

New York State Farmland Protection Working Group 2022 Interim Report



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**Agriculture
and Markets**

Letter from Commissioner Ball

I am pleased to receive the following interim report from the New York State Farmland Protection Working Group. It is my privilege to be in the position to facilitate such important discussions that focus on climate change, renewable energy, and agriculture, and I thank all the Working Group members for their consummate professionalism.

With year over year increases in renewable energy installations expected to continue for the foreseeable future, it is important that we work collaboratively to integrate renewables into our working landscapes with minimal impact to local communities that have strong economic ties to agricultural production. States across the nation, including New York State, have advanced strategies to both protect agricultural soil resources and expedite the adoption of renewable forms of energy. With that in mind, we can always improve upon efforts to balance State policies that drive these industries in New York State. Thanks to the Working Group's collaborations to date, I am pleased that such efforts are well underway.

In this interim report, the Working Group has provided early insights on topics that will evolve into promising consensus strategies. Our work is just beginning, and I am enthusiastic about the future conversations that will strengthen partnerships forming around agricultural and renewable energy development.

Sincerely,

Richard A. Ball

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Overview

The New York State Farmland Protection Working Group (FPWG) was created as a result of Chapter 55 of the Laws of 2021. The FPWG is a coordinated effort among relevant State agencies and authorities to work with representatives from county agriculture and farmland protection boards, as well as local government officials from across New York.

As stated in Executive Law 94-c(8)(b), the statutory purpose of the FPWG is to “recommend strategies to encourage and facilitate input from municipalities in the siting process and to develop recommendations that include approaches to recognize the value of viable agricultural land and methods to minimize adverse impacts to any such land resulting from the siting of major renewable energy facilities.”



Specific agencies and authorities tasked to the Working Group include the New York State Departments of Agriculture and Markets (AGM) and Environmental Conservation (DEC), the New York State Energy Research and Development Authority (NYSERDA), the New York State Office of Renewable Energy Siting (ORES), and the New York State Department of Public Service (DPS).

The FPWG held its initial organizational meeting on December 8, 2021, and subsequent meetings on January 26, 2022, and February 28, 2022. Points of discussion included renewable energy siting and permitting, existing controls for the protection of agricultural resources, perspectives from the farming and energy development communities, and the identification of priority topics for recommended strategy development.

This interim report specifically focuses on prioritized topics and several associated preliminary strategy summaries that are being expanded and explored by the FPWG to fully understand their impact on renewable energy siting and agricultural resources. Adoption of all final detailed strategies and recommendations by consensus of the Working Group is expected to occur in the fall of 2022.

For additional information on future meetings and to access past meeting content please visit the FPWG web page at agriculture.ny.gov/land-and-water/farmland-protection-working-group.

Recognition

The FPWG is comprised of key stakeholders from across New York State. Members represented are comprised of agencies, authorities, county agricultural and farmland protection boards (AFPB), farmers, and municipal representatives from all levels of government. Additionally, the FPWG included advisory member participants to gain further insight into industry and agricultural resource considerations surrounding the siting of renewable energy facilities. Members are listed below.

Members

- Amber Corbin, Town of Rush Deputy Supervisor and Councilperson (Monroe County)
- August Ruckdeschel, Suffolk County Division of Planning and Environment
- Basil Seggos, Commissioner, New York State Department of Environmental Conservation
- Cassie Fedler, Chair, Washington County AFPB, Washington County Board of Supervisors
- Christopher Rosenquest, Mayor of Plattsburgh (Clinton County)
- Darren McCabe, Mayor, Village of Homer (Cortland County)
- Doreen Harris, President and CEO, New York State Energy Research and Development Authority
- Felipe A. Oltramari, Director, Genesee County Department of Planning
- Houtan Moaveni, Executive Director, New York State Office of Renewable Energy Siting
- Julian Mangano, Della Terra Farm (Lewis County)
- Mary Underhill, Livingston County Planning Board, AFPB
- Matilda Larson, Planner, St. Lawrence County Planning Department, AFPB
- Matt Sousa, Chair, Steuben County AFPB
- Melissa M. Hartman, Supervisor, Town of Eden (Erie County)
- Michael A. Casale, Commissioner, Economic Development Niagara County
- Patrice Perry, Director, Columbia County Planning Department, AFPB
- Richard Ball, Commissioner, New York State Department of Agriculture and Markets
- Rory M. Christian, Chair and CEO, New York State Public Service Commission

Advisory

- Anne Reynolds, Executive Director, Alliance for Clean Energy New York Inc.
- Elizabeth Wolters, Deputy Director of Public Policy, New York Farm Bureau
- Ethan Winter, Northeast Solar Specialist, American Farmland Trust
- Jim Bittner, Owner/Operator, Bittner Singer Orchards, Advisory Council on Agriculture

Terminology

Definitions

Executive Law §94-c - Section 94-c of the Executive Law, Chapter 18 of the Consolidated Laws of New York State, Article 6, Department of State, was enacted to consolidate the environmental review and permitting of major renewable energy facilities in New York State and provide a single forum in which the Office of Renewable Energy Siting (ORES) may undertake a coordinated and timely review of proposed major renewable energy facilities to meet the state's renewable energy goals while ensuring the protection of the environment and consideration of all pertinent social, economic and environmental factors in the decision to permit such facilities, including potential impacts to agriculture.

Agricultural Assessment - A real property tax assessment granted under the New York State Real Property Tax Law.

Agricultural District - A geographic area which consists predominantly of viable agricultural land. Agricultural operations within a district are the priority land use and are afforded benefits and protections to promote the continuation of farming and the preservation of agricultural land. In practice, districts may include land that is actively farmed, idle, and forested, as well as residential and commercial. *Supplement IV displays a map of agricultural districts in New York State.*



Agricultural Land Classification System - A rating system developed and administered by the AGM that is used to evaluate and group soils in New York on the basis of their productivity and capability.

Agricultural Mitigation Payment - A calculated payment that may be required from a renewable energy system participating in a NYSERDA Renewable Energy Standard Request for Proposal (RESRFP), should NYSERDA make an award to the renewable energy system. This payment is made to a designated fund if the as-built Renewable Energy System's Facility Area overlaps with mineral soil groups (MSG classifications 1-4) and is in an Agricultural District. Payment amounts may be adjusted through consultations with AGM regarding co-agricultural opportunities and based on the final site configuration (reduced or expanded Facility Area acreage). *Supplement VI includes a link to NYSERDA's Agricultural Mitigation Payment calculator.*

Photo provided courtesy of Delaware River Solar

Agricultural Technical Working Group (A-TWG) - An independent advisory body to the State of New York and other participating entities to steer efforts in advancing renewable (primarily solar) energy development across scales in a responsible way that supports New York State's agricultural operations, lands, farmers, and communities. It is comprised of agricultural land and farmer advocates; solar developers and operators; non-governmental organizations that focus on clean energy, climate, and environmental protection; local government officials; academic experts; and State agencies. The organization's website is <https://www.nyatwg.com>.

Alternative Compliance Payments (ACPs) - Load Serving Entities (LSEs) can achieve annual Renewable Energy Standard through a combination of Tier 1 RECs purchased from NYSERDA, Tier 1 RECs from their own projects, Tier 1 RECs purchased from a third party, or ACPs. The price of an ACP is approved

by the New York Public Service Commission for a compliance year. Any shortfall in an LSE's obligation must be met with ACPs.

Clean Energy Standard (CES) – The New York State Public Service Commission's (PSC) Order Adopting the Clean Energy Standard issued on August 1, 2016, under Case 15-E-0302, Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard, established the Clean Energy Standard creating a timeline for LSEs to procure at least 50% of their electricity from renewable resources by 2030. On October 15, 2020, the PSC expanded the original Order to align with the requirements of the Climate Leadership and Community Protection Act (CLCPA) of 2019 and issued its Order Adopting Modifications to the Clean Energy Standard (CES Modification Order) which set targets of 70% renewable electricity by 2030 and 100% carbon-free electricity by 2040. The Clean Energy Standard is divided into two components: the Renewable Energy Standard (RES) and the Zero Emission Standard. The CES Modification Order added the Tier 4 program to the RES, which is focused on renewable energy being provided to New York City. New York also has a separate Offshore Wind Standard.

Climate Leadership and Community Protection Act (CLCPA or Climate Act) - In July 2019, New York passed the Climate Leadership and Community Protection Act, which represents the most ambitious and comprehensive climate and clean energy legislation in the country. The Climate Act's nation-leading climate and energy goals set the stage for a sweeping set of measures to reduce the State's carbon footprint and improve the resiliency of communities across New York. The Climate Act will transform how we generate power by integrating more renewables into our electric grid, empower New York residents and businesses to heat and cool their homes and workplaces without using fossil fuels, and transition how we commute from point A to point B with zero-emission transportation. These goals include:

- 85% reduction in Green House Gas emissions by 2050;
- 100% zero-emission electricity by 2040;
- 70% renewable energy by 2030;
- 9,000 MW of offshore wind by 2035;
- 3,000 MW of energy storage by 2030;
- 6,000 MW of solar by 2025; and
- 22 million tons of carbon reduction through energy efficiency and electrification.

Commercial Operation - A state of operational readiness of a renewable energy facility under which (i) generating capacity is available and physically producing electric energy, and (ii) all rights, abilities, permits, and approvals to schedule and deliver energy have been obtained.

Environmental Attributes - All environmental characteristics, claims, credits, benefits, emissions reductions, offsets, allowances, allocations, howsoever characterized, denominated, measured, or entitled, attributable to the generation by a Renewable Energy System. These environmental attributes are the substance of value represented by renewable energy certificates (RECs).



Facility Area – The definition of facility area can vary amongst programs and projects. In general, the definition includes all land area occupied during the commercial operation of the generation facility, the associated interconnection equipment, and, if applicable, energy storage equipment as verified by

NYSERDA through the operational certification process described in NYSERDA's agreements. Generally, this will include all areas within the facility's perimeter security fence(s) and the applicable facility related improvements outside of fenced areas. The Facility Area shall include the area "inside the fence" of the project including all fencing inclosing the mechanical equipment such as the solar arrays, inverters, location of any combiner boxes, fuses, switches, meters, distribution boards, monitoring systems such as balance of systems or components, interconnection equipment, and stormwater controls. The Facility Area shall additionally include improvements of the project "outside of the fence" including access roads, parking areas, stormwater controls, and other permanent facilities or structures installed at the Facility Area, except vegetative landscape screenings and appropriately buried utilities such as electrical conductors or conduit(s). This term may also include temporary land uses, maintenance areas, vegetative buffers and similar features.

Host Municipality or Municipalities - The town(s) or city(ies) within which a major renewable energy facility and its associated generation tie-in to the electricity grid is located.

Load Serving Entity (LSE) - Any entity subject to the jurisdiction of the New York State Public Service Commission that secures energy to serve the electrical energy requirements of end-use customers in New York State.¹ As defined, these entities include investor owned entities, energy service companies, community choice aggregations not served by ESCOs, jurisdictional municipal utilities, and any retail customers self-supplying through the New York Independent System Operator (NYISO). While not jurisdictional LSEs, the New York Power Authority (NYPA) and the Long Island Power Authority (LIPA) have also committed to adopting renewable energy targets that achieve the CES's renewable energy targets.²

Major Renewable Energy Facility - As defined in Executive Law §94-c, any renewable energy facility with a nameplate generating capacity of twenty five megawatts or more, and any co-located system storing energy generated from such a renewable energy system prior to delivering it to the bulk transmission system, including all associated appurtenances to electric plants as defined under Section 2 of the New York State Public Service Law, including electric transmission facilities less than ten (10) miles in length in order to provide access to load and to integrate such facilities into the State's bulk electrical transmission system. *Supplement II. contains a current list of projects.*

Mineral Soil Group 1-4 (MSG 1-4) - Soil classification defined by the New York State Department of Agriculture and Markets' Agricultural Land Classification System. MSG 1-4 are considered some of the most productive soils in New York State because of their unique combination of physical and chemical attributes. *Supplement V. depicts MSG 1-4.*

MW or MWac - A megawatt of alternating current electric energy generating capacity.

New York Control Area (NYCA) - The control area that is under the control of the NYISO which includes transmission facilities listed in the NYISO or transmission operator agreements, as may be amended from time to time.

New York Generation Attribute Tracking System (NYGATS) - An online certificate tracking system that records information about electricity generated, imported, and consumed within New York State. NYGATS also serves as the platform for applying for Renewable Energy Standard (RES) certification under the New York's Clean Energy Standard. NYGATS retains records of resources that have received a statement of

¹ Public Service Law §66-p(1)(a)

² NYS Public Service Commission. Case 15-E-0302, Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and Clean Energy Standard, Order Adopting Modifications to the Clean Energy Standard (issued October 15, 2020)

qualification and designates the RECs created by a facility as eligible for RES Tier 1 compliance. View the NYGATS Registry at nygats.ny.gov.

New York Independent System Operator (NYISO) - Administrator of the wholesale power markets in New York and manager of the physical electrical operations of the NYCA.

New York State AGM's Guidelines for Agricultural Mitigation for Wind Power Projects - Preventative guidance developed to mitigate impacts from the construction of solar energy generating infrastructure on agricultural lands that are slated to return to agriculture production after the energy facility's useful life. These can be viewed at agriculture.ny.gov/land-and-water/guidelines-agricultural-mitigation-wind-power-projects.

NYSAGM's Guidelines for Solar Energy Projects – Construction Mitigation for Agricultural Lands – Preventative guidance developed to mitigate impacts from the construction of solar energy generating infrastructure on agricultural lands that are slated to return to agriculture production after the energy facility's useful life. These can be viewed at agriculture.ny.gov/land-and-water/guidelines-solar-energy-projects-construction-mitigation-agricultural-lands.



Blade delivery at High Sheldon Windfarm, Sheldon, New York

OpenNY - The initiative of policies, programs, and tools that provide public access to digital data for collaboration and analysis. The website is data.ny.gov

Orders - New York State Public Service Commission (PSC) CES Order [Case 15-E-0302](#), Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard (CES), "Order Adopting a Clean Energy Standard," issued and effective August 1, 2016; Case 15-E-0302, "Order Modifying Tier 1 Renewable Procurements," issued and effective January 16, 2020; and Case 15-E-0302, "Order Adopting Modifications to the Clean Energy Standard," issued and effective October 15, 2020.

ORES - New York State Office of Renewable Energy Siting. The ORES website is ores.ny.gov and the Executive Law § 94-C implementing regulations can be found at ores.ny.gov/regulations.

Prime Farmland and Prime Farmland if Drained ("Prime Farmland") - Lands identified by the United States Department of Agriculture (USDA) as prime farmland and prime farmland if drained, as depicted on the Site Character Maps issued by NYSERDA with NYSERDA's RESRFP18-1 and RESRFP19-1 (2018 and 2019) Renewable Energy Standard solicitations. Prime farmland, as defined by the USDA, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses.

Renewable Energy Certificate (REC) or Tier 1 RECs - The electronic record of generation data created by NYGATS and representing all of the attributes, including all Environmental Attributes, of one MWh of electric generation from a Renewable Energy System delivered into the New York Control Area and registered with the NYGATS tracking system. The attributes represented in each Tier 1 REC include all environmental characteristics, claims, credits, benefits, emissions reductions, offsets, allowances, allocations, howsoever characterized, denominated, measured, or entitled, attributable to the generation of Actual Eligible Production by a Project, including but not limited to: (i) any direct emissions or any avoided emissions of pollutants to the air, soil, or water including but not limited to sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO), particulate matter, and other pollutants; (ii) any direct or

avoided emissions of carbon dioxide (CO₂), methane (CH₄), and other greenhouse gases (GHGs) that have been or may be determined by the United Nations Intergovernmental Panel on Climate Change to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere; (iii) all set-aside allowances and/or allocations from emissions trading programs made unnecessary for compliance in such program as a result of performance under NYSERDA's REC agreement, including but not limited to allocations available under 6 NYCRR §§ 204, 237 and 238; and (iv) all credits, certificates, registrations, recordations, or other memorializations of whatever type or sort, representing any of the above.

Renewable Energy Standard (RES) - a component of the Clean Energy Standard (CES). The Public Service Commission's (PSC) Order Adopting the Clean Energy Standard issued on August 1, 2016, along with additional orders issued under Case 15-E-0302, Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard (Orders), established the RES as the means of achieving a 50% renewable by 2030 goal. A component of the RES consists of a Tier 1 obligation on Load Serving Entities to procure Tier 1 Renewable Energy Credits (RECs) associated with new renewable energy resources. The Orders authorize NYSERDA, as central procurement administrator for New York State, to offer long-term contracts to generators for the purchase of Tier 1-eligible RECs, in the form of Tier 1 NYGATS certificates. Pursuant to the Orders, NYSERDA seeks to accomplish the RES objective by contracting with suppliers, through a series of competitive RFPs, for the RES Tier 1 RECs created by eligible generation resources. Subsequent Orders have established the New York's nation leading goal of generating 70% of New York's electricity from renewable sources by 2030, 100% zero-emission electricity by 2040, and 85% reduction in Greenhouse Gas emissions by 2050, consistent with the Climate Leadership and Community Benefit Act.

Renewable Energy System - As defined in the CLCPA, a system that generates electricity through use of the following technologies: solar thermal, photovoltaics, on land and offshore wind, hydroelectric, geothermal electric, geothermal ground source heat, tidal energy, wave energy, ocean thermal, and fuel cells, which do not utilize a fossil fuel resource in the process of generating electricity. *Supplement I shows a typical solar renewable project development timeline.*

SEQR - the New York State Environmental Quality Review Act, found at www.dec.ny.gov/permits/357.html.

Site Character – A Project Viability category developed in consultation with AGM in NYSERDA's [RESRFP18-1](#) and [RESRFP19-1](#) (2018 and 2019) RES solicitations used to evaluate bid proposals according to the proposer's level of willingness to site and construct a renewable energy system in locations that avoid encroachment on land with agricultural importance to New York State by committing to avoid overlap with important agricultural areas and/or committing to avoid development on parcels that at the time of the bid proposal held an agricultural assessment. Awarded projects claiming Site Character points were required to attest that:

- 1) the permanent generation, interconnection and, if applicable, energy storage footprint will avoid land identified by the USDA as Prime Farmland and Prime Farmland if drained ("Prime Farmland"), and/or
- 2) the permanent generation, interconnection and, if applicable, energy storage footprint will avoid parcels with an agricultural assessment at the time of the bid proposal submittal, and
- 3) proposers agreed to construct the facility in accordance with AGM Construction Standards.

NYSERDA provided proposers with an interactive, web-based Site Character map and downloadable Geographic Information System (GIS) files (SHP format) for each solicitation issued to identify Prime Farmland areas associated with a renewable energy system's project parcel(s).

Smart Solar Siting Scorecard (Scorecard) - Tool used to addresses multiple solar siting considerations and site management practices from the perspective of environmental, agricultural, and climate interests. The

Scorecard provides criteria for renewable energy developers to consider in siting future projects, and include within project design, operations and maintenance, and decommissioning plans to encourage a balanced approach between renewable energy siting and other New York State policies, goals and objectives.

New York State Climate Policies and Agricultural Considerations

In 2014, the State launched Reforming the Energy Vision (REV) strategy to spur clean energy innovation, increase private capital investments, and improve consumer choice and affordability. REV assembles a package of action items that are designed to build an integrated energy network capable of fortifying a central grid with clean, locally generated power.³ In 2015, the State adopted the New York State Energy Plan to serve as a comprehensive roadmap to build a clean, resilient, and affordable energy system for all New Yorkers.⁴ A significant portion of the plan coordinates every State agency and authority working with energy issues and serves as a roadmap to advance the REV agenda.

In 2019, New York's Climate Leadership and Community Protection Act (CLCPA) was signed into law. Most significantly, the CLCPA increased the State's 50 percent renewable energy goal to 70 percent by 2030 and converted this goal into a mandate. The accumulation of these strategic actions, more recent statutory mandates through the CLCPA, and accompanying climate change policies have intensified the need for and rapid development of renewable energy generating systems.

Together, the State Energy Plan, REV, and the CLCPA work to attain the following 2030 clean energy goals:

- 40% reduction in greenhouse gas emissions from 1990 levels;
- 70% of electricity will come from renewable energy resources; and
- 600 trillion British Thermal Unit increase in statewide energy efficiency.

On September 17, 2020, the Public Service Commission issued a Final Supplemental Generic Environmental Impact Statement (SGEIS) its review of anticipated environmental impacts of the expansion of the State's renewable energy goals pursuant to the CLCPA. This SGEIS determined that the CLCPA would result in direct benefits in the form of reduction in GHG emissions, additional economic development, workforce employment, the avoidance of adverse health outcomes, and improved transmission and distribution network relative to those described in the prior SEQRA analyses conducted for the REV, Clean Energy Fund, Clean Energy Standard, and for the procurements of offshore wind. The CLCPA Final SGEIS determined that the CLCPA has the potential to lead to additional secondary benefits described in these prior SEQRA analyses, including further development of new agricultural markets, coastal tourism, indirect



³ New York State Department of Public Service. *Reforming the Energy Vision*.

<https://www3.dps.ny.gov/w/pscweb.nsf/all/cc4f2efa3a23551585257dea007dcfe2#:~:text=Under%20its%20%E2%80%9CReforming%20the%20Energy,improving%20consumer%20choice%20and%20affordability.>

⁴ New York State Energy Planning Board. (2015). *The Energy to Lead: 2015 New York State Energy Plan*.

<https://energyplan.ny.gov/>

jobs associated with construction and operation, purchases of local products and services, and new or increased tax payments by employees and facilities.⁵

In addition, to support the installation of renewable energy systems including wind and solar photovoltaic systems, the State is also obligated through a broad cross section of laws to sustain valuable natural resources, valuable economies, and the associated land base. Regarding agricultural resources, the State has undertaken a collaborative effort to develop a framework of progressive siting controls that seek to avoid, minimize, and mitigate adverse impacts to the extent practicable.

⁵ Case 15-E-0302, Implementation of a Large-Scale Renewable Program and Clean Energy Standard, Final Supplemental Generic Environmental Impact Statement for the Climate Leadership and Community Protection Act (issued September 17, 2020)

New York State Energy Research and Development Authority (NYSERDA) Programs Overview

Renewable Energy Standard (Tier 1 Program)

The promotion of a vibrant agricultural economy is an important policy goal of New York State. NYSERDA recognizes the importance of collaboration between the agriculture and clean energy sectors as a critical part of the State's overall decarbonization strategy. As such, NYSERDA works in close coordination with AGM and other stakeholders to responsibly support the development of Renewable Energy Systems. Since the adoption of the Clean Energy Standard in 2016, the Tier 1 REC Program has implemented an increasing number of programmatic measures to incorporate the State's agricultural policies into its procurement efforts.

NYSERDA's Tier 1 Program, like many other NYSERDA programs, is guided by Orders issued by the Public Service Commission (PSC). The Orders are effectuated through different implementation measures such as programmatic policies and environmental research. Procurements issued by NYSERDA are governed by applicable State law and NYSERDA procurement guidelines.

The Orders authorize NYSERDA, as central procurement administrator for New York State, to offer long-term contracts to generators for the purchase of Tier 1 eligible RECs, in the form of Tier 1 NYGATS certificates.⁶ Pursuant to the Orders, NYSERDA seeks to accomplish the RES objective by contracting with renewable energy developers, through a series of competitive Requests for Proposals (RFPs), for only the Tier 1 eligible RECs created by eligible generation resources. For the sake of clarity, NYSERDA acquires the Tier 1 eligible RECs only, and does not have any claim to associated energy, capacity, or ancillary services associated with the Tier 1 eligible RECs. Under the Orders, NYSERDA is authorized to procure a target amount of renewable energy certificates (currently 4.5 million MWh per solicitation) to ensure that 70% of the State's 2030 load is served by eligible renewable energy systems.

Under the RES, each Load Serving Entity (LSE) is obligated to serve its retail customers by procuring new renewable resources, evidenced by the procurement of Tier 1 RECs from NYSERDA or other sources, or by making Alternative Compliance Payments (ACPs) in increasing quantities to satisfy the State's greenhouse gas emissions reduction goals. Through RES RFPs, NYSERDA will purchase Tier 1 RECs from the contracted renewable energy systems on behalf of the LSEs in New York State and will then sell the Tier 1 RECs to the LSEs for compliance with the LSEs' Tier 1 obligations. The LSEs pass the cost of compliance on to their customers, the ratepayers of New York.

NYSERDA's competitive Tier 1 solicitations evaluate and score proposals based on: (1) the Fixed REC Bid Price or Index REC Bid Price, weighted at 70% of the overall score, and (2) non-price factors, which have a combined weight equaling 30% of the overall score. The 30% non-price evaluation component is divided into two categories:

- 1) 20% project viability, operational flexibility, and peak coincidence; and
- 2) 10% incremental economic benefits to New York State.

As NYSERDA administers competitive procurements with a price component in accordance with State procurement guidelines, it is important to note that any costs the renewable energy system is expected to incur must be included in the bid proposal submitted for consideration. NYSERDA is not able to adjust the price component of a competitive award. The renewable energy system must deliver energy generation for end use in New York State and renewable energy systems will only receive payment from NYSERDA once the project fulfills all associated permitting and siting requirements, completes construction, and begins delivering electricity to the New York grid. These payments from NYSERDA for the purchase of

⁶ The CES/RES Orders can be accessed from the NYS Public Service Commission's website:

<http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=15-e-0302>.

Tier 1 RECs generated by the Renewable Energy Systems serve as a financial incentive for developers to contribute to accomplishing the goals of the CLCPA.

The following provides a summary of NYSERDA's progressive attention to protecting agricultural land in the Tier 1 Program RFPs, while at the same time advancing the State's ambitious climate targets under the Climate Act.

- In 2016, NYSERDA awarded its first solar Renewable Energy System under the Renewable Portfolio Standard, a precursor to the Renewable Energy Standard.
- In 2017, NYSERDA awarded twenty two solar projects and three wind projects under the Renewable Energy Standard. Renewable Energy Systems participating in this RFP were evaluated in accordance with the Orders and based on project viability, including permitting status, favoring projects with more developed site plans.
- In 2018, in consultation with AGM, NYSERDA introduced a Site Character category and associated evaluation criteria in the Renewable Energy Standard Solicitation, which favorably evaluated projects that avoided building on important agricultural lands defined as USDA Prime Farmland.
- In 2019, in consultation with AGM, NYSERDA required awarded projects claiming Site Character points or projects sited in Agricultural Districts to adhere to AGM's Guidelines for Wind or Solar Energy Projects - Construction Mitigation for Agricultural Lands (AGM Guidelines). These guidelines require that Renewable Energy System developers perform certain planning, construction, post-construction, restoration, and decommissioning activities to enable agricultural lands to return to agricultural use following the completion of construction or upon decommissioning. An independent third-party monitoring, via an environmental monitor that has a confident understanding of normal agriculture practices, oversee the incorporation of the guidelines in the field for Renewable Energy Systems in agricultural areas.
 - Including the AGM Guidelines in NYSERDA's RES Standard Form Agreement has served to minimize project site related agricultural impacts. Requiring these guidelines in applicable NYSERDA awarded projects has helped to ensure that Renewable Energy Systems are installed in a way that minimizes disruption to agricultural activities and practices that maintain the farmland's soil integrity. In addition, upon decommissioning of the Renewable Energy System, the renewable energy equipment will be disassembled and removed such that agricultural activities may resume on the land.
- In 2020, NYSERDA continued to signal to renewable developers the State's preference to avoid building Renewable Energy Systems on the New York's most valuable farmland. This new requirement replaced the Site Character category above utilizing Prime Farmland with a different qualification of Mineral Soil Groups (MSG) 1-4. In addition, NYSERDA introduced a required Agricultural Mitigation Payment for projects sited on 30 acres or more of MSG 1-4 in an agricultural district and continued to require that all Renewable Energy System solar awardees adhere to AGM's Guidelines for Solar Energy Projects - Construction Mitigation for Agricultural Lands.
 - Nearly forty years after the development of the New York State Agricultural Land Classification's System, NYSERDA, in collaboration with AGM and Cornell University, initiated the transposition of the entire catalog of Mineral Soil Group designations from tabular form into a geographic information system (GIS) layer. This data set was published in September 2020 on NYSERDA's website and is updated annually to coincide with the annual RES solicitation. This tool streamlines the ability for Renewable Energy System developers to identify where MSG 1-4 are located in the State, helping them to strategically avoid these important soils.
 - Of the 21 NYSERDA awards under the 2020 Tier 1 solicitation, the awarded solar projects are preliminary sited on approximately 11,000 acres of land, of which an estimated 4,300 acres may be sited on Mineral Soil Groups 1-4. The projects are subject to their applicable

permitting process, which will ultimately determine the as-built configuration of each project. The projects are required to pay Agricultural Mitigation Payments unless they modify their project plans to more extensively avoid MSG 1-4 or implement dual-use, multi-use, or co-utilization strategies.

- In 2021, NYSERDA introduced the Smart Solar Siting Scorecard combined with the Agricultural Mitigation Payment policy, which resulted in a significant and meaningful shift away from Renewable Energy Systems sited on MSG 1-4.
 - As a result, participating solar projects that also entered the NYISO queue in 2021 had an approximate 50% reduction in overlap with MSG 1-4, compared to the year prior.
 - Prior to 2021, on average, 40% of a solar projects' preliminary facility footprint had overlap with MSG 1-4. For projects that entered early-stage development in 2021, this metric had significantly dropped to 22% on average.

NY-Sun Program

The NY-Sun program is New York State's initiative to advance distributed generation solar while driving costs down and making solar energy more accessible to homes, businesses, and communities. The projects participating in the NY-Sun program are typically five MW alternating current or smaller, and do not fit the definition of a Major Renewable Energy Facility. Currently, installed distributed solar projects, combined with the projects that are under an advanced stage of development, bring the State to 95 percent of the current Climate Act goal to install six gigawatts (GW) of distributed solar by 2025. NYSERDA and DPS staff developed the Distributed Solar Roadmap (Roadmap) to propose a pathway to achieve 10 GW of distributed solar deployment by 2030.⁷ The Roadmap explores various options for setting incentive levels to achieve the expanded NY-Sun goal of an incremental four GW. The Roadmap was filed December 17, 2021. It was open for public comment through a State Administrative Procedure Act (SAPA) period which concluded on March 7, 2022. On April 19, 2022, the Public Service Commission approved the Roadmap, charting a path towards achieving an expanded goal of at least 10 gigawatts of distributed solar by 2030 and continues the NY-Sun program.

NY-Sun Commercial/Industrial (C/I) projects located in an agricultural district must comply with AGM's Solar Construction Guidelines. If the project utilizes over 30 acres of MSG 1-4, it is required to make Agricultural Mitigation Payment to the fund administered by NYSERDA. Since being implemented, these requirements have already demonstrated their effectiveness. In 2021, all 50 distributed solar projects subject to these requirements, totaling 1,037 acres of affected area, have committed to avoiding and minimizing impacts to important agricultural lands in consideration of the solar layout and complying with the Solar Construction Guidelines. For 48 of these projects, all unaffected portions of the farms hosting the solar projects will remain in agricultural production, a total of 3,385 acres. The Roadmap foresees the existing requirements being extended to distributed solar projects developed through the incremental four GW target. Guidance provided by the Agricultural Technical Working Group (A-TWG) and the New York State Farmland Protection Working Group will continue to inform agricultural preservation and mitigation requirements and practices going forward.

NY-Sun also requires C/I projects receive their local planning and zoning approvals prior to submission into the program in order to ensure that projects are in line with local regulations. NY-Sun offers added incentives for projects that are located on underutilized lands, such as landfills and brownfields, and for canopy systems in New York City where space is limited.

Build-Ready Program

⁷ The New York State Distributed Solar Roadmap is available here:

<https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7B4C42AAFF-0EB9-4890-AA0D-21C70B088F4B%7D>.

NYSERDA has created a [Build-Ready Program](#) to rapidly advance large-scale renewable energy projects on previously developed sites, including existing or abandoned commercial sites, brownfields, landfills, former industrial sites, and other abandoned or underutilized sites. By focusing development on such sites, NYSERDA is promoting achievement of the State's climate goals in accordance with State agricultural policy. The Build-Ready Program takes a comprehensive approach to avoiding and minimizing impacts to agricultural lands in its site review process. When requested, the Build-Ready Program can investigate opportunities to promote agrivoltaics – the co-location of renewable energy and agriculture such as crops, livestock, or pollinators. By taking these measures, Build-Ready is maintaining focus on its primary purpose: to foster and encourage siting and development of renewable energy on previously developed sites and existing or abandoned commercial and industrial sites.

Environmental Research Program

This program aims to increase the understanding and awareness of the environmental and public health impacts of energy choices and emerging energy options, and to provide a scientific foundation for creating effective and equitable energy-related environmental policies and resource management practices. In 2020, NYSERDA issued Program Opportunity Notice (PON) 4270 to support research to better understand



Photo provided courtesy of American Solar Grazing Association

commercial and utility-scale solar photovoltaic (PV) site design implications, mitigation options, and associated costs for addressing the effects PV may have on the environment and the community. Six projects were chosen for funding through this solicitation, two of which address the intersection between solar and agriculture and three of which address the intersection between solar and environmental resources. These projects are currently in the process of collecting data and are anticipated to be completed in 2024. A brief summary of four of these research projects is set forth below.

Agro-economic and Environmental Impacts of Co-location of Solar and Agriculture (Research Lead: American Solar Grazing Association): This project seeks to evaluate how to best co-locate solar and agriculture by collecting a range of different kinds of data from solar sites in the northeast that are currently using co-location. The project aims to provide a better understanding of how well PV systems can coexist with agricultural lands and identify ways in which the co-location of a PV system with agricultural lands can be maximized.

Land-use Optimization of Energy and Agricultural Productions for Low-impact PV Site Designs (Research Lead: Cornell University): This project seeks to analyze microclimate conditions at utility-scale solar energy sites and develop a framework that can be used to minimize land use conflicts between solar projects and agriculture production throughout New York State. The project aims to provide a better understanding of what the microclimate is around PV panels and how this may impact crop growth between and around PV panels.

Avian Use of PV Solar Energy Facilities in New York – Biodiversity, Community Composition, and Conservation Significance (Research Lead: DNV): This project seeks to assess avian use of PV solar energy facilities in New York State, specifically looking at biodiversity, community composition, and conservation significance. The project aims to provide a better understanding of how a PV system may impact the behavior of avian species and communities in and around a PV system and what landscape factors at varying spatial scales may influence avian biodiversity.

Utility-Scale Solar Effects on Wetland Hydrology, Winter Raptor, and Grassland Bird Threatened and Endangered (T&E) Species and Decommissioning Best Management Practices and Mitigation Opportunities (Research Lead: Tetra Tech, Inc.): This project seeks to address three separate concerns that come up frequently during the Article 10/94-c permitting processes. The project will conduct a groundwater hydrology study and a grassland bird survey pre-construction and during/post-construction at multiple PV sites, as well as a decommissioning literature review of utility-scale solar projects to help address information gaps and mitigation opportunities. The project aims to provide a better understanding of these three different environmental concerns that are frequently identified during the environmental permitting process for a PV system.

NYSERDA is currently developing an agrivoltaics incubator request for proposals, planned to be released in the second quarter of 2022. The RFP will seek proposals from organizations, research institutions, and individuals with an interest in advancing ideas and opportunities that support a broader understanding of the costs, benefits, opportunities, and market potential for agrivoltaics in New York State.

In addition to the efforts mentioned above, NYSERDA has developed an Agricultural Technical Working Group (A-TWG) to bring together State agencies, non-governmental agricultural organizations, local governments, and solar developers to identify actions that each of these stakeholder groups is taking to address agricultural concerns alongside renewable energy development. The A-TWG provides support and guidance to the Farmland Protection Working Group, which includes leadership from key New York State agencies with support from municipal organizations and farmland protection boards to make recommendations regarding responsible siting of solar on the State's agricultural land.



Solar project in Gloversville, NY provided courtesy of Nexamp

Clean Energy Siting for Local Governments (technical assistance)

NYSERDA offers several resources to help local governments understand how to manage responsible clean energy development in their communities. These resources include step-by-step instructions and tools to guide the implementation of clean energy, including permitting processes, property taxes, siting, zoning, and more, in forms of technology specific guidebooks. The [New York State Solar Guidebook](#) is one such guidebook, which includes the Model Solar Energy Local Law. The Model Solar Energy Local Law serves as a resource to inform local officials on the processes of installing, operating, maintaining, and decommissioning solar systems in their respective jurisdictions. To complement these resources, NYSERDA works directly with local governments across New York State to help them meet their clean energy goals. Free technical assistance is available to local governments on a variety of topics related to clean energy development. Additionally, NYSERDA offers workshops on a variety of clean energy topics for local officials to earn continuing education credits.

New York State Office of Renewable Energy Siting (ORES) 94-c Agricultural Resources Overview

Executive Law §94-c consolidates the environmental review and permitting of major renewable energy facilities in New York State to a single forum in which ORES undertakes a coordinated and timely review

of proposed major renewable energy facilities to meet the State's renewable energy goals, while ensuring the protection of the environment and consideration of all pertinent social, economic, and environmental factors, with input from local governments and host communities.

Since April 3, 2020, all large-scale renewable energy projects 25 megawatts or larger are required to obtain a siting permit from ORES for new construction or expansion. Projects already in the current Public Service Law Article 10 siting process through the State's Siting Board may remain in Article 10 or opt to transfer into the new 94-c siting process. New projects sized between 20 and 25 megawatts may also elect to apply for a siting permit.

The overarching framework of Executive Law § 94-c and accompanying regulations at 19 NYCRR part 900 (Part 900) is to avoid, minimize, or mitigate, to the maximum extent practicable, any potential significant adverse environmental impacts of proposed major renewable energy facilities. In accordance with Executive Law § 94-c(5)(e), ORES may only issue a final siting permit if it makes a finding that the proposed project, together with any applicable uniform and site-specific standards and conditions, would comply with applicable laws and regulations. In making this determination, ORES may elect not to apply, in whole or in part, any local law or ordinance which would otherwise be applicable if it makes a finding that, as applied to the proposed major renewable energy facility, the local law is unreasonably burdensome in view of the Climate Leadership and Community Protection Act targets and the environmental benefits of the proposed major renewable energy facility.

ORES recognizes the importance of conserving highly productive agricultural lands in New York State and has developed a comprehensive set of regulations, in consultation with AGM, to address potential significant adverse impacts to agricultural resources. ORES conducts a thorough assessment of potential significant adverse impacts to agricultural resources on a case-by-case basis and makes a siting permit determination based on a specific siting permit application and the hearing record developed specifically on that application. Under the following provisions of Part 900, applicants must demonstrate that potential significant adverse impacts to relevant agricultural resources would be avoided and minimized to the maximum extent practicable and must offer mitigation measures to offset any unavoidable impacts.

1. Pre-application Procedures (19 NYCRR 900-1.3):

At the earliest stages of a project's development, applicants are required to consult with local municipalities and host community members where a proposed major renewable energy facility is located. An application will not be complete without proof of consultation with the host municipalities and communities. The pre-application process also requires a thorough screening of natural and cultural/historical resources in consultation with ORES and other involved New York State agencies. During these pre-application consultations, ORES, in consultation with AGM, works with applicants to avoid siting major renewable energy facilities on lands used for active farming activities containing the New York State Agricultural Land Classification mineral soil groups (MSG) 1-4 so as to avoid significant adverse environmental impacts to highly productive agricultural lands to the maximum extent practicable.

2. Exhibit 15 (19 NYCRR 900-2.16):

Section 900-2.16 requires applicants to provide ORES with the information necessary to evaluate potential significant adverse environmental impacts to agricultural resources on a case-by-case basis and to make decisions that balance the need to efficiently advance a major renewable energy facility while protecting farmland and farmers. The regulations establish a clear standard to use in evaluating the potential impacts to agricultural resources that may result from the construction and operation of major renewable energy facilities.

Agricultural Plan: If a facility site is proposed to be located on active agricultural lands (i.e., land in active agricultural production defined as active three (3) of the last five (5) years) containing MSG 1-4, § 900-2.16 requires applicants to develop an Agricultural Plan that is consistent with the AGM guidelines for solar and wind facilities to the maximum extent practicable. Applicants must address in the Agricultural Plan how they plan to avoid, minimize, and mitigate agricultural impacts to those active agricultural lands.

Agricultural Co-utilization Plan: Applicants are strongly encouraged to explore options for co-location of major renewable energy facilities and farming activities to allow for continued agricultural production within the facility site. In addition to using the facility site for traditional row crops and hay where feasible, such activities may include sheep grazing, the cultivation of pollinator-friendly plantings, and the installation of apiaries. The regulations specifically contemplate the development of co-utilization plans to detail proposed practices that would be implemented throughout the useful life of the facility. The proposed activities should be consistent with and support the existing on-farm agricultural production whenever possible. The regulations are intended to encourage innovation and flexibility, rather than being prescriptive, and to guide applicants in the process of requesting and obtaining a permit for a solar or wind facility.

Decommissioning and Site Restoration Plan: To ensure New York State farmlands are protected over time, developers are required to restore the land to its original status as productive farmland at the end of a project's useful life. Section 900-2.24(a) requires the preparation of a Decommissioning and Site Restoration Plan consistent with AGM guidelines. Section 900-6.6 further requires permittees to provide financial security in the form of a letter of credit or other approved financial assurance for decommissioning and site restoration activities, in accordance with an approved Decommissioning and Site Restoration Plan, which must remain active until a facility is fully decommissioned.

3. Executive Law § 94-c Siting Permit:

Pursuant to Executive Law § 94-c and its implementing regulations, a siting permit is developed based on an extensive record compiled during a public permit process. A siting permit may only be issued if ORES makes a finding that the proposed project, together with any applicable provisions of the uniform standards and conditions (USCs) (19 NYCRR Subpart 900-6), necessary site-specific conditions, and applicable compliance filings (19 NYCRR Subpart 900-10):

- 1) complies with Executive Law § 94-c and applicable provisions of ORES's regulations at 19 NYCRR part 900;
- 2) complies with substantive provisions of applicable State laws and regulations;
- 3) complies with substantive provisions of applicable local laws and ordinances, except those provisions ORES has elected not to apply based on a finding that they are unreasonably burdensome in view of the CLCPA targets and the environmental benefits of the facility;
- 4) avoids, minimizes, or mitigates to the maximum extent practicable potential significant adverse environmental impacts of the facility; and
- 5) achieves a net conservation benefit with respect to any impacted threatened or endangered species.

In making the required findings, ORES is directed to consider New York's CLCPA targets and the environmental benefits of the proposed major renewable energy facility.

With respect to potential significant adverse environmental impacts to relevant agricultural resources, the uniform standards and conditions set forth in § 900-6.4(s) will be imposed upon each facility to ensure consistency with AGM Guidelines for Solar Energy Projects – Construction Mitigation for Agricultural Lands and AGM Guidelines for Agricultural Mitigation for Wind Power Projects. The USCs also require the hiring of an independent third-party agricultural monitor to oversee compliance with agricultural conditions and requirements.

ORES retains authority to issue site-specific conditions to address impacts unique to a particular facility in compliance with Executive Law § 94-c(3)(d). In the development of such site-specific permit conditions, ORES must consider the CLPCA targets and the environmental benefits of renewable energy projects.

In making its final determination, ORES must balance all interests, including local interests, in the siting of major renewable energy facilities, and must consider, among other matters, public health and safety, local laws, public comments and all pertinent social, economic and environmental factors of a proposed facility.

New York State Public Service Commission (PSC) Article VII and Article 10 Agricultural Resources Overview

The Public Service Commission (PSC or Commission) and Department of Public Service (DPS) have controls in place within the Article VII and Article 10 review processes to avoid, minimize, and mitigate impact on agricultural lands. Article VII of the New York State Public Service Law (PSL) sets forth a review process for the consideration of any application to construct and operate a major electric transmission facility or fuel gas transmission facility. Article VII requires a full review of the need for and environmental impact of the siting, design, construction, and operation of major transmission facilities. Specifically, the PSL requires an applicant to apply for a Certificate of Environmental Compatibility and Public Need (Certificate), and meet the Article VII requirements before constructing any such facility.⁸ All major electric generating facilities larger than 25 megawatts (MW) which are not subject to review by the ORES are sited according to New York State's Article 10 law. Article 10 provides for the siting review of new and repowered or modified major electric generating facilities of 25 MW or greater in New York State by the Board on Electric Generation Siting and the Environment (Siting Board) in a unified proceeding instead of requiring a developer or owner of such a facility to apply for numerous State and local permits.⁹

DPS recognizes the importance of collaboration between the agriculture and clean energy sectors as a critical part of the State's overall decarbonization strategy. DPS works in collaboration with NYSERDA, ORES, AGM, and other agencies in the development of programs and policies to advance renewable energy development in a way that minimizes impacts to agricultural resources in New York State.

1. Article VII – Siting of Major Utility Transmission Facilities

Article VII of the PSL and its implementing regulations, contained in 16 NYCRR Parts 85-88, require a finding that any proposed facility avoids or minimizes to the extent practicable any significant adverse environmental impact; represents the minimum adverse environmental impact; avoids or minimizes to the extent practicable any significant adverse impact on active farming operations; represents a minimum adverse impact on active farming operations; conforms to applicable State and local laws and regulations; and will serve the public interest, convenience, and necessity. In rendering a decision either granting or denying an application under Article VII, the Commission is required to:

- determine that the facility represents the minimum adverse environmental impact and “other pertinent considerations including . . . the effect on agricultural lands. . . .”¹⁰
- determine, that the proposed facility avoids or minimizes to the extent practicable any significant adverse impact on active farming operations that produce crops and livestock and livestock products;¹¹
- determine the facility represents a minimum adverse impact on active farming operations that produce crops and livestock and livestock products. The Commission may consider the state

⁸ NYS Department of Public Service. “Article VII Major Electric and Gas Transmission Facilities.” Accessed at <https://www3.dps.ny.gov/W/PSCWeb.nsf/All/A021E67E05B99EAD85257687006F393B?OpenDocument>.

⁹ NYS Department of Public Service. “Article 10 Law.” Accessed at <https://www3.dps.ny.gov/W/PSCWeb.nsf/W/PSCWeb.nsf/All/D12E078BF7A746FF85257A70004EF402?OpenDocument>

¹⁰ PSL §126(1)(c)

¹¹ PSL §126(1)(d)

of available technology and the nature of economics of various alternatives, as well as the ownership and easement rights of the impacted property, in making these findings;¹² and

- find that the facility conforms to applicable State and local laws and regulations.¹³ However, the Commission may refuse to apply any local ordinance, law, resolution or other action or regulation or any local standard or requirement that the Commission finds is unreasonably restrictive in view of the existing technology, or of factors of cost or economics, or of the needs of consumers whether located inside or outside of such municipality.

Party Status: In addition to the findings required by Article VII, PSL §124(1)(e) grants AGM the statutory right to be a party to certification proceedings. By allowing AGM to be a party, AGM has the right to engage in discovery, present expert testimony, participate in evidentiary hearings, and participate in settlement negotiations. Where there are potential agricultural impacts, AGM does typically join the proceeding as a party.

Additional Conditions: While there are no standard conditions encoded in statute or regulation for facilities certified under Article VII, Commission precedent has developed typical conditions that are ordered for any certified facility. These typical conditions include requirements for notifying agricultural producers of upcoming construction; requiring an agricultural inspector or an environmental monitor with the qualifications necessary to also serve as an agricultural inspector during construction activities in agricultural areas; requiring adherence with the AGM guidelines entitled *Electric Transmission Right-of-Way Projects*; and requirements designed to limit impacts to agricultural operations.

2. Article 10 – Siting of Major Electric Generating Facilities

Article 10 of the PSL and its implementing regulations, contained in 16 NYCRR Part 1000-1002, require a finding by the New York State Board on Electric Generation Siting and the Environment (Siting Board) that:

- construction or operation of a major electric generating facility is a beneficial addition to or substitution for the electric generation capacity;
- the facility will serve the public interest;
- the adverse environmental effects of the construction and operation of the facility will be minimized or avoided to the maximum extent practicable;
- if the facility results in or contributes to a significant and adverse disproportionate environmental impact, the applicant will avoid, offset, or minimize the impacts caused by the facility upon the local community for the duration that the certificate is issued to the maximum extent practicable using verifiable measures; and
- that the facility is designed to operate in compliance with applicable State and local laws and regulations, except that the New York State Board on Electric Generation Siting and the Environment (Siting Board) may elect not to apply any local ordinance, law, resolution, or other action or any regulation unless the Siting Board finds that, as applied to the proposed facility, such is unreasonably burdensome in view of the existing technology or the needs of or costs to ratepayers whether located inside or outside of such municipality.¹⁴

In making the above findings, the Siting Board is required to consider the environmental impacts, the impact on community character, and other considerations deemed pertinent by the Siting Board.¹⁵

¹² Id.

¹³ PSL §126(1)(g)

¹⁴ PSL §168(3)

¹⁵ PSL §168(4)

Party Status: As with Article VII proceedings, PSL §166(1)(e) grants AGM the statutory right to be a party to Article 10 proceedings. With party status, as explained above, AGM has the right to engage in discovery, present expert testimony, participate in evidentiary hearings, and participate in settlement negotiations.

Application Requirements: The Article 10 implementing regulations reflect the statutory considerations the Siting Board is required to make with respect to agricultural impacts. Exhibit 4 of the Article 10 application must include maps showing existing land uses in the applicable study area, zoning districts, and agricultural districts, among other land use information.¹⁶ The regulations also require that Exhibit 22 of the Article 10 application include “[a]n analysis of the temporary and permanent impacts of the construction and operation of the facility and the interconnections on agricultural resources, including the acres of agricultural land temporarily impacted, the number of acres of agricultural land that will be permanently converted to nonagricultural use, and mitigation measures to minimize the impact to agricultural resources.”¹⁷

Additional Conditions: Similar to Article VII proceedings, there are no standard conditions encoded in statute or regulation. As Article 10 has developed, typical conditions have been developed through Siting Board precedent. With respect to agricultural considerations, this includes conditions requiring adherence with the AGM guidelines entitled *Guidelines for Agricultural Mitigation for Wind Power Projects* or *Guidelines for Solar Energy Projects – Construction Mitigation on Agricultural Lands* as well as filings regarding a project’s compliance with the applicable guidelines; requiring remediation of agricultural lands; monitoring of agricultural areas either through a dedicated agricultural monitor or an environmental monitor qualified to carry out agricultural monitoring; and requirements for consultation with agricultural producers through the various stages of construction. In addition to these typical conditions, the project may be modified either through settlement negotiations or as the Siting Board deems appropriate in light of agricultural concerns. This could include layout changes such as location shifts or elimination of components to avoid impacts to important agricultural lands.

Supplement III contains information on Article 10 renewable energy facilities and status.

¹⁶ 16 NYCRR §1001.4

¹⁷ 16 NYCRR §1001.22(q)

PRELIMINARY STRATEGY SUMMARY

Through a collaborative process, the Farmland Protection Working Group (FPWG) has been researching various aspects of the public's need for reliable renewable energy, food security, and a robust agricultural industry in New York State. To that end, the FPWG has identified several prioritized preliminary strategies for further exploration and refinement going forward. These ideas are wide-ranging, representing the scope of FPWG deliberations to date as the Working Group works to produce a final set of recommendations supported by all involved stakeholders.

Potential Studies, Applied Research, and Demonstrations on Utility-Scale Projects

- 1) Facilitate further research related to dual-use or co-utilization of agricultural production and utility-scale renewable energy projects (20 megawatts alternating current and larger).
 - A. Document case studies of agricultural activities within solar energy facilities (e.g., dual-use/co-utilization) from other states and countries.
 - B. Foster the development of standards and best management practices for agricultural dual-use/co-utilization (forage, row crops, pasture, etc.).
 - C. Direct funding to applied research located on/adjacent to utility-scale and distribution level demonstration projects incorporating dual-use/co-utilization. Select/encourage a pilot project or projects to minimize agricultural impacts.
- 2) Initiate a study, building on the information contained within the September 2020 CLCPA Final SGEIS and related environmental reviews, to determine the potential benefits and/or burdens of renewable energy development related to New York's agricultural industry. Assess the impact of solar project proliferation and the associated economic and productivity impact on the agricultural sector. The study will include an inclusive assessment of all economic pressures, non-solar land-use conversions, and other factors impacting New York's agricultural economy and land use. The study will be used to inform State and regional policy, balancing agricultural State priorities with the statutory requirements of the CLCPA.
- 3) Encourage environmental, habitat, and ecosystem services studies of operating solar projects, with a focus on grassland bird and threatened and endangered species benefits and impacts.
 - A. Study habitat conservation benefits in a project's operating period/expected useful life within existing solar arrays (inside the fence). Aggregate existing studies (or requirements for studies to be conducted) and post-construction monitoring efforts for meta-analysis.
 - B. Encourage pilot projects to evaluate the efficacy of establishing habitat and siting features (e.g., wildlife migration corridors, nesting boxes) for threatened and endangered species within and in proximity to solar arrays that will improve the habitat.



Potential Financial Incentives/Disincentives

- 1) Incentivize developers and landowners to continue to utilize land for farming within the project site, co-existing with solar projects.
 - A. Establish agriculturally friendly siting practices for agricultural operators and solar developers to encourage dual-use/co-utilization (forage, row crops, pasture, etc.).
 - B. Allow continued agricultural assessment on acres utilized with the goal of minimizing impacts to agricultural production through dual-use, multi-use, and co-utilization, to encourage farming inside the project fence and on adjacent lands.
- 2) Explore options to disburse Agricultural Mitigation Payments to assist local efforts.
 - A. Share payments with impacted counties to advance farmland protection plan action items.
 - B. Secure perpetual conservation easements on farms targeting prime agricultural lands in disproportionately impacted communities.
 - C. Distribute payments to the Soil and Water Conservation Districts associated with a project's host county or counties and prioritize funding for soil conservation projects on farms to protect lands of agricultural importance to New York State.

Potential Local/State Planning Implementation

- 1) Create a State level working lands management plan.
 - A. Develop a Statewide farmland protection plan.
- 2) Update local farmland protection plans to reflect siting of renewable energy facilities.
 - A. Include a statutory amendment of New York State AML 25AAA §325 to allow a county plan to be updated more frequently than every 10 years, and §324-a to allow municipal plans to be similarly updated to address emerging issues, such as the siting of renewable energy facilities within local farmland protection plans.



Route 29 Solar, Mayfield, NY

- 3) Advance locally identified county agricultural and farmland protection plan action items.

- A. Explore ways to provide State assistance to county agricultural and farmland protection boards to implement actions identified in County and Municipal Agricultural and Farmland Protection Plans (AFPPs), to further siting of renewable energy projects.

Potential State and Local Government Tools

- 1) Update NYSERDA's model solar energy local law to enhance treatment of agricultural issues.
 - A. Update the model solar energy local law for municipal governments, as necessary, to enhance treatment of agricultural issues.
 - B. Continue to administer countywide workshops on the model solar energy local law to educate local officials on available resources and provide best practice guidance.
 - C. Provide direct technical assistance to municipalities as they adopt local laws to encourage responsible development while maintaining active and productive agricultural lands.
- 2) Create a plan to pre-screen sites for presence of natural resources.
 - A. Utilize Smart Solar Siting Scorecard for solicitations involving NYSERDA's Renewable Energy Certificate (REC) eligible projects.
 - B. Add the latest version (2022) of the Mineral Soil Group (MSG) 1-4 tabular data and geographic information system layers to OpenNY to promote dissemination.



Cohocton Wind Farm, Cohocton, NY

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- Tammy Mitchell, Director of the Office of Electric, Gas, and Water – Department of Public Service
- Michael Cusack, General Counsel - New York State Office of Renewable Energy Siting

Supplements

I. Typical Solar Renewable Project Development Timeline

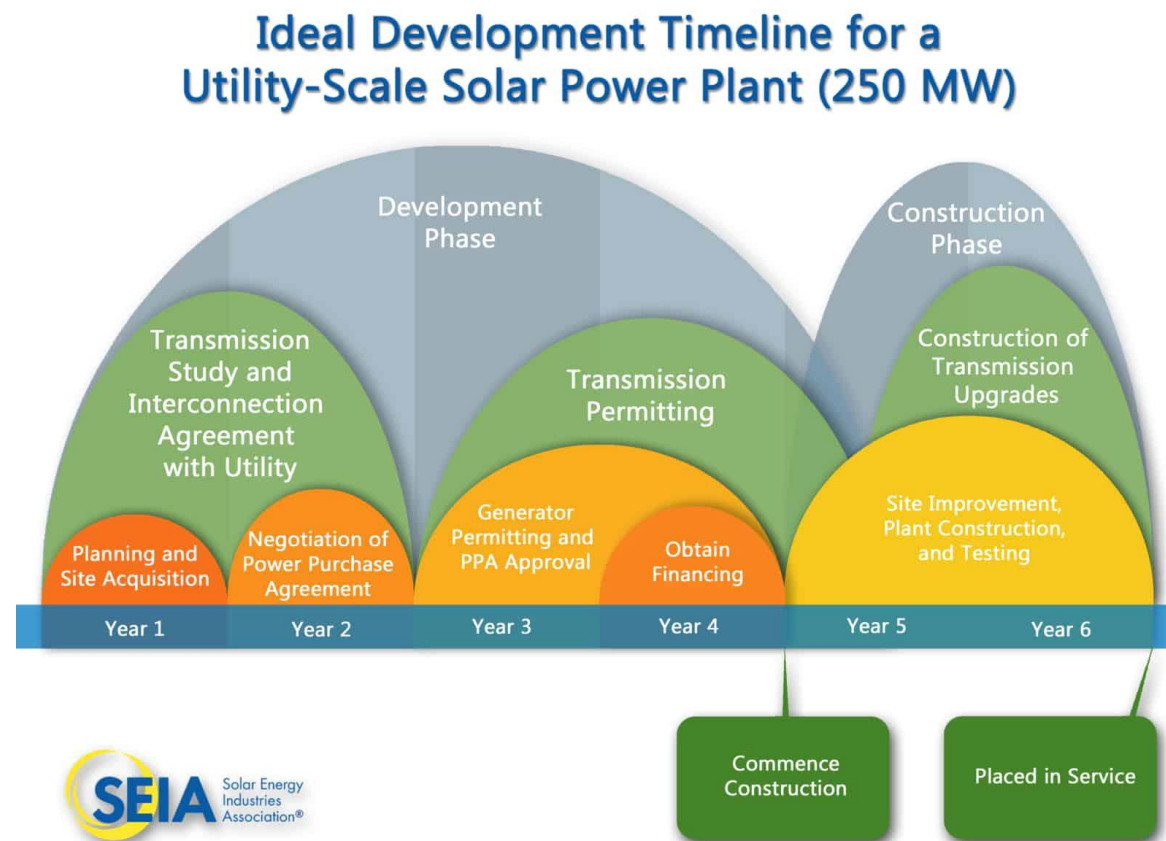


Figure provided courtesy of Solar Energy Industries Association

**Across the United States, renewable energy goals are implemented in a variety of ways. For renewable energy systems, this is typically through a Power Purchase Agreement (PPA), where a developer agrees to sell energy and renewable energy certificates or credits to a buyer. For purposes of this diagram, in New York State, NYSERDA's competitively sourced Tier 1 REC agreement are a financing tool similar to PPAs in other jurisdictions; however, PPAs typically include energy and/or capacity offtake.*

II. NYS ORES Renewable Energy Facilities and Status (03/31/2022)

Project Category	DPS DMM Case #	ORES DMM Matter #	Submission of §94-c Permit Application	Project Name	Project Website	Town(s)	County(ies)	Size [MW]	Technology
Article 10 Transfer	17-F-0655	21-00024	January 8, 2021	Riverhead Solar 2	www.aes.com/riverhead-solar-2-project	Riverhead	Suffolk	36	Solar
Article 10 Transfer	18-F-0440	21-00025	January 12, 2021	Morris Ridge Solar	www.edf-re.com/project/morris-ridge-solar-project	Mount Morris	Livingston	177	Solar + Storage
Article 10 Transfer	16-F-0546	21-00026	January 13, 2021	Heritage Wind	www.heritagewindpower.com	Barre	Orleans	184.8	Wind
New Section 94-c Permit Application	n/a	21-01108	June 3, 2021	Cider Solar	www.watkinsglensolarenergycenter.com	Elba, Oakfield	Genesee	500	Solar
Article 10 Transfer	17-F-0595	21-01069	June 7, 2021	Watkins Glen Solar Energy Center	http://cidersolarfarm.com	Dix	Schuyler	50	Solar
Article 10 Transfer	19-F-0512	21-00982	June 11, 2021	Greens Corner Solar	www.boralex.com/projects/greens-corners	Watertown, Hounsfield	Jefferson	120	Solar
Article 10 Transfer	20-F-0037	21-00748	July 20, 2021	Hemlock Ridge Solar (formerly Orleans Solar)	www.communityenergyinc.com/hemlockridgesolar	Barre, Shelby	Orleans	200	Solar
Article 10 Transfer	19-F-0588	21-00976	July 22, 2021	Homer Solar	www.edf-re.com/project/homer-solar-energy-center	Homer, Cortlandville, Solon	Cortland	90	Solar
Article 10 Transfer	19-F-0560	21-00750	August 10, 2021	South Ripley Solar Project	www.southripleysolar.com	Ripley	Chautauqua	270	Solar + Storage
Article 10 Transfer	19-F-0201	21-00962	September 13, 2021	Tracy Solar Energy Center	www.edf-re.com/project/tracy-solar	Orleans, Clayton	Jefferson	119	Solar + Storage
Article 10 Transfer	19-F-0781	21-00752	October 18, 2021	Riverside Solar	www.aes.com/riverside-solar-project	Lyme, Brownville	Jefferson	100	Solar
Article 10 Transfer	18-F-0038	21-02104	December 1, 2021	Bear Ridge Solar	https://ccrenew.com/projects/bearridge	Cambria, Pendleton	Niagara	100	Solar
Article 10 Transfer	18-F-0633	21-02480	December 23, 2021	Horseshoe Solar Energy	https://horseshoesolar.invenenergy.com	Caledonia	Livingston	180	Solar
Article 10 Transfer	20-F-0023	21-00917	February 18, 2022	Brookside Solar	www.aes.com/brookside-solar-project	Burke, Chateaugay	Franklin	100	Solar
Article 10 Transfer	20-F-0048	21-02553	March 8, 2022	Shepard's Run Solar	www.shepherdsrunsolar.com	Copake	Columbia	60	Solar
Article 10 Transfer	18-F-0498	22-00024	March 15, 2022	Moraine Solar Energy Center	www.edf-re.com/project/moraine-solar	Burns, Dansville	Allegany, Steuben	94	Solar

III. Article 10 Renewable Energy Facilities and Status (04/07/2022)

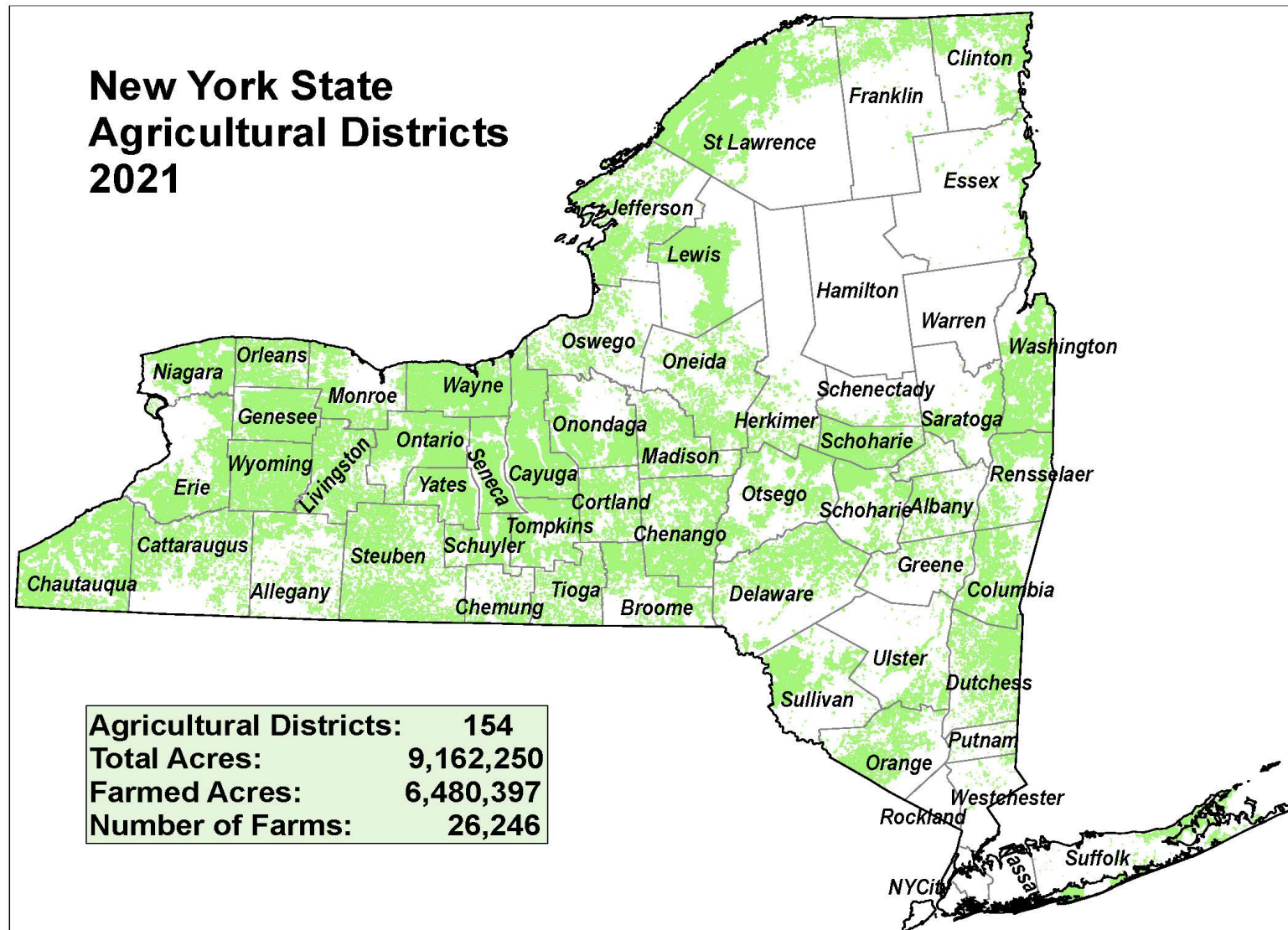
DPS DMM Case #	Article 10 Status	Project Name	Project Developer	Town(s)	County(ies)	Size [MW]	Technology
12-F-0365	Public Involvement Plan	Dry Lots Wind	Northeast Wind Projects, LLC	Town of Litchfield	Herkimer	33	Wind
14-F-0485	Public Scoping Statement	Lighthouse Wind	Lighthouse Wind LLC (Apex Clean Energy Holdings LLC)	Somerset & Yates	Niagara . and Orleans	201	Wind
14-F-0490	Certificate Granted 1/17/2018	Cassadaga Wind Farm	Cassadaga Wind LLC (Innogy Renewables US LLC)	Cherry Creek, Charlotte, Arkwright & Stockton	Chautauqua	126	Wind
15-F-0122	Certificate Granted 9/12/2019	Baron Winds Project	Baron Winds LLC (Innogy Renewables US LLC)	Cohocton, Dansville, Fremont & Wayland	Steuben	242	Wind
16-F-0062	Certificate Granted 8/20/2019	Eight Point Wind	Eight Point Wind LLC (NetEra Energy Resources LLC)	Greenwood & West Union;	Steuben	101.8	Wind
16-F-0205	Certificate Granted 3/13/2020	Canisteo Wind Energy Center	Canisteo Wind Energy LLC (Invenergy LLC)	Cameron, Canisteo, Greenwood, Jasper, Troupsburg, West Union	Steuben	290.7	Wind
16-F-0267	Certificate Granted 06/30/2020	Deer River Wind Farm	Atlantic Wind LLC (Avangrid Renewables LLC)	Pinckney, Harrisburg, Montague, Rodman	Lewis & Jefferson	100	Wind
16-F-0328	Certificate Granted 11/12/2019	Number Three Wind Farm	Number Three Wind LLC (Invenergy LLC)	Harrisburg, Lowville, & Denmark	Lewis	105.8	Wind
16-F-0559	Certificate Granted 12/16/2019	Bluestone Wind Project	Bluestone Wind LLC (Calpine Corporation)	Sanford & Windsor	Broome	125	Wind
17-F-0182	Certificate Granted 11/19/2020	Mohawk Solar Project	Mohawk Solar LLC (Avangrid Renewables LLC)	Canajoharie and Minden	Montgomery	90	Solar
17-F-0282	Certificate Granted 6/3/2020	Alle-Catt Wind	Alle-Catt Wind Energy LLC (Invenergy LLC)	Arcade; Centerville,& Rushford; Farmersville & Freedom	Wyoming, Allegany & Cattaraugus	340	Wind
17-F-0599	Certificate Granted 1/7/2021	East Point Energy Center	East Point Energy Center LLC (NextEra Energy Resources LLC)	Sharon	Schoharie	50	Solar
17-F-0597	Certificate Granted 03/11/2021	High River Energy Center	High River Energy Center LLC (NextEra Energy Resources LLC)	Florida	Montgomery	90	Solar
17-F-0598	Awaiting ALJ Decision	North Side Energy Center	North Side Energy Center LLC (NextEra Energy Resources LLC)	Brasher, Massena & Norfolk	St. Lawrence	180	Solar

<https://www3.dps.ny.gov/W/PSCWeb.nsf/All/763B187DD5A792DE8525847400667D6B?OpenDocument>

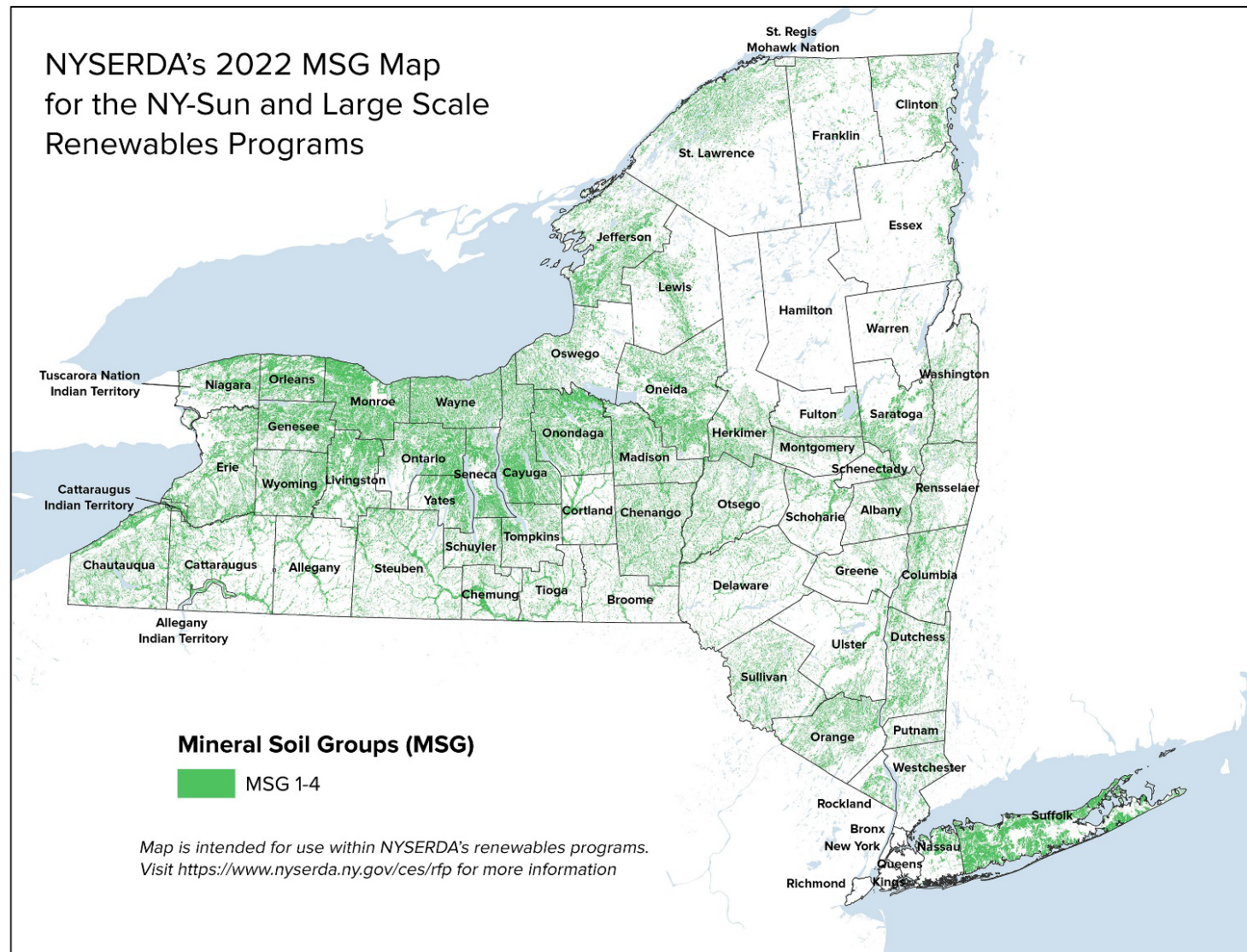
DPS DMM Case #	Article 10 Status	Project Name	Project Developer	Town(s)	County(ies)	Size [MW]	Technology
17-F-0602	Public Involvement Plan	Franklin Solar	Franklin Solar LLC (Geronimo Energy LLC)	Malone, V/o Malone	Franklin	150	Solar
17-F-0617	Certificate Granted 01/07/2021	Hecate Energy Albany	Hecate Energy Albany 1 LLC and Hecate Energy Albany 2 LLC (Hecate Energy LLC)	Coeymans	Albany	40	Solar
18-F-0087	Certificate Granted 08/04/2021	Flint Mine Solar Facility	Flint Mine Solar LLC (Hudson Energy Development LLC and Amber Infrastructure Group Limited)	Athens & Coxsackie	Greene	100	Solar
18-F-0262	Certificate Granted 03/11/2021	High Bridge Wind	High Bridge Wind LLC (Calpine Corporation)	Guilford	Chenango	100	Wind
19-F-0299	Certificate Granted 04/06/2022	Excelsior Energy Center Solar Project	Excelsior Energy Center LLC (NextEra Energy Resources LLC)	Byron	Genesee	280	Solar
19-F-0366	Certificate Granted 11/30/2021	Trelina Solar Energy Center	Trelina Solar Energy Center LLC (NextEra Energy Resources LLC)	Waterloo	Seneca	80	Solar
19-F-0471	Public Involvement Plan	Bunker Solar	EDF Renewables Development Inc	Belmont	Franklin	125	Solar + Storage
19-F-0591	Public Involvement Plan	Big Tree Solar	ConnectGen LLC	Bennington & Sheldon	Wyoming	175	Solar
19-F-0603	Public Involvement Plan	Rosalen Solar Energy Center	EDF Renewables	Rose & Galen	Wayne	350	Solar
19-F-0641	Public Involvement Plan	Ridge View Solar	EDF Renewables	Hartland & Newfane	Niagara	350	Solar
20-F-0043	Settlement	Garnet Energy Center	Garnet Energy Center, LLC (NextEra Energy Resources)	Conquest	Cayuga	200	Solar
20-F-0133	Public Involvement Plan	Declaration Energy Center	North Park Energy, LLC	Romulus & Varick,	Seneca	450	Solar

<https://www3.dps.ny.gov/W/PSCWeb.nsf/All/763B187DD5A792DE8525847400667D6B?OpenDocument>

IV. New York State Agricultural Districts Map



V. NYSERDA's 2022 MSG 1-4 Map



VI. Mitigation Payment Calculator

NYSERDA has adopted an approach to address concerns relating to solar development and the protection of agricultural lands in Agricultural Districts. Projects receiving NY-Sun incentive awards or Tier 1 Renewable Energy Standard awards from NYSERDA in Agricultural Districts may be responsible for making an agricultural mitigation payment to a designated fund based on the extent to which the solar project footprint, defined as the Facility Area, overlaps with land classified as MSG 1-4.

<https://www.nyserdera.ny.gov/-/media/Files/Programs/NYSun/agricultural-mitigation-estimate-calculator.ashx>

NY-Sun Agricultural Mitigation Estimate Calculator										NYS T&F 2022 MSG 1-4 Value per Acre					
										\$1,194	\$1,063	\$943	\$812		
		Facility Area (# of Acres) on Mineral Soil Group:						Payment Estimate (\$) by Mineral Soil Group:							
Project (NY-Sun Application #)	MWdc	Total Parcel(s) Area (Acres)	MSG 1	MSG 2	MSG 3	MSG 4	MSG 5:10/ Other	Total Facility Area (Acres)	MSG1	MSG2	MSG3	MSG4	Sum of all Acres (\$)	Facility Area Occupation Ratio (Facility Area/ Total Parcel Area)	Estimated Agricultural Mitigation Payment (\$)
Example Project 1	7.50	90	5	16	12	1	2	36	\$5,970	\$17,008	\$11,316	\$812	\$35,106	40%	\$14,042
Example Project 2	7.50	90	-	10	15	-	11	36	\$0	\$10,630	\$14,145	\$0	\$24,775	40%	\$0
								-	\$0	\$0	\$0	\$0	\$0	Enter values in Columns C through H	TBD
								-	\$0	\$0	\$0	\$0	\$0	Enter values in Columns C through H	TBD
								-	\$0	\$0	\$0	\$0	\$0	Enter values in Columns C through H	TBD
								-	\$0	\$0	\$0	\$0	\$0	Enter values in Columns C through H	TBD

Proposer Instructions

1. Populate Columns A and B with project information for reference.
2. Populate Column C with the total area of controlled parcels and, if applicable, parcels intended to be controlled for use to construct the Bid Facility site.
3. Populate Columns D through H based on the expected amount of overlap of Facility Area on MSG 1-4 and other soil types/land cover types.
4. Columns I through O will automatically calculate.
5. Column P will display the estimated Agricultural Mitigation Payment based on the estimated inputs for the Facility Area overlap with MSG 1-4

Proposers should note that an Agricultural Mitigation Payment will only be required if the Facility Area overlap with MSG 1-4 is equal to or greater than 30 acres.

Key Definitions

The **Facility Area** is defined as all land area occupied during the commercial operation of the generation facility, the associated interconnection equipment and, if applicable, energy storage equipment as verified by NYSERDA through the Operational Certification process. Generally, this will include all areas within the facility's perimeter security fence(s) and the applicable facility related improvements outside of fenced areas. The Facility Area shall include the area "inside the fence" of the project including all fencing inclosing the mechanical equipment such as the solar arrays, inverters, location of any combiner boxes, fuses, switches, meters, distribution boards, monitoring systems such as Balance of Systems components, interconnection equipment, and stormwater controls. The Facility Area shall additionally include improvements of the project "outside of the fence" including access roads, parking areas, stormwater controls and other permanent facilities, or structures installed at the Facility Area, except vegetative landscape screenings or appropriately buried utilities such as electrical conductors or conduit(s).

MSG 1-4 are defined by the [NYS Department of Agriculture and Markets](#), for each soil type in each county identified by the United State Department of Agriculture, and are used to classify the state's agricultural lands based upon soil productivity and capability. Each county in New York State has a listing of all soil types present in the county that is associated with a specific mineral soil group, MSG 1 through 10. The interactive map of MSG 1-4 applicable to all RESRFP21-1 Bid Facilities is available here: [NYS Dept. of Agriculture and Markets Soil Groups](#)

The **Mitigation Value per Acre** is defined as the dollar value for MSG 1, 2, 3 and 4 according to the most current document entitled "[Agricultural Assessment Values Per Acre](#)" as prepared annually by the NYS Department of Taxation and Finance (NYSTF).

The **Mitigation Fund Payment** is the calculated amount shown above and described in RESRFP20-1, which acts as the estimated benchmark that the Proposer would expect to pay based on the proposed site configuration (Facility Area), knowledge of on-site conditions and before any other action to decrease this payment amount. Payment amounts may be adjusted through consultations with the New York State Department of Agriculture and Markets (AGM) regarding co-agricultural opportunities, and based on the final site configuration (reduced or expanded facility occupied acreage).

The Mitigation Fund Payment must be estimated and included by the Proposer as part of the Bid Proposal, and the estimate will be confirmed by NYSERDA prior to the offer of an award. The actual Mitigation Fund Payment, due at Commercial Operation Date (COD), will be determined by NYSERDA based on the actual site footprint and any actual Facility Area overlap with MSG 1-4, and reduced by the value of NYSERDA approved co-agricultural measures, if any. The Mitigation Payment shall not exceed the estimated Mitigation Fund Payment value at the time of an award, unless the proposed project layout is substantively revised or expanded to increase to the Facility Area's footprint on MSG 1-4.

The Agricultural Assessment Values per Acre document is available from the NYSTF: <https://www.tax.ny.gov/pdf/publications/orpts/current-year-ag-values.pdf>