



# Siting Solar Projects In Upstate NY

May 17, 2019 Finger Lakes Solar Workshop

1



**MISSION:** To promote the use of clean, renewable electricity technologies and energy efficiency in New York State, in order to increase energy diversity and security, boost economic development, improve public health, and reduce air pollution.

CURRENT BOARD MEMBERS:



## “Distributed” Solar



Distributed energy resources (DER) = smaller sized projects located “behind-the-meter” at a customer site, or that remotely feed a customer meter

Rooftop Solar = traditional distributed renewable project

Community Solar projects are larger, and start to blur the lines between traditional small, distributed solar and large, grid-scale solar

3

## “Grid-Scale” Solar

Larger sized projects that sell electricity directly into the wholesale transmission grid



Eastern Shore Project, Accomack County, VA (80 MW)

- Traditional
  - Wind Turbines
  - Hydropower
  - Biomass or Biogas
- On the Horizon...
  - Solar
  - Offshore Wind

4

# Solar Development in NYS

(as of March 2019)

## Distributed

- Behind-the-meter; interconnection through utility
- Operating – 19,745 projects in NatGrid territory
- Pipeline – 1,620 projects in NatGrid interconnection queue
- Community Solar (CDG) relatively new concept with details still being hashed out

## Grid-Scale

- Interconnection through NY Independent System Operator
- Operating – 0 projects in Upstate NY
- Pipeline – 78 projects in NYISO interconnection queue
- Cost of solar panels and project development has come down drastically in past few years

[Link to project map](#)

5

# Solar Permitting

SEQR vs. Article 10

## Under 25 MW

- State Environmental Quality Review (SEQR)
- Local Zoning and Ordinances

## Over 25 MW

- Article 10 of NYS PSL
- Comply with all Local Rules and approval by State Siting Board

### **Role of Local Governments in Article 10**

- Local Governments play a prominent role in Article 10 proceedings and influence project conditions based on local needs
- Participation in Stipulations process and Public Hearings
- 2 Ad-Hoc members of State Siting Board appointed from local area
- Intervenor Funding available to stakeholders and local governments

6

# Public Involvement Program

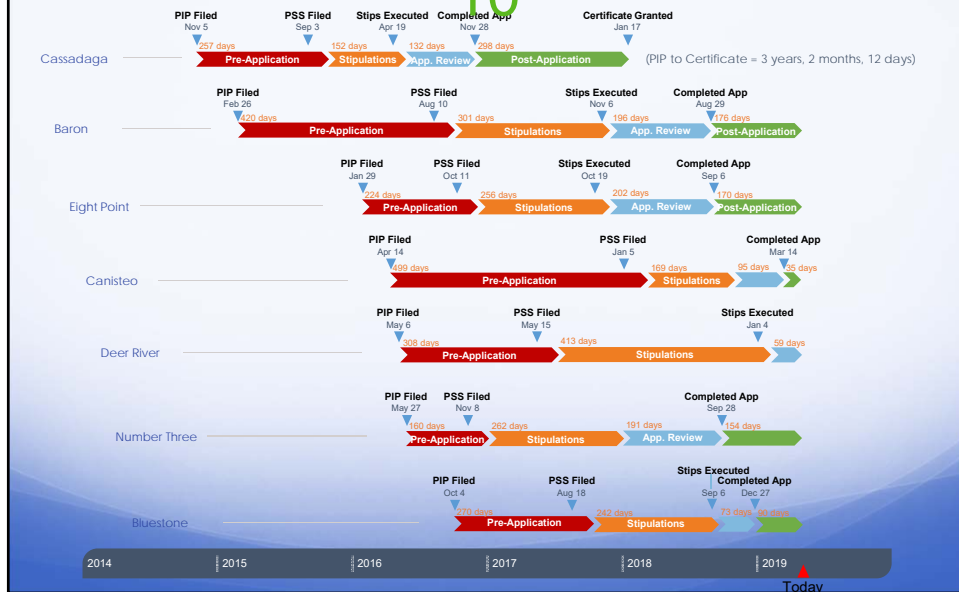
One of the key elements of the Article 10 regulations is the requirement that applicants develop and implement a Public Involvement Program (PIP) designed to facilitate public participation at all phases of the Article 10 process, from pre-application through certification and compliance

The Program must include:

- consultation with the affected agencies and other stakeholders
- pre-application activities to encourage stakeholders to participate at the earliest opportunity
- activities designed to educate the public as to the specific proposal and the Article 10 review process, including the availability of funding for municipal and local parties
- the establishment of a website to disseminate information to the public
- notifications
- activities designed to encourage participation by stakeholders in the certification and compliance process.

7

# Projects' Progress in Article 10



## Local Permitting Considerations

- Construction phase issues typical to any large development
- Zoning and land-use regulations
- Decommissioning Plans
- Fire and safety protocols
- Landscaping and viewshed
- Property taxes = “PILOT” agreements
- Non-issue: noise or traffic disturbances typical of many other types of large scale development and operation

9

## Comparison of Land Use Between Land-Based Wind and Grid-Scale Solar

(acres/MW)	Wind	Solar
Direct Land-Use Per MW	0.1	7.2
Total Project Land-Use Per MW	15.0	7.9

Source: NREL, Land-Use Requirements of Solar Power Plants in the United States, “Large PV,” 2013.  
NREL, Land-Use Requirements of Modern Wind Power Plants in the United States, “Wind Power Plants,” 2009.

10

# Benefits for Your Town

- Property tax revenues (PILOT payments)
- Leaseholder agreements
- Indirect economic injection during construction phase
- Potential Host Community Agreements and other community benefit packages
- Incentivized and supported through established state-level clean energy programs

# Benefits for Your Town (cont'd)

**COPPINHAM** • 40 MW • 45 turbines • January 2013 • Lewis & Jefferson Counties • Towns of Denmark, Champlin & Rutland  
The Coppinham wind farm created about 300 jobs during construction. Each year, a minimum of \$4,000 per megawatt per year will be paid to Lewis County, the town of Denmark, and the school district. This will increase with inflation to \$14,020 per megawatt by the end of the project's 20 year lifespan. In the first year of construction alone, the town of Denmark is to receive \$430,000 from Coppenham Wind in Host Community fees.

**IRVINGTON SUMMIT** • 19.5 MW • 16 turbines • October 2018 • Chautauque County • Town of Arlington  
The Irvington Summit wind farm will pay a minimum of \$4,000 per megawatt per year to the county, town, and school district in PILOT payments, which will increase with inflation. The town of Arlington will receive a minimum of \$1,900 per megawatt per year in Host Community payments, which will also increase with inflation. These payments will continue over the 30 year lifespan of the project.

**IRVINGTON** • 17.7 MW • 17 turbines • December 2016 Franklin County • Town of Champlain & Bellows Falls  
The Irvington Wind Farm created 289 jobs during construction and 10 permanent positions. Each year, a base payment of \$1,000 per megawatt is distributed among the taxing jurisdictions, and \$1,000 per megawatt goes to the school district in PILOT payments. The towns of Chateaufort and Bellows Falls will receive an additional base payment of 25,000 per megawatt per year in a Host Community agreement. These amounts will increase with inflation. In 2018, the town of Bellows Falls received \$1,000,000 in PILOT, Host Community, and Economic Development fees.

**ORANVILLE** • 24 MW • 18 turbines • March 2014 Wyoming County • Town of Oranville  
The Oranville Wind Farm created 100 construction jobs and 10 permanent positions. In the first 3 years, they paid \$483,020 in PILOT payments to Wyoming County, the Town of Oranville, the Warren Central School and the Allen Central School. According to the Oranville Town Budget, in 2018 they received \$11,342 in Host Community fees. These numbers will increase with inflation over the 15 year lifespan of the project.

**MARKS HILL** • 12.5 MW • 12 turbines • January 2014 Steuben County • Town of Marks Hill  
The Marks Hill wind farm pays \$5,300 per megawatt, amounting to about \$65,860, per year to the county, town, and school district in PILOT payments. This payment will continue through the 20 year lifespan of the project. This project created 10 temporary construction jobs and two permanent positions. A quote from the Jasper Town Supervisor at the time, Lucille Kerwin, says, "The project is a huge investment in Jasper, and the long-term payments will be making to the Town will enable us to keep taxes low. That is a huge help to our citizens, including renters and low-income."

**MARBLE RIVER** • 214 MW • 20 turbines • November 2012 Clinton County • Towns of Clinton & Ellenburg  
Each year, Marble River will pay a minimum of \$4,000 per megawatt to the county, towns and school district. Each town will also receive at least \$1,000 per megawatt each year in Host Community payments. Both these amounts will increase with inflation over the 20 year lifespan of the project. This project created 306 temporary construction jobs and 13 permanent positions.

**ROXBORO** • 15.35 MW • 17 turbines • February 2012 Steuben County • Town of Roxboro  
A quote from Don Ealy, the Howard town supervisor, says, "This is a Real Community. We don't have industry coming in and helping us with taxes. We've never seen something like this that can help other land uses. This will bring us some relief for 20 years, and hopefully into the future after that." This project has will have paid out approximately \$2,571,524.44 in PILOT payments, according to the original PILOT Agreement.

**STEEL WINDS 1&2** • 10 MW • 14 turbines • April 2007 January 2012 • 10th County • City of Lakeside and Town of Harding  
Steel Winds was developed on a former steel mill that had been abandoned for 20 years. It brought life into the community, and created 140 construction jobs and 4 permanent positions. This opened other new developments in the area, such as a community center, commercial center, 1.2 acre grammar and base park, and a clean burning power plant.

**HARDSCROBLE** • 14 MW • 17 turbines • March 2011 Herkimer County • Towns of Little Falls, Warrens & Fairfield  
Hardscroble wind pays a minimum of \$4,000 per megawatt per year in PILOT payments to the county, towns, and school districts, which increases with inflation. According to the Averill Park newspaper website, "The clean, hydrogen energy produced at Hardscroble has a pollution offset equal to removing an estimated 26,000 cars from the road each year."

**NOBLE WETHERSFIELD** • 126 MW • 82 turbines • March 2008 Wyoming County • Towns of Wethersfield  
From 2008 through 2018, the Noble Wethersfield Wind Farm paid a total of \$1,260,674.92 in PILOT payments to the county, towns, and school districts. The towns of Wethersfield and Chateaufort receive a minimum of \$6,892 per megawatt per year. These numbers will continue to increase with inflation over the 15 year lifespan of the project.

**WIND WILLOW** • 11.2 MW • 15 turbines • March 2009 Wyoming County • Towns of Sheldon & Wethersfield  
For the first five years of the project, the town of Sheldon was able to eliminate taxes. Over the past 8 years of the project, \$1,529,969.09 was paid in PILOT fees to the county, town and school district. The Town of Sheldon receives a minimum of \$6,893 per megawatt per year in Host Community fees. This will continue to increase with inflation over the 15 year lifespan of the project.

**COCHITON/DOUCH MIL** • 221 MW • 35 turbines • January 2009 • Steuben County • Towns of Cochitton, Alexa & Prattsburgh  
According to the original PILOT agreement, Cochitton Wind started off in 2009 paying \$500 per megawatt in PILOT payments, which has increased to \$6,329 per megawatt in 2019. According to the original Host Community Agreement, they will also pay the Town of Cochitton \$2,515 per megawatt in 2019. With this revenue, Cochitton has been able to reduce property tax by 50%, as well as perform maintenance throughout the town.

**NOBLE CHATEAUGAY** • 107 MW • 71 turbines • January 2009 • Franklin County • Town of Chateaufort  
Noble Chateaufort created hundreds of temporary construction jobs and 8 permanent positions. The Town of Chateaufort has a Host Community Agreement that pays a minimum of \$1,000 per megawatt, totaling to about \$31,000 per year, which will increase with inflation. The county, town and school district also receive PILOT payments of \$1,000 per megawatt, subject to inflation.

**NOBLE ALTONA** • 97.5 MW • 65 turbines • January 2009 Clinton County • Town of Altona  
The Town of Altona receives a minimum of \$3,000 per megawatt, approximately \$20,250, per year from a Host Community Agreement. This number will continue to increase with inflation over the 20 year lifespan of the project. The county, town and school district also receive PILOT payments each year. Hundreds of temporary construction jobs were created, along with 7 permanent positions.

**NOBLE CLINTON** • 102 MW • 87 turbines • April 2008 Clinton County • Town of Clinton  
According to the project website, "Over 20 years, the Noble Clinton Windpark will create an estimated \$76,600,000 in local economic benefits." Hundreds of temporary construction jobs and 7 permanent positions were created. Each year, the county, town, and school district will receive a minimum of \$9,000 per megawatt per year in PILOT payments, subject to inflation. The towns of Clinton will receive an additional \$1,000 per megawatt per year, subject to inflation, in Host Community fees.

**NOBLE BLOSS** • 101 MW • 67 turbines • March 2008 • Wyoming County • Towns of Eagle & Arade  
Since the start of the project, Noble has paid a total of \$1,738,941.22 to Wyoming County, each town, and the school district, as of 2018. The Town of Eagle also receives a minimum of \$6,400 per megawatt per year in the Host Community Agreement, which will increase with inflation. With this revenue, the Town of Eagle has eliminated taxes and garbage fees.

**NOBLE ELLENBURG** • 81 MW • 54 turbines • March 2008 Clinton County • Town of Ellenburg  
The Town of Ellenburg receives a minimum of \$3,000 per megawatt, around \$24,000 per year, in Host Community payments, which will increase with inflation. According to David Conant, the town supervisor in 2014, "The town has been able to keep its tax rate low and stable during the six year Noble Environmental Energy has operated its Ellenburg Wind Park." Hundreds of temporary construction jobs and permanent jobs were created.

**MORRISVILLE** • 34.5 MW • 23 turbines • November 2007 Madison County • Towns of Skowhegan, Eaton, Madison and Augusta  
The Morrisville wind farm pays a minimum of \$8,000 per megawatt per year, divided amongst the County, towns, and school districts. This payment will continue to increase with inflation over the 15 year lifespan of the project.

**MAPLE RIDGE** • 321.75 MW • 250 turbines • January 2008 • Lincoln County • Towns of Marlborough, Lamoille, Ferrisburgh and Westford  
Maple Ridge is the largest wind farm in New York. This project created 80 local permanent jobs. With the revenue from Maple Ridge, the Lamoille school was able to start offering AP classes, give every student grades 3 through 12 a laptop, into athletic fields, and more. School superintendent Cheryl Stockley says, "The wind project is certainly a part of our district's landscape. Our students go to the wind farm for field trips. They study wind and green energy in their classrooms. We have a new team called 'The Turbine' that practices here." According to Jeremy Kelly, a local restaurant owner, "The benefits that wind farms bring to the community are greater than any potential disadvantages." The school district has been able to do a lot more projects and

**FENNER WIND FARM** • 30 MW • 20 turbines • December 2001 • Madison County • Town of Fenner  
In the first year of the PILOT, Fenner wind paid \$1,875 per megawatt in PILOT fees and \$5,000 per megawatt in Host Community fees, which continued for 15 years. A new upgraded PILOT agreement is currently in the works.

**WETHERSFIELD WIND FARM** • 6.6 MW • 10 turbines October 2008 • Wyoming County • Town of Wethersfield  
The Wethersfield project was the first of 5 operational wind farms in Wyoming County.

**MADISON WIND FARM** • 11.6 MW • 10 turbines September 2005 • Madison County • Town of Madison  
This is the oldest operating wind farm in New York. 7.1 million was spent within 30 miles of the wind farm through 2016.

## Benefits for Your Town (cont'd)

- Examples of renewable energy project contributions in other upstate NY towns:
  - **Maple Ridge Project** – With the revenue from Maple Ridge Project, the Lowville school was able to start offering AP classes, give every student grades 3-12 a laptop, redo athletic fields, and more. School superintendent Cheryl Steckly says, “The benefits that wind farms bring to the community are greater than any potential disadvantages.”
  - **Howard Project** – Don Evia, the Howard town supervisor, says, “This is a Rural Community. We don’t have industry coming in and helping us with taxes. We’ve never seen something like this that can help offset land taxes. This will bring us some relief for 20 years, and hopefully into the future after that.” This project has will have paid out approximately \$2,971,518.44 in PILOT payments, according to the original PILOT Agreement.
  - **High Sheldon Project** – For the first five years of the project, the town of Sheldon was able to eliminate taxes. Over the past 8 years of the project, \$1,529,069.69 was paid in PILOT fees to the county, town, and school district.

13

## Role in NY’s Clean Energy Future

- Imminent transition to a cleaner and greener energy economy
- Recent gubernatorial proposal of 100% clean electricity by 2040
- Governor has proposed benchmarks of:
  - 70% renewables by 2030
  - 6,000 MW of distributed solar by 2025
  - “More than doubling” land-based wind and grid-scale solar
  - “Maximizing contributions from existing renewables”
- Solar will play a large role in the clean energy transition, as well as wind power and energy storage

14

## Getting Creative with Solar

- **Projects that support agriculture**
  - By using part of the land for solar and continuing to farm
  - By co-location of sheep grazing or bee keeping
  - By requiring decommissioning and returning land to farming
- **Land Reclamation or use of Town Land**
  - Developing brownfields with solar
  - Placing solar on closed landfills
  - Co-locating solar at town properties or encouraging solar parking canopies for new development in town
- **Community Solar programs**
- **Community Choice Aggregation programs**

15

## Tools For Municipalities

- **New York State Solar Guidebook:**
  - Solar Permitting and Inspecting
  - Roof Top Access and Ventilation
  - SEQR for Solar
  - New York State's Real Property Tax Law § 487
  - Solar Payment-in-Lieu-of-Taxes (PILOT)
    - Model solar PILOT; property tax and PILOT calculators (distributed)
  - Solar Installations in Agricultural Districts
  - Landowner Considerations for Solar Land Leases
  - Decommissioning Solar Panel Systems
  - Model Solar Energy Local Law
  - Municipal Solar Procurement Toolkit

16



Thank you!

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17