the Project by the Town. In event the Owner fails to decommission the Project within one-hundred eighty (180) days after providing Owner Decommissioning Notice or fails to respond with a reasonable explanation for the delay in the construction or cessation of operation of the Project within 30 days of the Town Decommissioning Notice, the Town may commence the decommissioning of the Project. For the purposes of this Agreement, "ceases to be operational" shall mean no generation of electricity, other than due to repairs to the Project or causes beyond the reasonable control of Owner.
- 3. Upon removal of the infrastructure and disposal of any component of the Project from the site on which the Project is built, or in the event the Town becomes owner of the Project, any and all amount remaining in the Decommissioning Account shall be returned to Owner.
- 4. This Agreement may not be amended or modified except by written instrument signed and delivered by the Parties. This Agreement is binding upon and shall inure to the benefit of the Parties and their respective heirs, executors, administrators, successors and assigns. Owner may assign this Agreement to any subsidiary, or purchaser or transferee of the Project. The Parties agree to execute and deliver any additional document or take any further action as reasonably requested by the other party to effectuate the purpose of this Agreement. The Parties agree that Owner shall have the option to replace the funds in the Decommissioning Account with a commercially reasonable decommissioning bond.
- 5. The Parties agree that this Agreement shall be construed and enforced in accordance with and governed by the laws of New York.
- 6. This Agreement may be executed through separate signature pages or in any number of counterparts, and each of such counterparts shall, for all purposes, constitute one agreement binding on all parties.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have caused their names to be signed hereto by their respective representatives thereunto duly authorized as of the date first above written.

TOWN	
Ву:	
Name:	
Title:	
Date:	
OWNER:	
Ву:	
Name:	
Title:	
Date:	

SCHEDULE I – Option A – Solar Project #1

Decommissioning Account (Deposits estimated)							
Timeframe (Year)	Amount (\$)	Cumulative (\$)					
Start of	\$82,575.00	\$82,575.00					
Construction							
4	\$2,064.38	\$84,639.38					
7	\$2,115.98	\$86,755.36					
10	\$2,168.88	\$88,924.24					
13	\$2,223.11	\$91,147.35					
16	\$2,278.68	\$93,426.03					
19	\$2,335.65	\$95,761.68					
22	\$2,394.04	\$98,155.73					
25	\$2,453.89	\$100,609.62					
28	\$2,515.24	\$103,124.86					
31	\$2,578.12	\$105,702.98					

SCHEDULE I – Option B – Solar Project #1

Decommissioning Bond (Engineer Cost Estimates)						
Timeframe (Year)	Amount (\$)	Cumulative (\$)				
Start of	\$82,575.00	\$82,575.00				
Construction						
4	TBD	TBD				
7	TBD	TBD				
10	TBD	TBD				
13	TBD	TBD				
16	TBD	TBD				
19	TBD	TBD				
22	TBD	TBD				
25	TBD	TBD				
28	TBD	TBD				
31	TBD	TBD				