



October 23, 2021

BY EMAIL

Richard Fon, Chairman
Planning Board
Town of Yorktown
363 Underhill Avenue
Yorktown, NY 10598

Subject: Tree Ordinance Mitigation Plan - Proposed Solar Project, Foothill Street, Yorktown

Dear Mr. Fon:

Con Edison Clean Energy Businesses, Inc. is proposing to develop a ground-mounted solar facility on 15.90 acres of the 34.23-acre site at 3849 Foothill Street in Yorktown owned by William Lockwood.

In accordance with the local Tree Ordinance, the Applicant has recently submitted a Tree Inventory to the Planning Board showing that a total of 1871 "protected" trees, of varying quality and condition, will be removed to develop the proposed project.

The Tree Ordinance also requires that the Applicant submit a "mitigation plan" to the Planning Board to "address and compensate for the impact of the removal of protected trees and removal or disturbance of protected woodlands."

The Applicant previously submitted a draft mitigation plan for discussion purposes, but, with the completion of the Tree Inventory, is now able to propose a final mitigation plan for consideration.

The Tree Ordinance provides for "Payment into the Tree Bank Fund. In lieu of replacing a lost protected tree or disturbance to a protected woodland, the payment shall be \$100 for every protected tree removed and \$300 for every 5,000 square feet of protected woodland disturbed." In gross terms, this formula would result in a payment to the Tree Bank Fund of \$228,656, based upon the 1871 trees @ \$100 (\$187,100) to be removed and the 15.90 acres of the 34.23-acre site to be disturbed (\$41,556).

As a part of its mitigation plan, the Applicant has submitted plans for an additional 212 plantings, installed at a cost of \$160,000, at the project site to enhance the natural screening and in mitigation for the trees to be removed for the project. See the Landscaping & Plantings in Mitigation Plan attached (and included in the Site Plan set as Sheet C006 at a larger scale). See also the Landscaping and Plantings for Mitigation Inventory and Cost Estimate attached.

The Applicant will also post a Bond to ensure the sustainability of those plantings and to pay for their replacement if necessary.

It is suggested that this \$160,000 expenditure for new plantings be credited toward the \$228,656 payment to the Tree Bank Fund and, as a result, the net payment to the Fund by the Applicant will be \$68,656.

In further mitigation, the Applicant notes that, over and above the 18.32 acres at the site left wholly undisturbed and untouched by the solar project development, once the project is completed, almost all of the 15.90 acres that is disturbed will be returned to grass and meadow, using a pollinator-friendly seed mix, as prescribed by a Certified Ecological Restoration Practitioner, providing a new, much-needed habitat for bees, butterflies and other native pollinators.

The solar project will also have a positive, indirect effect on the environment as solar energy replaces or reduces the use of other energy sources that have larger effects on the environment. The EPA Greenhouse Gas Equivalencies Calculator attached demonstrates that the greenhouse gas offsets from this 1.87 MW AC solar project will be 60 million pounds of carbon dioxide (CO₂) over the 25-year life of the project. That is the equivalent of taking nearly 6 million passenger car miles driven ... and their fossil fuel emissions ... off the road. By comparison the trees currently on the site which are to be cut would sequester less than 5% of that amount of carbon dioxide during the same period.

This mitigation plan will be in addition to a Payment in Lieu of Taxes Agreement (PILOT) that the Applicant proposes to enter upon with the Town. Please refer to the attached PILOT Toolkit, which is information and guidance provided by the New York State Energy Research and Development Authority (NYSERDA). As you can see, the proposed range for PILOT payments in the ConEd Territory is from a base of \$3,700 to a high of \$11,100 per MW AC of capacity. The reason for the range is that each Solar Project has individual characteristics which greatly affect its profitability. In this case, the Applicant is proposing to make payment to the Town at the top end of the NYSERDA Guidance, that is \$11,100 per MW AC. Though some of the project specific characteristics are higher than the NYSERDA Base Case which was used to come up with the PILOT guidance, such as higher lease payments and utility interconnection costs, in the spirit of collaboration the Applicant does not propose any discounts to the PILOT rate. These payments will be made in addition to the standard property tax currently paid to the Town.

As currently designed, this proposed project has a capacity of approximately 1.87 MW AC. Based on the \$11,100 per MW AC payment, this equals an additional tax payment to the Town of approximately \$20,757 per year, or a total of approximately \$311,355 over the term of the PILOT Agreement. This provides great tax benefit to the Town without placing any burden on Town resources or services. More specifically, such projects do not use sewer or water, do not require trash pick-up or police or fire response and, most importantly, do not put any additional



children in the school system. As a result, all of this additional revenue can be used for enhancing Town programs and/or or infrastructure ... or to lower the tax burden for residents.

Your consideration of this mitigation plan is appreciated. Con Edison Clean Energy Businesses, Inc. looks forward to becoming a good corporate neighbor in the Town and to assisting in further enhancing the community in which you and the Planning Board justifiably take such pride. It is also excited to bring this clean, renewable electricity project to the Town.

Regards,

Joe Shanahan

Project Developer

Con Edison Clean Energy Businesses

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CC: Town Supervisor Matthew Slater (By Email)

Tree Conservation Advisory Commission Attn: Bill Kellner (By USPS)

Landscaping & Planting for Mitigation Budget Cost Estimate

February 5, 2021

Item Description	Unit	Quantity	Unit Price (2020 \$)	Cost
Tree Plantings				
AC - Abies concolor - White Fir (6-7' Height)	EA	39	\$600	\$23,400
JV - Juniperus virginiana - Eastern Red Cedar (8' Height)	EA	59	\$700	\$41,300
PG - Picea glauca - White Spruce (8' Height)	EA	38	\$700	\$26,600
PP - Picea pungens - Colorado Spruce (8' Height)	EA	43	\$650	\$27,950
TO - Thuja occidentalis 'Emerald Green' - Emerald Green Arborvitae (5' Height)	EA	33	\$450	\$14,850
			SUB-TOTAL	\$134,100
Basic Work Zone traffic Control (5%)	LS	1		\$6,705
Mobilization (4%)	LS	1		\$5,364
Survey Operations (2%)	LS	1		\$2,682
Erosion and Sediment Control (0.5%)	LS	1		\$671
			TOTAL	\$149,522
			Construction Contingency (5%)	\$7,476
			GRAND TOTAL	\$156,998
			SAY	\$160,000

Assumptions:

- Unit cost includes installation.

PLANT LIST								
Key	Qty.	Botanical Name	Common Name	Mature Size		Installed Size	Condition	Approximate Size in 5 Years
				Height	Spread			
Evergreen Trees								
AC	39	Abies concolor	White Fir	50-75' Ht.	20-30' Sprd.	6-7' Ht.	B&B	14-15' Ht. /10-12' Sprd.
JV	59	Juniperus virginiana	Eastern Red Cedar	30-60' Ht.	10-25' Sprd.	8' Ht.	B&B	15-16' Ht. /8-9' Sprd.
PG	38	Picea glauca	White Spruce	40-60' Ht.	10-20' Sprd.	8' Ht.	B&B	15-16' Ht. /8-9' Sprd.
PP	43	Picea pungens	Colorado Spruce	30-60' Ht.	10-20' Sprd.	7-8' Ht.	B&B	14-15' Ht. /10-12' Sprd.
Evergreen Shrubs								
TO	33	Thuja occidentalis 'Emerald Green'	Emerald Green Arborvitae	7-15 Ht.	3-4' Sprd.	5' Ht.	B&B	7-8' Ht. /2-3' Sprd.
1. Average growth rates were based on information from the Arbor Day Foundation. 2. Size in 5 years represented on this table are approximate and do not take into account exact site conditions the trees will be planted in. 3. Individual trees grow at different rates depending on their condition at installation and watering/maintenance during the period of establishment. Growth rates will vary.								

United States Environmental Protection Agency


Greenhouse Gas Equivalencies Calculator

1.87 MW AC Solar Project





3,132,000 kilowatt-hours of electricity

Equivalency Results [How are they calculated?](#)







The sum of the greenhouse gas emissions you entered above is of Carbon Dioxide Equivalent. This is equivalent to:







2,214 Metric Tons 

Greenhouse gas emissions from


 478  Passenger vehicles driven for one year	-or-	 5,494,911  Miles driven by an average passenger vehicle
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CO₂ emissions from

 249,178  gallons of gasoline consumed	-or-	 217,529  gallons of diesel consumed	-or-	 2,440,019  Pounds of coal burned
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 29.3  tanker trucks' worth of gasoline	-or-	 256  homes' energy use for one year	-or-	 375  homes' electricity use for one year
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12.2
railcars' worth of coal burned




-or-

5,127
barrels of oil consumed




-or-

90,526
propane cylinders used for home barbeques

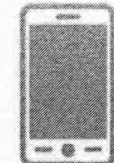


0.0006
coal-fired power plants in one year




-or-

282,413,637
number of smartphones charged




Greenhouse gas emissions avoided by

753
Tons of waste recycled instead of landfilled



-or-

108
Garbage trucks of waste recycled instead of landfilled




-or-

94,224
trash bags of waste recycled instead of landfilled




0.470



Wind turbines running for a year

-or-


04,120



Incandescent lamps switched to LEDs

Carbon sequestered by


36,616



tree seedlings grown for 10 years

-or-


2,892



acres of U.S. forests in one year

-or-

15



acres of U.S. forests preserved from conversion to cropland in one year

Solar Payment-In-Lieu-Of-Taxes (PILOT)

Assisting New York State municipalities considering payment-in-lieu-of taxes (PILOT) agreements for community solar projects larger than one megawatt.



NYSERDA

Solar Guidebook for Local Governments
NYSERDA 17 Columbia Circle Albany, NY 12203

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Overview

The following toolkit is for local governments in New York State who are considering a payment-in-lieu-of-taxes (PILOT) agreement for solar projects larger than one megawatt (MW). We provide resources for local governments to gain more information on PILOT agreements. A few notable resources within the toolkit are the New York Model Solar Energy PILOT Law, Model Solar PILOT Agreement for a single jurisdiction, and the PILOT calculator for taxing jurisdictions, which can be accessed here and under the PILOT toolkit section below.¹⁸

1. Community Solar

In addition to residential, commercial, and municipal projects, a relatively new kind of solar project, “community solar,” has emerged as an efficient and affordable way for all New Yorkers to gain access to clean energy. Community solar projects are much larger, typically in the 2,000-kw range and allow individuals (including renters and others who cannot install a system on their own roof) to purchase individual panels or some fraction of the electricity the entire system generates. These customers receive credits for this electricity on their monthly utility bills.

A community solar project brings revenues and benefits to a community and its residents in several ways. The owner of a project site will typically lease land to the solar company in return for lease payments. Community solar customers, which may include municipalities, businesses, and residents, save money on their utility bills. Taxing jurisdictions can benefit from PILOT payments. At the same time, given the passive nature of a solar array, a solar project does not create increased demands on municipal services and infrastructure.

2. Real Property Tax Law (RPTL) § 487

As a measure to promote the installation of clean energy sources, the New York State legislature adopted a section of the RPTL § 487 that exempts the value of a solar panel system from local property taxes.¹⁹ Under the law, any increase in the property value attributable to the addition of the solar panel system is exempt from property tax. The RPTL § 487 exemption has been a cornerstone of the State’s efforts to meet its clean energy goals, providing essential economic incentives for solar. The law does, however, allow any taxing jurisdiction (town, school, etc.) to “opt-out” of the tax exemption by adopting a local law or resolution, making the added value of a solar panel system fully taxable. Alternatively, a taxing jurisdiction that does not opt-out can require a solar developer to pay an annual fee or “payment- in-lieu of taxes” as a replacement for the taxes it would have otherwise collected. Under the law, PILOT amounts cannot exceed what the tax amount would have been without the exemption. Additionally, the law does not allow jurisdictions to partially opt out of the law to generate tax revenue from large solar projects while exempting the small systems of homeowners. Opting out of RPTL § 487 makes community solar projects financially unviable and makes homeowners’ rooftop systems more expensive.

¹⁸ The terms “taxing jurisdictions” and “jurisdictions” include counties, cities, towns, villages and school districts.

¹⁹ New York State Real Property Tax Law § 487 provides a 15-year real property tax exemption for properties located in New York State with renewable energy systems, including solar electric systems. The law applies only to the value that a solar electric system adds to the overall value of the property; it does not mean that landowners with an installed renewable energy system are exempt from all property tax. Local governments have the option to opt out of RPTL § 487 and tax solar projects at the full property tax rate, but doing so can impact project economics in a way that unintentionally prohibits developers from building projects. For more information on RPTL § 487, see Understanding New York State’s Real Property Tax Law § 487 fact sheet. A local government that does not opt out of RPTL § 487 can still generate revenue through PILOT agreements.

NYSERDA understands that many communities have little or no experience with solar PILOT agreements or with assessing the value of large-scale solar projects. Information is difficult to obtain by consulting other communities because few communities have completed large-scale solar projects.

Two common questions have arisen from New York State municipal officials and other interested parties:

- (1) If we do not opt-out and seek a PILOT, what is a fair PILOT amount based on what projects can afford?
- (2) What are the steps to negotiate a successful PILOT agreement?

The answer to the first question is complicated, as PILOTs are often negotiated for individual projects, and the PILOT amount a project can afford depends on many factors, including construction and maintenance costs, and the amount of revenue from electricity sales. From the point of view of solar developers, if the PILOT amount is too high, they will not be able to make the project economically feasible and will not proceed. So, the amount of revenue available for a PILOT is dependent on the overall project economics. The first question then becomes, “What PILOT amount will allow the jurisdiction and its residents to enjoy the benefits of the project, but will not make the project financially unviable and unattractive to a developer?”

NYSERDA’s research indicates that PILOT rates should be negotiable between 1% and 3% of the compensation solar developers receive for the electricity their projects generate.²⁰ This research includes an independent analysis of current solar market data and an analysis of solar project compensation rates established under the preliminary value stack in the New York Public Service Commission’s March 2017 Value of Distributed Energy Resources (VDER) order. The new solar energy compensation methodology will likely reduce project revenue. NYSERDA will review and update its PILOT guidance regularly; taxing jurisdictions are encouraged to adjust their PILOT rates accordingly.

NYSERDA offers the Solar PILOT Toolkit as a resource to help municipalities and solar developers negotiate successful PILOT agreements. The following describes the Toolkit’s contents.

3. Solar PILOT Toolkit

3.1 The Model Solar PILOT Law

The Model Solar PILOT Law, or resolution, provides a sample template for jurisdictions that wish to establish the legal authority to implement a formulaic, jurisdiction-wide PILOT agreement process with solar developers. The model law cites the appropriate laws to do so and includes blank fields for jurisdictions to fill in. The model law exempts projects smaller than 1 MW AC as the amount of PILOT revenue may not justify the cost of negotiating the PILOT.

3.2 The Model Solar PILOT Agreement

Only jurisdictions that do not opt out of RPTL § 487 may enter PILOT agreements. The Model Solar PILOT Agreement provides a draft contract that jurisdictions can sign with solar developers. The agreement can be tailored to meet a jurisdiction’s specific needs and includes blank fields for the jurisdiction to fill in. Jurisdictions may negotiate PILOT rates with solar developers on a project-by-project basis or may adopt a jurisdiction-wide rate for certain types of solar panel systems, typically in the form of annual payments based on a dollar-per-MW rate.

²⁰ NYSERDA continuously assesses market data and Public Service Commission proceedings and may revise this Toolkit when appropriate.

3.3 The Solar PILOT Calculator

The Solar PILOT Calculator can be accessed [here](#).

This tool provides PILOT rate guidance for solar projects and includes two separate calculators.²¹ Calculator One should be used to set a uniform PILOT rate across an entire jurisdiction.

The following table displays sample PILOT rates generated by Calculator One for a 2-MW AC community solar project in each utility service territory. The “Low” and “High” rates represent 1% and 3% of the compensation solar developers receive for the electricity their projects generate. NYSERDA’s research of solar project economics across the State indicates that such projects should be able to afford rates within this range.

	Low (\$/MW AC)	High (\$/MW AC)
Central Hudson	\$2,600	\$7,600
Orange & Rockland	\$3,200	\$9,500
National Grid	\$1,700	\$5,100
NYSEG	\$1,700	\$5,000
Con Edison	\$3,700	\$11,100
Rochester Gas & Electric	\$1,700	\$5,000

Calculator Two should be used to set PILOT rates on a project-by-project basis. It is highly customizable, taking into account extensive project-specific data and all factors affecting solar project economics. Users may accept the default values but are encouraged to enter project-specific data. Calculator Two estimates PILOT rates based on the net present value of a project’s unlevered cash flow that achieves a specified pre-tax internal rate of return.

²¹ Each calculator’s outputs reflect the sum total of all PILOT payments, property taxes from taxing jurisdictions which have opted-out of the exemption, and special district taxes (which are not exempt under RPTL § 487).