

Model Solar Energy Local Law

For local governments to utilize when drafting local laws
and regulations for solar development.



NYSERDA

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

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Overview

The Solar Energy Local Law serves as a resource to help educate local officials about the processes of installing, operating, maintaining, and decommissioning solar energy systems in their respective jurisdictions. Local officials can use the Model Law to evaluate their existing local laws, regulations, and policies and adopt new rules and regulations that facilitate solar development while meeting local needs. Before adopting the Model Law provisions, local officials should consider the role local governments play in solar energy development, how they can plan for solar energy, zoning techniques that facilitate solar development, and other helpful resources.

1. The Role of Local Governments in Solar Energy Development

Local governments have broad authority to adopt land use regulations that encourage the most appropriate use of the land. New York State has empowered its local governments to adopt land use regulations and to review and approve development proposals through various local boards, including local legislatures, planning boards, zoning boards of appeal, and architectural review boards. Local governments adopt zoning and other land use regulations to implement their planning goals and objectives and guide land development.

Zoning is the most commonly and extensively used technique for regulating land uses. Zoning provisions, established in accordance with a comprehensive plan, separate a community into zoning districts and specify the land uses and building dimensions that are permitted in each zone. Other local land use regulations govern the subdivision of land and the planning and design of individual sites. For example, local regulations can determine which uses require site plan review and approval. During site plan review, the designated local board evaluates how a particular parcel is developed. For communities without zoning, site plan regulations are the primary technique for regulating development. In addition, land use regulations may include provisions that protect natural and cultural resources or help facilitate solar energy development. Many of the factors considered under land use regulations go hand in hand with a community's review under the State Environmental Quality Review Act (SEQRA).

In some circumstances, local land use laws regulating solar energy systems may interact with other State laws. In April 2020, the New York State legislature enacted the Accelerated Renewable Energy Growth and Community Benefit Act (the Act), which created the Department of State's Office of Renewable Energy Siting (ORES). ORES implements the State's consolidated and timely review and approval process for major renewable energy facilities. Under the Act, new large-scale renewable energy projects producing 25 MW or more must obtain a permit from ORES, while new renewable energy projects producing between 20 and 25 MW may opt in to the new process. Prior to issuing a final siting permit for a major renewable energy facility, ORES must find that the proposed project complies with any applicable local laws and regulations, except those determined by ORES to be unreasonably burdensome.

Applications for major renewable energy facilities must contain a statement clearly identifying any applicable local comprehensive plan, an indication of whether the proposed facility is consistent with that plan, as well as a list of all substantive local requirements (e.g. laws, resolutions, regulations, standards, and other requirements) applicable to the proposed facility. Permittees must construct and operate permitted facilities in accordance with all applicable and substantive local requirements which are not determined to be unreasonably burdensome. In accordance with the office's regulations, ORES "may elect to not 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 facility, it is unreasonably burdensome in view of the CLCPA targets and the environmental benefits of the proposed facility" (NYCRR Chapter XVIII, Title 19 §900-2.25(c)). Applicants may request that ORES not apply a local law or ordinance by including in their application a statement of justification showing the degree of burden caused by a specific requirement.

Whether permitted locally (under local land use regulations and SEQRA) or by ORES, applicants for a solar energy system shall be required to obtain building, electrical, and/or plumbing permit approvals and successful inspections as necessary to ensure full compliance with the New York State Uniform Fire Prevention and Building Code.

Commentary: The Article 10 Review Process

Since 2011, energy generating facilities larger than 25 MW (including solar and other renewables) have been permitted in accordance with Public Service Law Article 10 (Article 10), which authorizes a comprehensive application process overseen by the NYS Board on Electric Generation Siting and the Environment (Siting Board).

Although ORES now serves as the sole permitting authority for new major renewable generating facilities, Article 10 remains an important mechanism. Existing projects in initial stages of Article 10 review will continue with this permitting process unless they opt to transfer their application to ORES.

Much like ORES, the Article 10 regulations ensure that the proposed project will adhere to applicable local laws, including regulations related to environmental factors, public health and safety, and the interconnection to and use of water, electric, sewer, telecommunication, fuel, and steam lines in public rights of way. Proposed projects must comply with these laws unless ORES finds a regulation unreasonably burdensome due to existing technology or ratepayer costs or needs.

To learn more about Article 10, visit <https://www.nyserda.ny.gov/All-Programs/Programs/Clean-Energy-Siting/Siting-for-Large-Scale-Renewables>.

1.1 Comprehensive Planning for Solar Energy

Municipalities should consider amending their local plans before adopting solar energy regulations because local land use regulations must conform to the locality's comprehensive plan. New York State Village Law § 7-704, General City Law § 20(25), and Town Law § 263 require land use regulations to be “in accordance with a comprehensive plan” or “in accordance with a well-considered plan.” When a local regulation is challenged, courts will examine a municipality's land use policies, actions, and existing regulations for evidence of the locality's comprehensive plan. Thus, proactive planning for solar energy development provides significant legal protections for regulations that implement the plan.

Local comprehensive plans also influence ORES permits for large-scale renewable energy projects. Under ORES regulations, applications for major renewable energy facilities must identify applicable local comprehensive plans and indicate whether the proposed facility is consistent with those plans.

Comprehensive plans inventory a community's needs and assets, develop a shared vision for the future, and build consensus and support for actions that will implement the plan. These plans can create the policy foundation for solar energy regulations through planning goals, objectives, strategies, and implementation measures that facilitate solar energy development. To learn more about comprehensive planning for solar energy, and to access additional comprehensive planning resources, consult NYSERDA's Clean Energy and Your Comprehensive Plan guide at: www.nyserda.ny.gov/ComprehensivePlan.

Commentary: Evidence of Comprehensive Planning

In the event that a municipality's land use regulations become subject to legal challenge or review, the courts will seek to identify evidence of a comprehensive plan to which the regulations under review must conform. The courts' thorough review will potentially consider all relevant municipal policies and actions, including but not limited to the following:

- Municipal zoning laws and their legislative findings.
- Previously adopted plans and policies (including topic-specific plans such as agricultural protection or conservation plans)
- Previous land use decisions.
- The local legislature's minutes.
- Existing conditions (or other) studies.
- Environmental reviews and findings.

1.2 Solar Energy Land Use Regulations

Municipalities can implement local solar plans and policies by adopting solar energy regulations that meet local needs. To develop a solar energy regulation, municipalities should consider completing the following steps.

1.2.1 Ensure the Regulation Conforms to Existing Plans and Policies

As discussed above, solar energy regulations should conform to existing policies and plans by implementing their goals, objectives, and strategies. For example, communities that have farmland protection plans, sustainability plans or climate action plans should ensure that their solar energy regulations align with those plans.

Commentary: Land Use Moratoria – What They Are, and How to Use Them Effectively

A moratorium on development is a local law or ordinance that suspends (for a reasonable time) property owners' rights to obtain development approvals, intended to grant a community time to consider, draft, and adopt land use plans or rules to respond to new or changing circumstances not adequately dealt with under its current laws.

A moratorium may be general or specific. A general moratorium prevents the consideration and approval of all development in the community. A specific moratorium prevents the consideration and approval of development in a particular geographic area or of a certain type; for example, New York municipalities have previously implemented moratoria focused solely on the construction of docks, telephone antennas, wind turbines, and other types of development.

Communities should be cautious and intentional when considering the adoption of a moratorium. Moratoria involve the suspension of landowners' right to use their property, are often litigated, and can be invalidated by the courts if the community is unable to show the necessity for the moratorium and its reasonableness under the circumstances.

Key Considerations for Municipalities:

- A moratorium must be reasonable to avoid the risk of being challenged and voided by the courts.
 - Reasonableness is best established by local legislative findings documenting the moratorium's necessity in light of health/safety risks or a new land use problem that the municipalities' existing regulations were not designed to handle.
 - The more specific and legitimate the municipality's plan and timetable for the moratorium are, the more likely the moratorium will be found to be reasonable.
 - Generally, courts are deferential to a local legislature's findings. However, courts will void a moratorium when there is proof of special facts showing that the municipality acted unreasonably, arbitrarily, or in bad faith in adopting the moratorium.
- A moratorium must be adopted in conformance with all procedures required of any zoning or land use action, including notice, hearing, the formalities of adoption, and filing.
- A moratorium should include specific procedures for requesting a variance from its terms, just as land use regulations have to provide for variances.
- A moratorium does not apply to approved projects where the developer has completed construction or has completed substantial construction in reliance on a development approval or permit.

Resources:

- NYS Department of State: Land Use Moratoria
<https://dos.ny.gov/system/files/documents/2021/09/land-use-moratoria.pdf>

1.2.2 Collect Relevant Information About Solar Energy Development

When conducting studies and gathering data for solar energy development, local governments should assess existing conditions for relevant infrastructure, including gathering information about local electric distribution from hosting capacity maps.

Commentary: Hosting Capacity Maps

The “hosting capacity” of the local electric distribution system may affect solar energy development in a community. Hosting capacity refers to an estimate of the location and quantity of new distributed energy resources (DER), including solar energy systems, which can be interconnected without adversely impacting power quality or requiring costly infrastructure upgrades.

Analyzing local hosting capacity can help communities identify and account for areas with higher or lower potential for solar energy development. The Joint Utilities of New York publish and regularly update hosting capacity [maps](#) for public use.

Knowing that development is more likely to occur in areas with available hosting capacity, NYSERDA recommends municipalities consider the following:

- Hosting capacity maps should be analyzed alongside local zoning maps and other resources to help promote solar energy in areas with higher development potential.
- Utility hosting capacity maps do not include high-voltage transmission lines and therefore may not be predictive of all future solar energy development.
- Hosting capacity is subject to change based on factors like grid upgrades and should not be the sole factor shaping a municipality’s planning around clean energy.

For assistance viewing or analyzing a hosting capacity map, please contact NYSERDA’s Clean Energy Siting Team at cleanenergyhelp@nyserda.ny.gov.

Resources:

- NYS Department of Public Service: Hosting Capacity Maps and Useful Links
<https://www3.dps.ny.gov/W/PSCWeb.nsf/All/6143542BD0775DEC85257FF10056479C>

1.2.3 Involve Stakeholders in Process

Involving stakeholders in the development and implementation of solar energy regulations is crucial to build community support for these mandatory regulations that will affect real change. Municipalities should identify key stakeholders and ensure they are involved in regulation development. To learn more about facilitating meaningful community participation, review the Public Engagement and Education section of NYSERDA’s Clean Energy and Your Comprehensive Plan (www.nyserda.ny.gov/ComprehensivePlan).

1.2.4 Choose the Right Regulatory Tool

Local governments have broad authority to adopt solar energy regulations using a variety of zoning techniques that meet a community's unique land-use needs and goals. The regulatory tools described below offer different mechanisms and incentives to help municipalities create appropriate solar energy regulations given local circumstances. These include:

(a) Conventional Zoning

The Municipal Home Rule Law, NYS Village Law § 7-702, General City Law § 20(25), and Town Law § 262 empower local governments to adopt zoning regulations that divide a municipality's land into districts with authorized land uses and building restrictions that limit structure height, lot area coverage, and other building dimensions within each district. Users can consult a municipality's zoning map to identify the district within which any parcel of land is located. Conventional zoning defines each type of permitted solar energy system based on selected criteria, which may include system type, location, physical size, and nameplate capacity. The zoning law then allows each defined solar energy system as a principal, accessory, secondary or special use within certain zoning districts.

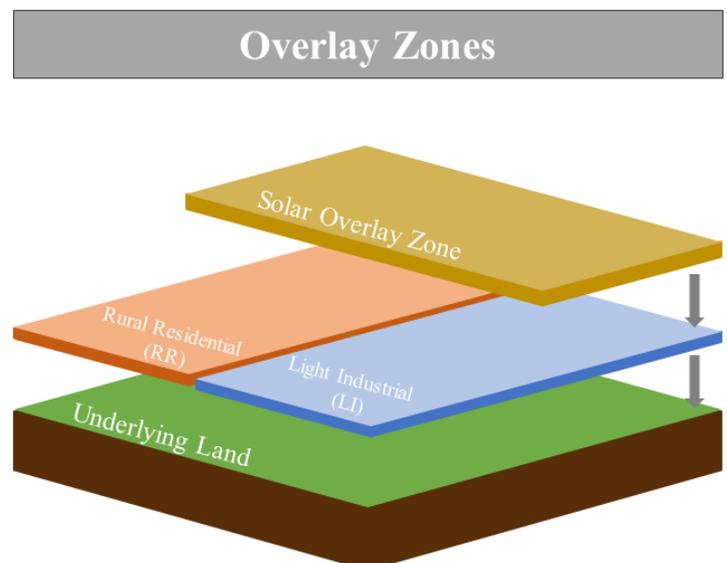
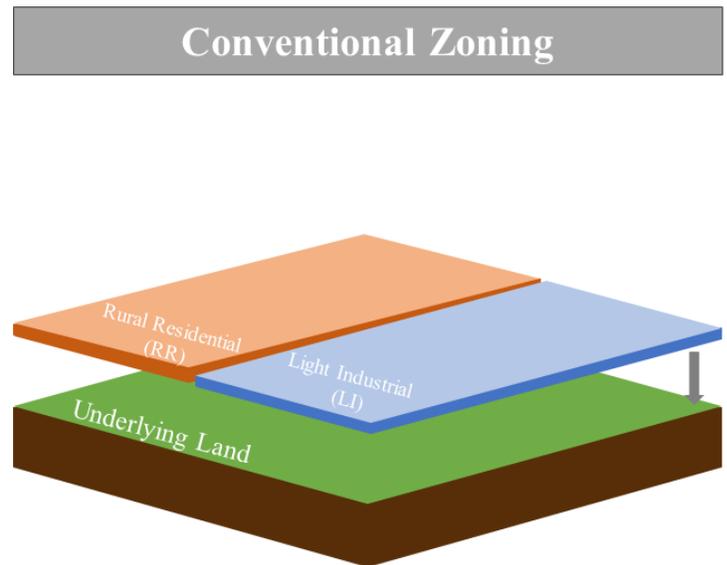
- Principal uses are permitted as-of-right in certain districts
- Accessory uses are subordinate, incidental to, and customarily found in connection with a principal use, and are usually permitted as-of-right but may require additional review in certain districts.
- Conditional or special uses are principal in nature; permit approvals are conditioned upon compliance with specific requirements to mitigate a system's adverse impacts.

As discussed below, to further limit adverse impacts, site plan regulations may include provisions that require applicants to submit a site plan showing the proposed system's layout, arrangement, and design to help the municipality evaluate a proposed system's impacts. The Model Solar Energy Local Law uses a conventional zoning approach to regulate solar energy systems.

A conventional zoning approach may be more familiar and more easily implemented by municipal board members and staff in charge of adopting and enforcing local solar energy regulations. This approach allows municipalities to regulate solar in a manner comparable to other types of development, rather than requiring them to proactively map out and limit solar development to specific areas.

(b) Overlay Zones

Under their delegated power to enact zoning regulations, municipalities may adopt overlay zoning. Overlay zoning contains provisions that apply to an overlay district, which is superimposed over the existing zoning map to designate precise areas where development may be permissible. Overlay provisions apply in addition to or in lieu of underlying zoning requirements, and often provide incentives and waivers to encourage certain types and styles of development. By creating a solar overlay zone, local governments are tasked with defining specific areas where solar energy systems would be appropriate within the community. Because the underlying zoning district standards still apply to projects in an overlay zone, this approach may help minimize resistance from property owners who have concerns about continuity with existing zoning regulations.



An overlay zoning approach may be preferred if the municipality wishes to define specific areas in which to allow solar development that are not directly aligned with current zoning boundaries. Implementing a solar overlay approach may require additional time and resources, as it requires the municipality to evaluate the entire community based on factors of concern (such as proximity to electric infrastructure, topography, and soil qualities, etc.), identify where to locate systems, and draw the boundaries of the overlay zone on the existing zoning map.

Solar Overlay Zone Example: Town of Evans, NY

The Town of Evans utilizes an overlay zone approach as outlined in its 2019 “Solar Energy Systems Law of the Town of Evans” (Solar Law). Under this approach, Type 2 solar energy systems (defined as a small-scale system not exceeding 110% of on-site electricity consumption) are permitted in all zoning districts, while Type 1 systems (large-scale systems which are not sized in accordance with on-site residential or commercial consumption) are permitted only within the Town’s Utility Scale Solar Overlay District.

Projects proposed within the Overlay District – which spans portions of the Town’s agricultural lands, open space, and existing industrial zones – are required to comply with applicable regulations for Type 1 systems as established in the Solar Law. These requirements include minimum lot size, maximum, yard, minimum setbacks, orientation, maximum height, maximum energy generation, and other requirements.

Reference materials:

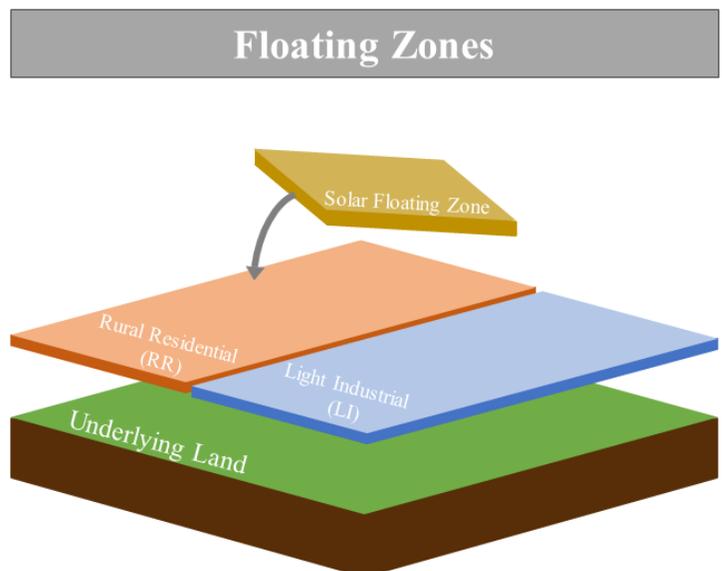
- Town of Evans’ Solar Energy Systems Law: https://locallaws.dos.ny.gov/sites/default/files/drop_laws_here/ECMMDIS_appid_DOS20190726060025/Content/09021343802755b7.pdf
- Town of Evans’ Utility Scale Solar Overlay District: <https://www.townofevans.org/docs/maps-and-drawings/2216-solar-overlay-map-attachment-a-effective-february-3-2020/file.html>
- Town of Evans’ Zoning Map: <https://townofevans.org/docs/maps-and-drawings.html>.

(c) Floating Zones

Under its zoning authority, a local government may amend its zoning code to include a “floating zone” which allows for solar energy systems, but does not require an amendment to the zoning map until a project or area is identified for the application of this zone.

Though sometimes referred to as an overlay zone (the terms have been used interchangeably), a floating zone is distinct in that it “floats” in the zoning code until the municipality amends its zoning map to affix the new district to an area that is appropriate for solar development. The municipality can apply the zone upon a developer’s petition, the local legislature’s initiative, or a municipal board’s recommendation. When a developer or landowner applies for the floating zoning to be affixed to their property, they must demonstrate compliance with the floating zone’s conditions and performance objectives, which may include criteria to mitigate project impacts. If approved, the floating zone is applied to the developer’s property on the zoning map, and the applicant may proceed to any subsequent permitting or approval processes.

Like the overlay zone approach, floating zones offer some flexibility in terms of identifying appropriate or preferred areas for solar development. Developers can apply for a floating zone to be applied to any parcel they can show is appropriate for solar development, which may open more areas in the community to solar development. Because of this, floating zones eliminate the municipality’s preliminary burden of determining the most environmentally appropriate areas for solar development. The municipality must only identify appropriate solar project site criteria and standards for inclusion in the floating zone. However, this approach does introduce some uncertainty for developers who must invest in and submit the preliminary application prior to knowing that the floating zone will be applied to a proposed site, and it creates a more elaborate, two-step review process for applicants and local governments.



Solar Overlay/Floating Zone Example: Town of Glenville, NY

In early 2021, the Town of Glenville amended its zoning law to include a “Solar Farm Overlay District.” In practice, the law incorporates aspects of both an overlay and floating zone approach, whereby:

- Designated solar districts do not exist on the Town’s zoning map unless approved on a project-by-project basis;
- Applicants proposing a solar farm must seek a zoning change for the project parcel(s); if approved by the Town Board, a new solar district is created and added to the zoning map;
- The applicant may then submit a site plan application for review by the Town’s Planning and Zoning Commission.

To be approved for a zoning change, an applicant’s preliminary-stage site plan must demonstrate compatibility with surrounding uses, alignment with the Town’s Comprehensive Plan, avoidance of adverse visual impacts, and other criteria. Once approved for a zoning change, the applicant’s submission to the Planning and Zoning Commission will be reviewed for compliance with solar zone and underlying-district-specific standards (setbacks, lot size, etc.) and other requirements established in the zoning law.

Reference materials:

- Town of Glenville’s law establishing a “Solar Farm Overlay District”: https://locallaws.dos.ny.gov/sites/default/files/drop_laws_here/ECMMDIS_appid_DOS20210223060238/Content/09021343802e0f10.pdf.

(d) Site Plans

NYS Village Law § 7-725-a, General City Law § 27-a, and Town Law § 274-a authorize municipalities to adopt site plan regulations that govern the development of individual parcels of land through site-specific design and infrastructure standards. Site plan regulations supplement the zoning code’s use and dimensional standards and authorize local boards to review a proposed project’s site design and features to determine potential impacts to the site and neighboring parcels.

Solar energy system regulations can require applicants to submit a site plan showing the proposed system’s layout, arrangement, and design so the municipality can evaluate system impacts. The Model Solar Energy Local Law requires site plans only for projects of certain types and sizes, while ensuring that projects which are unlikely to have significant land use impacts (e.g. rooftop or building-integrated solar) are not subject to onerous permitting requirements.

Commentary: Site Planning for Solar Development Versus Conventional Development

Ground-mounted solar arrays differ from conventional development projects in the following ways:

1. Large-scale solar arrays are a passive principal use with minimal regular activity and disturbance.
2. The amount of land occupied by a solar array may significantly vary project-to-project, from less than an acre to hundreds of acres.
3. The accelerated construction timeframe for solar developments can disturb soils and vegetation and contribute to stormwater runoff.
4. Solar arrays are installed above ground on metal racking systems, often utilizing simple steel piles or ground screws. The bulk of the system is not fixed to the ground and has a minimal footprint, unlike traditional development which has a large, fixed footprint.
5. Solar arrays require vehicular paths, and must account for the movement of vehicles across the natural ground surface.
6. Solar arrays have on-site utility lines and electrical interconnection equipment.
7. Solar arrays require fencing at a large scale.
8. The lifespan of solar panels requires the consideration of system decommissioning and site restoration after a 25- to 30-year term.

(e) Incentive Zoning

Incentive zoning allows developers to build at greater development densities than permitted under existing zoning in exchange for providing one or more community benefits, such as off-site infrastructure, open space or parks, agrivoltaics, or some other physical, social, or cultural amenity. Incentive zoning is authorized by and must comply with the requirements of Village Law § 7-703, General City Law § 81-d, and Town Law § 261-b, whereby incentives may allow adjustments to zoning requirements for lot coverage, setbacks, or other considerations. The resulting increase in development density may help provide community benefits (e.g. electric bill savings through a community solar subscription), and can mitigate land use impacts by reducing a project's physical footprint.

If it is not feasible for the development to provide a direct community benefit, the incentive zoning system may allow developers to make cash payments to a municipal trust fund to provide specified benefits elsewhere. It is important to note that local zoning regulations are not to include a mandate for payment as a prerequisite for a zoning approval; frequently, however, solar project developers may be willing to provide payments to the municipality as part of a local benefit package, sometimes referred to as a Host Community Agreement.

1.2.5 Streamline the Project Review Process

Local land use review and approval systems typically involve several local agencies that undertake complicated, uncoordinated, single-issue reviews of a proposed project. It is not uncommon for applicants to have difficulty navigating this complex process, which can result in costly delays. Municipalities can streamline the land use approval system through techniques that simplify, consolidate, clarify, and automate the process. Localities can simplify application requirements, coordinate board reviews, engage the public early in the review process through pre-application meetings, and allow administrative approvals when appropriate. Local staff can improve efficiencies by coordinating with the local utility and state agency staff who will issue any permits required for local approvals. Municipalities can also clarify the process for applicants by creating clear guidelines, developing a road map for them, revising application materials, ensuring transparency throughout the process, and proactively educating the public about the process. Online permitting helps automate the process, and preapplication meetings help get all parties on the same page early in the process, avoiding conflict and confusion later.

1.2.6 Complete a Generic Environmental Impact Statement on the Land use Regulation

Solar energy system regulations must undergo SEQRA review, as do any subsequent solar energy projects approved under those regulations (projects approved under a state-level siting process are subject to a comprehensive alternative review process). To reduce the need for in-depth SEQRA reviews for future projects, the municipality can prepare a Generic Environmental Impact Statement (GEIS) for the solar energy regulation. Authorized by 6 N.Y.C.R.R. § 617.10, a GEIS identifies environmental conditions and develops standards and review thresholds to ensure that future development is compatible with or protective of those conditions. When a final GEIS has been filed, no further SEQRA compliance is required if a subsequent proposed project will conform with the GEIS's established conditions and thresholds. However, a supplement to the final GEIS must be prepared if the final GEIS did not adequately address the subsequent proposed project and that project may have one or more significant adverse environmental impacts. Additionally, the Part 617 regulations authorize a municipality to charge a portion of its GEIS preparation costs to developers of later projects as they submit permit applications, a highly cost-effective approach.

1.3 Additional Resources

Planning & Land Use Regulation Resources

NYS Department of State Division of Local Government Services

https://dos.ny.gov/publications?f%5B0%5D=filter_term%3A1716

Local Laws Search

NYS Department of State Division of Local Government Services

<https://locallaws.dos.ny.gov>

Training and Assistance

NYS Department of State Division of Local Government Services

<https://dos.ny.gov/training-assistance>

Planning and Zoning Training Series

New York Planning Federation

<https://nypf.org/services>

Property Topics and Concepts

American Planning Association Planning and Law Division

<https://www.planning.org/divisions/planningandlaw/propertytopics.htm#Floating>

Are You Solar Ready?

American Planning Association

<https://www.planning.org/planning/2020/mar/are-you-solar-ready>

Planning Implementation Tools: Overlay Zoning

University of Wisconsin-Stevens Point, Center for Land Use Education

https://www.uwsp.edu/cnr-ap/clue/documents/planimplementation/overlay_zoning.pdf

2. Model Solar Energy Local Law

The Model Solar Energy Local Law can be found on the following page and at www.nysesda.ny.gov/SolarGuidebook, under the Model Solar Energy Local Law tab. A workable version of this document can also be found online at the above website. It is not recommended for municipalities to use the Model Solar Energy Local Law ‘as is’; rather, it was created as a resource for advising local governments when adopting solar energy local laws.

- a. This Model Solar Energy Local Law (Model Law) is not intended for adoption exactly as it is written. It is intended to be advisory only, and users should not rely upon it as legal advice. A municipality is not required to adopt this Model Law. Municipal officials are urged to seek legal advice from their attorneys before enacting a solar energy law. Municipalities must carefully consider how the Model Law language may be modified to suit local conditions, their comprehensive plan, and existing zoning and land use regulations and zoning provisions.
- b. The sole siting authority for solar projects under 20 megawatts (MW) resides at the local level rather than the state level; siting authority for solar projects between 20-25 MW may be subject to decision by the applicant. One purpose of this Model Law is to inform and facilitate local efforts to expand solar energy generation in a sustainable way. This Model Law regulates the installation, operation, maintenance, and decommissioning of solar energy systems. The Model Law is intended to be an “all-inclusive” ordinance that facilitates a thorough review of all aspects of solar energy systems under typical zoning and land use regulations, including the State Environmental Quality Review Act. As they review this Model Law, municipalities are encouraged to examine their local laws and regulations and the types, size and number of solar energy projects proposed. Local governments should adopt a local law that regulates solar energy development in a way that makes the most sense for each municipality, removing, modifying, or adding provisions as appropriate.
- c. In some cases, there may be multiple approaches to regulating solar energy systems based on certain criteria or local preferences. Throughout the Model Law text, “[OR]” has been selectively placed to indicate considerations for which a municipality should evaluate multiple approaches, before selecting a preferred strategy. Municipalities should choose the options which work best for their communities, in consultation with appropriate municipal officials and staff. The content provided in brackets and highlighted may be customizable or optional; depending on local circumstances, a municipality may want to include this content or choose to adopt a different standard.
- d. Other zoning code definitions, uses, and regulations should be reviewed to identify any conflict with the provisions of this Model Law. For example, municipalities should amend any zoning provision that prevents an accessory use from existing on an accessory structure, which the Model Law allows. If a municipality’s zoning code defines or limits the use of the term “subordinate,” in a way that conflicts with the Model Law’s definitions, the municipality should amend the Model Law to state that it preempts the more restrictive definition. Some local zoning laws prohibit accessory structures on other accessory uses, which this Model Law allows. One solution to this and the other conflicts noted here is to amend the zoning definition for solar accessory uses to clarify that they are allowed despite restrictive definitions of “subordinate” or the prohibition of accessory uses to accessory buildings.

1. Authority

This Solar Energy Local Law is adopted pursuant to [Select one: sections 261-263 of the Town Law / sections 7-700 through 7-704 of the Village Law / sections 19 and 20 of the City Law and section 20 of the Municipal Home Rule Law] of the State of New York, which authorize the [Village/Town/City] to adopt zoning provisions that advance and protect the health, safety and welfare of the community, and, in accordance with the [Village/Town/City] law of New York State, “to make provision for, so far as conditions may permit, the accommodation of Solar Energy Systems and equipment and access to sunlight necessary therefor.”

Commentary: Municipalities are specifically authorized to adopt legislation to accommodate Solar Energy Systems and equipment. The Model Law Authority Section references this delegated authority. The municipal attorney should be consulted regarding this Section as well as the Model Solar Energy Law in its totality.

2. Statement of Purpose

This Solar Energy Local Law is adopted to advance and protect the public health, safety, and welfare of [Village/Town/City] by creating regulations for the installation and use of solar energy generating systems and equipment, with the following objectives:

1. To take advantage of a safe, abundant, renewable and non-polluting energy resource;
2. To decrease the cost of electricity to the owners of residential and commercial properties, including single-family houses;
3. To increase employment and business development in the [Village/Town/City], to the extent reasonably practical, by furthering the installation of Solar Energy Systems;
4. To mitigate the impacts of Solar Energy Systems on environmental resources such as important agricultural lands, forests, wildlife and other protected resources; and
5. To create synergy between solar and [other stated goals of the community pursuant to its Comprehensive Plan; may include urban/downtown revitalization, vacant land management, creating a walkable, healthy community, etc.].

3. Definitions

ACTIVE AGRICULTURAL LAND: Land used for a Farm Operation in accordance with Agriculture and Markets Law § 301 – uses of which include production of crops, livestock, and livestock products – within the past five years.

BATTERY ENERGY STORAGE SYSTEM: One or more devices, assembled together, capable of storing energy in order to supply electrical energy at a future time (not to include a stand-alone 12-volt car battery or an electric motor vehicle).

BUILDING-INTEGRATED SOLAR ENERGY SYSTEM: A combination of Solar Panels and Solar Energy Equipment integrated into any building envelope system such as vertical facades, semitransparent skylight systems, roofing materials, or shading over windows, which produce electricity for onsite consumption.

FACILITY AREA: The cumulative land area occupied during the commercial operation of the solar energy generating facility. This shall include all areas and equipment within the facility's perimeter boundary – including the solar energy system, onsite interconnection equipment, onsite electrical energy storage equipment, and any other associated equipment – as well as any site improvements beyond the facility's perimeter boundary such as access roads, permanent parking areas, or other permanent improvements. The facility area shall not include site improvements established for impact mitigation purposes, including but not limited to vegetative buffers and landscaping features.

FARM OPERATION: Land and on-farm buildings, equipment, facilities, and practices which contribute to the production, preparation, and marketing of crops, livestock, and livestock products as a commercial enterprise (in accordance with Agriculture & Markets Law § 301[11]).

GLARE: The effect by reflections of light with intensity sufficient as determined in a commercially reasonable manner to cause annoyance, discomfort, or loss in visual performance and visibility in any material respects.

GROUND-MOUNTED SOLAR ENERGY SYSTEM: A Solar Energy System which is secured to the ground via a pole, ballast system, or other mounting system; is detached from any other structure; and which generates electricity for onsite or offsite consumption.

KILOWATT (kW): A unit of power equal to 1,000 watts. The nameplate capacity of residential and commercial solar energy systems may be described in terms of kW.

MEGAWATT (MW): A unit of power equal to 1,000 kW. The nameplate capacity of larger solar energy systems may be described in terms of MW.

MINERAL SOIL GROUPS 1-4 (MSG 1-4): Soils recognized by the New York State (NYS) Department of Agriculture and Markets as having the highest value based on soil productivity and capability, in accordance with the uniform statewide land classification system developed for the NYS Agricultural Assessment Program.

NAMEPLATE CAPACITY: A solar energy system's maximum electric power output under optimal operating conditions. Nameplate Capacity may be expressed in terms of Alternating Current (AC) or Direct Current (DC).

NATIVE PERENNIAL VEGETATION: Native wildflowers, forbs, and grasses that serve as habitat, forage, and migratory way stations for Pollinators and shall not include any prohibited or regulated invasive species as determined by the NYS Department of Environmental Conservation.

ON-FARM SOLAR ENERGY SYSTEM: A Solar Energy System located on a farm which is a “farm operation” (as defined by Article 25-AA of the Agriculture and Markets Law, which may include one or multiple contiguous or non-contiguous parcels) in an agricultural district, which is designed, installed, and operated so that the anticipated annual total amounts of electrical energy generated do not exceed more than 110 percent of the anticipated annual total electrical energy consumed by the farm operation.

POLLINATOR: Bees, birds, bats, and other insects or wildlife that pollinate flowering plants, and includes both wild and managed insects.

ROOF-MOUNTED SOLAR ENERGY SYSTEM: A Solar Energy System located on the roof of any legally permitted building or structure that produces electricity for onsite or offsite consumption.

Commentary: This Model Law does not include a specific definition for Solar Energy Systems raised on canopy mounting, such as a solar parking canopy. Canopy-mounted configurations are included within the definition of Roof-Mounted Solar Energy Systems or Ground-Mounted Solar Energy Systems, depending on canopy location. Canopy-mounted systems installed on the roof of a structure are treated as Roof-Mounted Solar Energy Systems. Elevated systems not mounted on a roof are treated as Ground-Mounted Solar Energy Systems. If a municipality anticipates requiring special consideration for solar canopy systems, it could add to the Model Law specific provisions addressing these concerns or use a waiver for certain standards that may conflict with canopy-mounted systems, like height limitations.

SOLAR ACCESS: Space open to the sun and clear of overhangs or shade so as to permit the use of active and/or passive Solar Energy Systems on individual properties.

SOLAR ENERGY EQUIPMENT: Electrical material, hardware, inverters, conduit, energy storage devices, or other electrical and photovoltaic equipment associated with the production and storage of electricity.

SOLAR ENERGY SYSTEM: The components and subsystems required to convert solar energy into electric energy suitable for use. The term includes, but is not limited to, Solar Panels and Solar Energy Equipment. A Solar Energy System is classified as a Tier 1, Tier 2, Tier 3, or Tier 4 Solar Energy System as follows.

A. Tier 1 Solar Energy Systems include the following:

1. Roof-Mounted Solar Energy Systems.
2. Building-Integrated Solar Energy Systems.
3. Ground-Mounted Solar Energy Systems with a Nameplate Capacity of up to [25] kW AC.

[OR]

Ground-Mounted Solar Energy Systems with a total solar panel surface area of up to [4,000] square feet.

4. On-Farm Solar Energy Systems

B. Tier 2 Solar Energy Systems include the following:

1. Ground-Mounted Solar Energy Systems not included under Tier 1 Solar Energy Systems with a Nameplate Capacity of up to [1] MW AC and which generate no more than [110]% of the electricity consumed on the site over the previous [12] months.

[OR]

Ground-Mounted Solar Energy Systems not included under Tier 1 Solar Energy Systems with a Facility Area of up to [8] acres in size and which generate up to [110] % of the electricity consumed on the site over the previous [12] months.

C. Tier 3 Solar Energy Systems include the following:

1. Ground-Mounted Solar Energy Systems not included under Tier 1 or Tier 2 Solar Energy Systems with a Nameplate Capacity of up to [5] MW AC.

[OR]

Ground-Mounted Solar Energy Systems not included under Tier 1 or Tier 2 Solar Energy Systems with a Facility Area of up to [40] acres in size.

D. Tier 4 Solar Energy Systems are Solar Energy Systems which are not included under Tier 1, Tier 2, or Tier 3 Solar Energy Systems.

SOLAR PANEL: A photovoltaic device capable of collecting and converting solar energy into electricity.

Commentary: It is imperative that municipalities consider the practical land use impacts of different solar project types when establishing definitions and thresholds for Solar Energy System tiers. Where indicated in the Solar Energy Systems definition, municipalities shall elect to establish thresholds based on a systems' Nameplate Capacity (using kW and MW) OR its physical footprint (using square feet or acres), and should be consistent in this choice throughout. These definitions will be critical to the workability of the remaining sections of any solar regulation.

As defined above, NYSERDA's Model Solar Energy Local Law utilizes four tiers:

Tier 1 Solar Energy Systems include all Roof-Mounted and Building-Integrated Solar Energy Systems; Ground-Mounted Solar Energy Systems with a Nameplate Capacity up to 25 kW AC, or with a total Solar Panel surface area of up to 4,000 square feet; and On-Farm Solar Energy Systems designed to support an existing agricultural operation in the community. Permitted in all zoning districts, Tier 1 Solar Energy Systems comprise those which are likely to cause the least concern from a zoning and land use perspective. These systems will primarily support residences and small commercial operations, or may directly support agricultural operations.

Roof-Mounted and Building-Integrated Solar Energy Systems do not pose any land use or stormwater runoff impacts; as such, their inclusion under Tier 1 offers a streamlined permitting process while still ensuring adequate review and code compliance through a building permit requirement.

For Ground-Mounted Systems, the 25 kW AC Nameplate Capacity limit aligns with the Unified Solar Permit criteria; derived from the 25 kW cutoff for residential solar net metering as established by the NYS Public Service Commission (PSC). The 4,000 square foot size limit corresponds to the SEQRA Type 2 action threshold for certain accessory structures which do not require zoning changes or use variances.

Finally, On-Farm Solar Energy Systems are included under Tier 1 because, in accordance with NYS Agriculture and Markets Law Chapter 69, Article 25-AA Section 305-a and related guidance, these systems cannot be subject to unreasonably restrictive requirements such as site plan review, special use permits, or non-conforming use requirements.

See Guidelines for Review of Local Laws Affecting Small Wind Energy Production Facilities and Solar Devices, available at https://agriculture.ny.gov/system/files/documents/2019/11/guidelines_for_solar_and_small_wind_energy_facilities.pdf.

Tier 2 Solar Energy Systems include Ground-Mounted Solar Energy Systems larger than 25 kW that primarily use the electricity generated from the system on-site. Tier 2 Ground-Mounted Solar Energy Systems have a Nameplate Capacity of up to 1 MW AC or a Facility Area of up to 8 acres, and generate no more than 110% of the electricity consumed on-site over the previous 12 months.

A municipality may elect to define Tier 2 Solar Energy Systems according to their physical size using measurements akin to those found in the zoning ordinance's bulk and area requirements (measured in acres, square feet etc.), or based on system Nameplate Capacity. Because Tier 2 Solar Energy Systems are tied to existing development as accessory structures subordinate to the principal use on-site, these systems have smaller impacts and require less oversight.

Tier 3 Solar Energy Systems are larger principal uses with greater impacts that require more oversight. Tier 3 systems are those not included in Tier 1 or Tier 2 Solar Energy Systems that have a Nameplate Capacity of up to 5 MW AC or a Facility Area of up to 40 acres in size, depending on the threshold type selected by the municipality.

The 5 MW cutoff derives from the NYS Standardized Interconnection Requirements (SIR) as established by the NYS PSC. Because solar energy systems typically occupy 5-8 acres per megawatt, a 40-acre cutoff utilizes a conservative estimate of the land needed for a 5 MW project, while allowing for some flexibility in terms of planning and project design.

Tier 4 Solar Energy Systems are large-scale systems that are not included under Tier 1, Tier 2, or Tier 3 Solar Energy Systems.

Tier 4 Solar Energy Systems include all projects subject to the state-level siting process administered by the Office of Renewable Energy Siting (ORES); this extends to all new solar projects with a Nameplate Capacity of 25 MW or greater, as well as new solar projects between 20-25 MW which elect to seek a permit through ORES.

4. Applicability

- A. The requirements of this Local Law shall apply to all Solar Energy Systems permitted, installed, or modified in [Village/Town/City] after the effective date of this Local Law, excluding general maintenance and repair.
- B. Solar Energy Systems constructed or installed prior to the effective date of this Local Law shall not be required to meet the requirements of this Local Law.
- C. Modifications to an existing Solar Energy System that increase the Facility Area by more than [5] % of the original Facility Area (exclusive of moving any fencing) shall be subject to this Local Law.

Commentary: The Applicability Section establishes the effective date for implementation of the law. In addition, it carves out an exemption for maintenance, repair of systems, and modifications to existing Solar Energy Systems with an increase in Facility Area less than 5% of the original Facility Area (exclusive of moving any fencing).

5. General Requirements

- A. A Building permit shall be required for installation of all Solar Energy Systems.
- B. Prior to the issuance of the building permit or final approval by the [Reviewing Board], construction and/or site plan documents must be signed and stamped by a NYS Licensed Professional Engineer or NYS Registered Architect.
- C. Local land use boards are encouraged to condition their approval of proposed developments on sites adjacent to Solar Energy Systems so as to protect their access to sufficient sunlight to remain economically feasible over time.
- D. Issuance of permits and approvals by the [Reviewing Board] shall include review pursuant to the State Environmental Quality Review Act [ECL Article 8 and its implementing regulations at 6 NYCRR Part 617 (“SEQRA”).

Commentary: The Solar Guidebook provides an overview of the SEQRA process and instructions for solar energy projects. Access the Solar Guidebook at www.nyserda.ny.gov/SolarGuidebook.

- E. All Solar Energy Systems shall be designed, erected, and installed in accordance with all applicable codes, regulations, and industry standards as referenced in the NYS Uniform Fire Prevention and Building Code (“Uniform Code”), the NYS Energy Conservation Code (“Energy Code”), and the [Village/Town/City] Code.
- F. For Solar Energy Systems subject to site plan review, the [Village/Town/City] shall impose, and may update as appropriate, a schedule of fees to recover expenses associated with engineering, environmental, or legal services determined to be reasonably necessary in the processing of an application under this law.

6. Permitting Requirements for Tier 1 Solar Energy Systems

All Tier 1 Solar Energy Systems shall be permitted in all zoning districts and shall be exempt from site plan review under the local zoning code or other land use regulation, subject to the following conditions for each type of Solar Energy Systems:

- A. Roof-Mounted Solar Energy Systems.
 - 1. Roof-Mounted Solar Energy Systems shall incorporate, when feasible, the following design requirements (exceptions may be approved by the [Code Enforcement Official]):
 - a. Solar Panels on pitched roofs shall be mounted with a maximum distance of [8] inches between the roof surface the highest edge of the system.
 - b. Solar Panels on pitched roofs shall be installed parallel to the roof surface on which they are mounted or attached.
 - c. Solar Panels on pitched roofs shall not extend higher than the highest point of the roof surface on which they are mounted or attached.
 - d. Solar Panels on flat roofs shall not extend above the top of the surrounding parapet, or more than [24] inches above the flat surface of the roof, whichever is higher.

2. Glare. All Solar Panels shall have anti-reflective coating(s).
3. Height. All Roof-Mounted Solar Energy Systems shall comply with the height limitations in Appendix 3.

[OR]

All Roof-Mounted Solar Energy Systems shall be subject to the maximum height regulations specified for principal and accessory buildings within the underlying zoning district.

B. Building-Integrated Solar Energy Systems

1. Building-Integrated Solar Energy Systems shall be shown on the plans submitted for the building permit application for the building containing the system.

C. Ground-Mounted Solar Energy Systems

1. Glare. All Solar Panels shall have anti-reflective coating(s).
2. Setbacks. Tier 1 Solar Energy Systems shall be subject to the setback regulations specified for the accessory structures within the underlying zoning district. All Ground-Mounted Solar Energy Systems shall only be installed in the side or rear yards in residential districts.
3. Height. Tier 1 Solar Energy Systems shall be subject to the height limitations specified for accessory structures within the underlying zoning district.

[OR]

Tier 1 Solar Energy Systems shall comply with the height limitations in Appendix 3.

4. Lot Size. Tier 1 Solar Energy Systems shall comply with the existing lot size requirement specified for accessory structures within the underlying zoning district.
5. Lot coverage. Tier 1 Solar Energy Systems are exempt from the lot coverage requirements in the underlying zoning district.
6. Screening and Visibility.
 - a. All Tier 1 Solar Energy Systems shall have views minimized from adjacent properties to the extent reasonably practicable.
 - b. Solar Energy Equipment shall be located in a manner to reasonably avoid and/or minimize blockage of views from surrounding properties and shading of property to the north, while still providing adequate Solar Access.

7. Permitting Requirements for Tier 2 Solar Energy Systems

All Tier 2 Ground-Mounted Solar Energy Systems shall be permitted in all zoning districts as accessory structures and shall be subject to site plan approval. Tier 2 Solar Energy Systems shall adhere to the standards and requirements established for Tier 1 Ground-Mounted Systems in Section [6(C)], in addition to (or in some cases amended by) the following requirements:

- A. Application & Site Plan Review Requirements. Applications for Tier 2 Solar Energy Systems, including materials for site plan review, shall include the following:
 1. Name, address, and contact information of proposed or potential system installer and the owner and/or operator of the Solar Energy System. Such information of the final system installer shall be submitted prior to the issuance of building permit.
 2. Name, address, contact information, and signature of the project applicant, as well as all the property owners, demonstrating their consent to the application and the use of the property for the Solar Energy System.
 3. Nameplate Capacity of the Solar Energy System (as expressed in kW or MW).
 4. Zoning district designation for the parcel(s) of land comprising the Facility Area.
 5. Property lines and physical features, including roads, for the project site.
 6. Adjacent land uses on contiguous parcels within a certain radius of the site boundary.
 7. Proposed changes to the landscape of the site, including site grading, vegetation clearing and planting, the removal of any large trees, access roads, exterior lighting, signage, fencing, landscaping, and screening vegetation or structures.

8. A one- or three-line electrical diagram detailing the entire Solar Energy System layout, including the number of Solar Panels in each ground-mount array, solar collector installation, associated components, inverters, electrical interconnection methods, and utility meter, with all National Electrical Code compliant disconnects and over current devices. The diagram should describe the location and layout of all Battery Energy Storage System components if applicable and should include applicable setback and other bulk and area standards.
9. A preliminary equipment specification sheet that documents all proposed Solar Panels, system components, mounting systems, racking system details, and inverters that are to be installed. A final equipment specification sheet shall be submitted prior to the issuance of building permit.

B. Standards. Tier 2 Systems shall adhere to the following standards.

1. Lot coverage. Tier 2 Solar Energy Systems are exempt from the lot coverage requirements in the underlying zoning district.
2. Screening/Visibility. Tier 2 Solar Energy Systems shall have views minimized from adjacent properties to the extent reasonably practicable using architectural features, earth berms, landscaping, or other screening methods that will harmonize with the character of the property and surrounding area.
3. Environmental Resources
 - a. Tree-cutting. Removal of existing trees larger than [6] inches in diameter should be minimized to the extent possible.
 - b. To the extent practicable, Tier 2 Solar Energy System Owners shall utilize and maintain native perennial vegetation to provide foraging habitat for pollinators in all appropriate areas within the Facility Area.
 - c. Use integrated pest management practices to refrain from/limit pesticide use (including herbicides) for long-term operation and site maintenance.

Commentary: The previous Sections regulate Tier 1 and Tier 2 Ground-Mounted Solar Energy Systems. Tier 1 Ground-Mounted Solar Energy Systems are relatively smaller in physical size compared to Tier 2 Ground-Mounted Solar Energy Systems. Tier 2 Ground-Mounted Solar Energy Systems produce electricity primarily for onsite consumption. Tier 1 and Tier 2 Ground-Mounted Solar Energy Systems are permitted as accessory structures in all zoning districts deemed appropriate by the local jurisdiction and do not require site plan review. Tier 1 and Tier 2 Ground-Mounted Solar Energy Systems are standalone structures and generate different concerns than roof-mounted installations. Because these system sizes are not limited to a structure’s available roof space, it is important to think about the size of the lot in relation to the allowable system size, after accounting for setbacks. The Model Law requires all Tier 1 and Tier 2 Ground-Mounted Solar Energy Systems to be subject to the setback requirements of the underlying zoning district.

The Model Law provides two options to regulate the height of Tier 1 and Tier 2 Ground-Mounted Solar Energy Systems. One way is to limit the height of Ground-Mounted Solar Energy Systems to the requirements in the underlying zoning district. Each municipality must adopt appropriate height restrictions based on local need. Alternatively, municipalities can specify a set of new height standards, as shown in Appendix 3. All height measurements should be calculated when the Solar Energy System is oriented at maximum tilt.

This Model Law includes specific screening and visibility standards for Tier 1 and Tier 2 Ground-Mounted Solar Energy Systems while limiting the enforcement to “the extent reasonably practicable” to avoid overly burdensome standards.

8. Permitting Requirements for Tier 3 Solar Energy Systems

All Tier 3 Solar Energy Systems are permitted through the issuance of a [special use permit] within the [XXXXXXXXXXXXXX, XXXXXXXXXXXX, XXXXXXXXXXXX] zoning districts, and subject to site plan application requirements set forth in this Section.

A. Applications for the installation of Tier 3 Solar Energy System shall be:

1. Reviewed by the [Code Enforcement/Zoning Enforcement Officer/Reviewing Board] for completeness. Applicants shall be advised within [30] days of the completeness of their application or any deficiencies that must be addressed prior to substantive review.

Commentary: Municipalities are encouraged to consider and establish a reasonable period for determining the completeness of a Solar Energy System permit application, which may be shaped by factors including:

- Availability and capacity of the Reviewing Board and/or municipal officials tasked with reviewing applications.
- Cadence of Reviewing Board meetings; if meetings are held monthly, a 30-day review period may be necessary to allow the Board to issue a completeness determination.
- Supplemental review and support services provided by a consultant or third-party.

2. Subject to a public hearing to hear all comments for and against the application. This hearing shall be in compliance with all existing public hearing requirements established under law by the [Village/Town/City].

Commentary: State law requires a public hearing and decision on special use permits but does not require notice to neighbors unless mandated under local law. If not already required by local law, localities may elect to require the following notice for proposed Tier 3 Solar Energy Systems to ensure adequate notice to adjoining landowners by adding the following provision:

“In addition to existing public notice requirements under local law, Applicants shall deliver notice by first class mail to adjoining landowners or landowners within [200] feet of the property at least [10] days prior to such a hearing. Proof of mailing shall be provided to the [Reviewing Board] at the public hearing.”

3. Referred to the [County Planning Department] pursuant to General Municipal Law § 239-m if required.

4. Upon closing of the public hearing, the [Reviewing Board] shall take action on the application within 60-days of the public hearing, which can include approval, approval with conditions, or denial. The 60-day period may be extended upon consent by both the [Reviewing Board] and applicant.

B. Application & Site Plan Review Requirements. Applications for Tier 3 Solar Energy Systems, including materials for site plan review, shall include the following:

1. Name, address, and contact information of proposed or potential system installer and the owner and/or operator of the Solar Energy System. Such information of the final system installer shall be submitted prior to the issuance of building permit.
2. Name, address, contact information, and signature of the project applicant, as well as all the property owners, demonstrating their consent to the application and the use of the property for the Solar Energy System.
3. Nameplate Capacity of the Solar Energy System (as expressed in MW).
4. Zoning district designation for the parcel(s) of land comprising the Facility Area.
5. Property lines and physical features, including roads, for the project site.
6. Map(s) of MSG 1-4 soils and Active Agriculture Lands on the parcel(s) comprising the Facility Area and adjacent parcels.
7. Adjacent land uses on contiguous parcels within a certain radius of the site boundary.
8. Proposed changes to the landscape of the site, including site grading, vegetation clearing and planting, the removal of any large trees, access roads, exterior lighting, signage, fencing, landscaping, and screening vegetation or structures.
9. Erosion and sediment control and storm water management plans prepared to NYS Department of Environmental Conservation standards, if applicable, and to such standards as may be established by the Planning Board.
10. A one- or three-line electrical diagram detailing the entire Solar Energy System layout, including the number of Solar Panels in each ground-mount array, solar collector installation, associated components, inverters, electrical interconnection methods, and utility meter, with all National Electrical Code compliant disconnects and over current devices. The diagram should describe the location and layout of all Battery Energy Storage System components if applicable and should include applicable setback and other bulk and area standards.

11. A preliminary equipment specification sheet that documents all proposed Solar Panels, system components, mounting systems, racking system details, and inverters that are to be installed. A final equipment specification sheet shall be submitted prior to the issuance of building permit.
12. A Property Operation and Maintenance Plan that describes continuing site maintenance, anticipated dual-use, and property upkeep, such as mowing and trimming.

Commentary: In addition to long-term maintenance, the Operation and Maintenance Plan should present plans for dual-use on the site, including the crops that will be produced and a project-specific strategic grazing management plan of 3-to-7-year duration for the class(es) of livestock intended for the solar project. The grazing management plan should address herd size, forage availability, time of year, acreage to be grazed, weather conditions, and producer requirements. The Operation and Maintenance Plan should also place restrictions on the use of fertilizer or herbicide for long-term operation and site maintenance and should provide for scheduled upkeep of screening vegetation planted as part of the screening and visual impact mitigation plan.

13. A Decommissioning Plan [see Appendix 4] signed by the owner and/or operator of the Solar Energy System shall be submitted by the applicant. The decommissioning plan shall address the following:
 - a. The time required to decommission and remove the Solar Energy System and any ancillary structures.
 - b. The time required to repair any damage caused to the property by the installation and removal of the Solar Energy System.
 - c. The cost of decommissioning and removing the Solar Energy System, as well as all necessary site remediation or restoration.
 - d. The provision of a decommissioning security which shall adhere to the following requirements:
 1. The deposit, executions, or filing with the [Village/Town/City] Clerk of cash, bond, or other form of security reasonably acceptable to the [Village/Town/City] attorney and/or engineer, shall be in an amount sufficient to ensure the good faith performance of the terms and conditions of the permit issued pursuant hereto and to provide for the removal and restorations of the site subsequent to removal.

The amount of the bond or security shall be [115]% of the cost of removal and site restoration for the Tier 3 Solar Energy System, and shall be revisited every [5] years and updated as needed to reflect any changes (due to inflation or other cost changes). The decommissioning amount shall be reduced by the amount of the estimated salvage value of the Solar Energy System.
 2. In the event of default upon performance of such conditions, after proper notice and expiration of any cure periods, the cash deposit, bond, or security shall be forfeited to the [Village/Town/City], which shall be entitled to maintain an action thereon. The cash deposit, bond, or security shall remain in full force and effect until restoration of the property as set forth in the decommissioning plan is completed.

Commentary: Decommissioning is the process of removing an abandoned Solar Energy System and remediating the land. When describing requirements for decommissioning Solar Energy Systems, it is possible to specifically require the removal of infrastructure, disposal of any components, and the stabilization and re-vegetation of the site. A decommissioning plan is required for Tier 3 Solar Energy Systems.

It is important to note that despite many municipalities' choice to require a financial mechanism for decommissioning, there is no specific authority to do so as part of a land use approval for solar PV projects. Therefore, a municipality should consult the municipal attorney when evaluating financial mechanisms.

For additional resources, please refer to NYSERDA's Fact Sheet on Decommissioning Solar Panel Systems, available at nyserdera.ny.gov/SolarGuidebook.

Commentary: It is important for municipalities to consider consolidating application reviews and approvals for Solar Energy Systems in one board. In some communities, the local zoning law may allocate responsibilities for special use permits and site plan approvals to different boards. Moving the application back and forth between two boards can add months and unnecessary costs to the Solar Energy System.

To avoid this, the community should determine which board should be primarily responsible for Solar Energy System approvals and consolidate special use permit and site plan approval thereby adding the following language to the Model Law: "All site plan and special use permit approvals for Solar Energy Systems shall be the responsibility of the Reviewing Board in order to avoid delays in the review of Solar Energy System applications."

Including specific requirements for site plan approval ensures that potential problems are addressed in the initial stages of the project. Municipalities can modify the list of required information to meet local needs as appropriate.

C. Special Use Permit Standards. [Reviewing Board] may issue a special use permit for a Tier 3 Solar Energy System only after it has found that all the following standards and conditions have been satisfied:

Commentary: Municipalities may elect to include waiver provisions that provide flexibility for the Reviewing Board, in its discretion, to waive certain requirements for Solar Energy Systems which: (1) are harmonious with existing land uses where proposed, and/or (2) based on system size or other considerations, need not adhere to the law's special use permit and site plan regulations. In some cases, the waiver may be partial, allowing the Reviewing Board to require a proposed Solar Energy System to comply with individual requirements in the law or to remove certain special use permit standards, such as required fencing, for smaller projects or other situations where the community deems these standards unnecessary.

1. Underground Requirements. All utility lines located outside of the Facility Area shall be placed underground to the extent feasible and as permitted by the serving utility, with the exception of the main service connection at the utility company right-of-way and any new interconnection equipment, including without limitation any poles, with new easements and right-of-way.
2. Vehicular Paths. Vehicular paths within the Facility Area shall be designed in compliance with Uniform Code requirements to ensure emergency access, while minimizing the extent of impervious materials and soil compaction.
3. Signage.
 - a. No signage or graphic content shall be displayed on the Solar Energy Systems except the manufacturer's name, equipment specification information, safety information, and 24-hour emergency contact information. Said information shall be depicted within an area no more than [8] square feet.
 - b. As required by National Electric Code (NEC), disconnect and other emergency shutoff information shall be clearly displayed on a light reflective surface. A clearly visible warning sign concerning voltage shall be placed at the base of all pad-mounted transformers and substations.
4. Glare. All Solar Panels shall have anti-reflective coating(s).
5. Lighting. Lighting of the Solar Energy Systems shall be limited to that minimally required for safety and operational purposes and shall be reasonably shielded and downcast from abutting properties.
6. Multiple lots. At the discretion of the [Reviewing Board], where a Tier 3 Solar Energy System's Facility Area comprises multiple lots (regardless of ownership by an individual or multiple participating landowners), the combined lots may be treated a single lot for the purposes of applying specific standards and requirements, including but not limited to [lot size, setback] requirements.

Commentary: Tier 3 and Tier 4 Solar Energy Systems may include multiple lots within the Facility Area. To avoid project fragmentation, and to encourage responsible project density, the Reviewing Board may elect to treat adjacent participating lots as a single lot when applying select bulk and area standards, such as setbacks or lot size requirements.

This approach may help minimize visual and cumulative land-use impacts by consolidating a project's footprint, minimizing project fragmentation throughout the community, and preventing accidental marginalization of lands in the Facility Area.

7. Lot size. The property on which the Tier 3 Solar Energy System is placed shall meet the lot size requirements of the underlying zoning district.

[OR]

The property on which the Tier 3 Solar Energy System is placed shall meet the lot size requirements in Appendix 1.

8. Setbacks. The Tier 3 Solar Energy Systems shall comply with the setback requirements of the underlying zoning district for principal structures. Fencing, collection lines, access roads and landscaping may occur within the setback.

[OR]

The Tier 3 Solar Energy Systems shall meet the parcel line setback requirements in Appendix 2, Table 2.1. Fencing, collection lines, access roads and landscaping may occur within the setback.

9. Height. The Tier 3 Solar Energy Systems shall comply with the building height limitations for principal structures of the underlying zoning district.

[OR]

The Tier 3 Solar Energy Systems shall comply with the height limitations in Appendix 3 depending on the underlying zoning district.

- a. This height requirement can be waived by the [Reviewing Board] if the panels are being raised to accommodate continued or new agricultural purposes.

Commentary: Since Ground-Mounted Solar Energy Systems generally do not include much impervious surface and since lot coverage requirements are designed, in large part, to reduce impervious surfaces and associated stormwater runoff, this Model Law exempts Ground-Mounted Solar Energy Systems from lot coverage requirements. Ground-Mounted Solar Energy Systems are distinct from other uses, such as buildings or sheds, because stormwater generally will continue to infiltrate the uncompacted and vegetated ground beneath them. The setback, environmental, and agricultural requirements contained in the Model Law address issues related to stormwater runoff from Ground-Mounted Solar Energy Systems, and both the construction and operation of large Ground-Mounted Solar Energy Systems will be subject to applicable State requirements around erosion, sediment control and stormwater management requirements.

Municipalities which prefer not to waive lot coverage requirements for Ground-Mounted Solar Energy Systems can adopt more flexible lot coverage requirements that allow the Reviewing Board to limit issues related to fragmentation and the need to utilize large parcels of land for projects. The model language below requires that the Solar Energy System not exceed the maximum lot coverage requirement of the underlying zoning district but calculates lot coverage for a Ground-Mounted Solar Energy System by its actual impervious footprint, which results in a smaller measurement than the square footage of the Solar Panels.

10. Lot coverage. Lot coverage of the Solar Energy System, as defined below, shall not exceed the maximum lot coverage requirement of the underlying zoning district. The following components of a Tier 3 Solar Energy System shall be considered included in the calculations for lot coverage requirements:

- a. Foundation systems, typically consisting of driven piles or monopoles or helical screws with or without small concrete collars.
- b. All mechanical equipment of the Solar Energy System, including any pad mounted structure for Battery Energy Storage System components, switchboards, or transformers.
- c. Paved access roads servicing the Solar Energy System.

Alternatively, the requirement below measures a system's lot coverage by Solar Panel square footage and requires that the system not exceed a maximum lot coverage requirement established specifically for Ground-Mounted Solar Energy Systems.

10. Lot coverage. The Tier 3 Solar Energy System shall not exceed [60%] of the lot where it is installed. The surface area covered by Solar Panels shall be included in total lot coverage.

10. Lot coverage. Tier 3 Solar Energy Systems are exempt from the lot coverage requirements in the underlying zoning district.

11. Fencing Requirements. All mechanical equipment, including any structure for Battery Energy Storage System components, shall be enclosed by a [7-foot-high] fence, as required by NEC, with a self-locking gate to prevent unauthorized access.

12. Screening and Visibility.

- a. Solar Energy Systems smaller than [10] acres shall have views minimized from adjacent properties to the extent reasonably practicable using architectural features, earth berms, landscaping, or other screening methods that will harmonize with the character of the property and surrounding area.
- b. Solar Energy Systems larger than [10] acres shall be required to:
 1. Conduct a visual assessment of the visual impacts of the Solar Energy System on public roadways and adjacent properties. At a minimum, a line-of-sight profile analysis shall be provided. Depending upon the scope and potential significance of the visual impacts, additional impact analyses, including for example a digital viewshed report, [shall/may] be required to be submitted by the applicant.
 2. Submit a screening & landscaping plan to show adequate measures to screen through landscaping, grading, or other means so that views of Solar Panels and Solar Energy Equipment shall be minimized as reasonably practical from public roadways and adjacent properties to the extent feasible.

- i. The screening & landscaping plan shall specify the locations, elevations, height, plant species, and/or materials that will comprise the structures, landscaping, and/or grading used to screen and/or mitigate any adverse aesthetic effects of the system. The landscaped screening shall be comprised of a minimum of [1] evergreen tree, at least [6] feet high at time of planting, plus [2] supplemental shrubs at the reasonable discretion of the [Reviewing Board], all planted within each [10] linear feet of the Solar Energy System. Existing vegetation may be used to satisfy all or a portion of the required landscaped screening. A list of suitable evergreen tree and shrub species should be provided by the [Village/Town/city].

[OR]

The screening & landscaping plan shall specify the locations, elevations, height, plant species, and/or materials that will comprise the structures, landscaping, and/or grading used to screen and/or mitigate any adverse aesthetic effects of the system, following the applicable rules and standards established by the [Village/Town/County].

- ii. The [Reviewing Board] may elect to waive certain screening and landscaping requirements in select locations based on an applicant's demonstration of non-impact or impact mitigation on adjacent parcels.

Commentary: In general, municipalities should think through how helpful SEQRA can be in mitigating adverse impacts of any proposed system approved through a special use permit under this Section. When determining the appropriate SEQRA classification for a solar energy facility, municipalities shall consider a variety of tangible impacts which may be associated with the project, including the cumulative acreage of land disturbed by grading, road construction, racking system installation, and other activities.

For Tier 3 Solar Energy Systems which occupy fewer than 10 acres (considered Unlisted Actions in SEQR, except for systems in agricultural districts with a solar-panel surface area larger than 2.5 acres), this Model Law limits the enforcement of screening and visibility standards to "the extent reasonably practicable" to avoid overly burdensome standards.

For Tier 3 Solar Energy Systems which occupy greater than 10 acres (considered Type I Actions in SEQR), a visual impact assessment may be required by the Reviewing Board. If so, the visual impact assessment prepared for compliance with SEQRA could also be used to analyze visual impacts on public roadways and adjacent properties in compliance with requirements under the Model Law.

For additional resources, please refer to NY-Sun's "State Environmental Quality Review (SEQR) for Solar," available at nyserra.ny.gov/SolarGuidebook.

13. Environmental Resources

- a. Tree-cutting. Removal of existing trees larger than [6] inches in diameter should be minimized to the extent possible.
- b. Tier 3 Solar Energy System owners shall develop, implement, and maintain native vegetation to the extent practicable pursuant to a vegetation management plan by providing Native Perennial Vegetation and foraging habitat beneficial to game birds, songbirds, and Pollinators. To the extent practicable, when establishing perennial vegetation and beneficial foraging habitat, the owners shall use native plant species and seed mixes and seed all appropriate areas within the Facility Area. Any project which is designed to incorporate agricultural or farm-related activities or uses within the Facility Area may be excluded from this requirement based on the amount of space actually occupied by the agricultural use(s). This exclusion will only be allowed based on the [Reviewing Board] determination that these lands are being used for actual agricultural uses.
- c. Use integrated pest management practices to refrain from/limit pesticide use (including herbicides) for long-term operation and site maintenance.

Commentary: Pollinators (birds, bats, bees, butterflies, moths, beetles, and multiple other species of insects) are critical to agricultural yield in the U.S. Some solar facilities are starting to use seed mixes of native grasses and Pollinator friendly flowering plants as ground cover in solar farms. By establishing native Pollinator habitats on solar farms, it is possible to reconcile the conflict between solar farms and agricultural land use. Below are multiple recommended approaches that can be used for creating Pollinator habitat on solar farms:

- Plant short-growing, low-maintenance, native seed mix underneath and around the panels;
- Plant a diverse Pollinator seed mix in between the rows of panels;
- Plant buffers with vegetation that benefit Pollinators and early successional species; Plant native shrubs along the property boundary;
- Specify a minimum number of species of native flowers (encouraged to include species for each bloom period) and native grass species.

14. Agricultural Resources. Tier 3 Solar Energy Systems for which the Facility Area includes lands consisting of MSG 1-4 shall adhere to the following requirements:

- a. Tier 3 Solar Energy System components, equipment, and associated impervious surfaces shall occupy no more than [50%] of the area of MSG 1-4 within the Facility Area.
 1. A Tier 3 Solar Energy System may exceed the [50%] MSG 1-4 coverage threshold if it incorporates an onsite activity or program which provides for the use of the land as a Farm Operation. Exceedance beyond the [50%] threshold will only be allowed based on the [Reviewing Board]’s determination that the land is being used for a Farm Operation.
 2. Subject to discretion of the [Reviewing Board], if the landowner demonstrates that – notwithstanding the classification as MSG 1-4 – the land cannot be profitably employed due to excessive wetness, rocky conditions or slopes, the land may be excluded from the calculation required by this section.
- b. To the maximum extent practicable, Tier 3 Solar Energy Systems located on MSG 1-4 shall be constructed, monitored, and decommissioned in accordance with the the NYS Department of Agriculture and Markets’ “Guidelines for Solar Energy Projects - Construction Mitigation for Agricultural Lands.”

Commentary: For more information about solar and agriculture, including dual-use approaches and relevant NYS programs, please refer to the ‘Solar Installations on Agricultural Lands’ section of the Solar Guidebook, available at: www.nyserda.ny.gov/SolarGuidebook.

MSG 1-4 include the highest quality soils in New York based on soil productivity and capability, as identified by the NYS Department of Agriculture and Markets. The agricultural protection standards and requirements included in this Model Law are designed to align with this soil categorization methodology, which is already utilized by NYS agencies including the NYS Department of Agriculture and Markets, NYSEDA, ORES, and the NYS Department of Taxation and Finance.

Other optional approaches for addressing agriculture include:

- Adding a provision that requires any Tier 3 Solar Energy System located on Active Agricultural Land to not exceed [75%] of the area of Active Agricultural Land within the Facility Area.
- Utilizing “Prime Farmland” and “Farmland of Statewide Importance” as the basis for agricultural protection standards included under local regulations, rather than MSG 1-4.
- Rather than cross referencing to the construction requirements of the NYS Department of Agriculture and Markets, consider directly adding select priority construction requirements to the law. For more details, please refer to NYS Department of Agriculture and Market’s Guidelines for Agricultural Mitigation for Solar Energy Projects, available at https://agriculture.ny.gov/system/files/documents/2019/10/solar_energy_guidelines.pdf.
- Adding a provision that permits the Reviewing Board to waive or modify certain bulk and area standards that result in unintended consequences. Waiving those standards better protects agriculture and promotes continued agricultural use and alternative designs that protect more land.
- In drafting and evaluating solar regulations, coordinate with local/county/regional agricultural preservation board(s) as appropriate to provide an opportunity for ideation and feedback regarding agricultural land impacts. As with other external referral processes, consider establishing clear expectations and timelines to avoid delays.

D. Ownership Changes. If the owner or operator of the Solar Energy System changes or the owner of the property changes, the special use permit shall remain in effect, provided that the successor owner or operator assumes in writing all of the obligations of the decommissioning plan. A new owner or operator of the Solar Energy System shall notify the zoning enforcement officer of such change in ownership or operator within [30] days of the ownership change.

9. Permitting Requirements for Tier 4 Solar Energy Systems

All Tier 4 Solar Energy Systems are permitted through the issuance of a [special use permit] within the [XXXXXXXXXXXXXXXX, XXXXXXXXXXXX, XXXXXXXXXXXX] zoning districts, and are subject to the site plan and special use permit application requirements established for Tier 3 Solar Energy Systems in Section [8], in addition to (or in some cases amended by) the following requirements:

A. Applications for Tier 4 Solar Energy Systems shall:

1. Be reviewed by the [Code Enforcement/Zoning Enforcement Officer/Reviewing Board] for completeness. Applicants shall be advised within [60] days of the completeness of their application or any deficiencies that must be addressed prior to substantive review.

B. Pre-Application Meeting.

At least [60] days prior to the submission of an application, the Applicant shall conduct a pre-application meeting with the [Reviewing Board OR Village/Town/City staff] to ensure all parties have clear expectations regarding any [Village/Town/City] requirements applicable to the proposed Solar Energy System. A written request for this purpose shall be sent to the [Reviewing Board OR highest-ranking official of the Village/Town/City]. Submission and review of the application shall not be delayed based on the failure of the [Reviewing Board OR highest-ranking official of the Village/Town/City] to respond in a timely manner to a properly-filed meeting request.

At the pre-application meeting, the Applicant must provide (1) a brief description of the proposed facility and its environmental setting, (2) a map of the proposed facility showing project components, (3) the proposed facility's anticipated impacts, (4) a designated contact person with telephone number, email address, and mailing address from whom information will be available going-forward basis, and (5) an anticipated application submission date.

Commentary: The pre-application meeting requirement is intended to align with procedural requirements applicable to major renewable energy facilities, as permitted by ORES; this requirement is outlined in 19 NYCRR § 900-1.3 and available at <https://ores.ny.gov/system/files/documents/2021/03/chapter-xviii-title-19-of-nycrr-part-900-subparts-900-1-through-900-15.pdf>.

C. Community Engagement Plan.

Applications for a Tier 4 Solar Energy System shall include a Community Engagement Plan detailing the applicant's proposed plans and strategies for ensuring adequate public awareness and encouraging community participation. Applicants are highly encouraged to discuss the contents and details proposed in this plan with the [Reviewing Board OR local officials] prior to the submission of a formal application.

Commentary: Community Engagement Plans are also required for facilities that produce TIER 1 Eligible Renewable Energy Certificates in the New York Generation Attribute Tracking System (NYGATS). These facilities must meet the Community Engagement Plan criteria outlined in the Step Two Bid Proposal requirements for NYSERDA's Request for Proposals for TIER 1 Eligible Renewable Energy Certificates, available at <https://www.nyserda.ny.gov/All-Programs/clean-energy-standard/renewable-generators-and-developers/res-tier-one-eligibility/solicitations-for-long-term-contracts>.

Consistent with those criteria, municipalities can require the Plans be publicly posted and incorporate the following criteria into Community Engagement Plan requirements for Tier 4 Solar Energy Systems:

- Details of outreach strategies and activities that will be used to engage stakeholders and interested parties.
- Planned frequency of public events and strategies to ensure that events are widely attended by a representative cross section of community residents.
- Details of the direct benefits to the community.
- Details on past/planned engagement regarding payments in lieu of taxes agreements or host community agreements.
- Describe local interests and concerns, including identifying plans to thoughtfully build support for and respectfully responding to any opposition.
- Identify strategies the Applicant will use to mitigate concerns raised by the public.
- Method for soliciting feedback and input from the public and the process for sharing feedback and responses publicly.

D. Special Use Permit Standards

1. Setbacks: Tier 4 Solar Energy Systems shall meet all applicable parcel line and other setback requirements as outlined in Appendix 2, Table 2.2. Fencing, collection lines, access roads and landscaping may occur within the setback.
2. Agricultural Resources: Tier 4 Solar Energy Systems for which the Facility Area includes Active Agricultural Lands shall adhere to the following requirements:
 - a. Tier 4 Solar Energy System components, equipment, and associated impervious surfaces shall occupy no more than [50%] of the Active Agricultural Lands within the Facility Area.
 - i. A Tier 4 Solar Energy System may exceed the [50%] Active Agricultural Land threshold if it incorporates an onsite activity or program which provides for the use of the land as a Farm Operation. Exceedance beyond the [50%] threshold will only be allowed based on the [Reviewing Board]'s determination that the land is being used for a Farm Operation.

- b. To the maximum extent practicable, Tier 4 Solar Energy Systems located on Active Agricultural Lands shall be constructed, monitored, and decommissioned in accordance with the the NYS Department of Agriculture and Markets' "Guidelines for Solar Energy Projects - Construction Mitigation for Agricultural Lands."

10. Safety

- A. Solar Energy Systems and Solar Energy Equipment shall be certified under the applicable electrical and/or building codes as required.
- B. Solar Energy Systems shall be maintained in good working order and in accordance with industry standards. Site access shall be maintained, including snow removal at a level acceptable to the local fire department and, if the Tier 3 Solar Energy System is located in an ambulance district, the local ambulance corps.
- C. If a Battery Energy Storage System is included as part of the Solar Energy System, they shall meet the requirements of any applicable fire prevention and building code when in use and, when no longer used, shall be disposed of in accordance with the laws and regulations of the [Village/Town/City] and any applicable federal, state, or county laws or regulations.
- D. Where deemed necessary by the [Reviewing Board], the Applicant shall ensure emergency access to the Facility Area for local first responders by installing an emergency lock box or similar device, in a location subject to approval by the [Fire Chief of Village/Town/City].

11. Permit Timeframe and Abandonment

- A. The Special Use Permit and site plan approval for a Solar Energy System shall be valid for a period of [36] months, provided that [a building permit is issued for construction OR construction is commenced]. In the event construction is not completed in accordance with the final site plan – as may have been amended and approved – as required by the [Reviewing Board], within [36] months, the applicant may request to extend the time to complete construction for [12] months. Approval of a request to extend the time to complete construction shall not be unreasonably withheld by the the [Village/Town/City]. If the owner and/or operator fails to perform substantial construction within [48] months, the approvals shall expire.
- B. Upon cessation of electricity generation of a Solar Energy System on a continuous basis for [12] months, the [Village/Town/City] may notify and instruct the owner and/or operator of the Solar Energy System to implement the decommissioning plan. The decommissioning plan must be completed within [12] months of notification.
- C. If the owner and/or operator fails to comply with decommissioning upon any abandonment, the [Village/Town/City] may, at its discretion, utilize the bond and/or security for the removal of the Solar Energy System and restoration of the site in accordance with the decommissioning plan.

Commentary: Abandonment, as it applies to Solar Energy Systems, requires that the Solar Energy System be removed after a specified amount of time of inactivity. A municipality can establish a timeframe for the removal of a Solar Energy System based on aesthetics, system size, location, and system complexity. Municipalities, in their codes, can designate the amount of time after which a Solar Energy System is considered abandoned.

If provisions of financial surety to cover the cost of removal are not required, municipalities could use other remedies, such as placing a tax lien on the property if the owner and/or operator fail(s) to comply with decommissioning requirements.

12. Enforcement

Any violation of this Solar Energy Law shall be subject to the same enforcement requirements, including the civil and criminal penalties, provided for in the zoning or land use regulations of [Village/Town/City].

Commentary: This Section provides that any violation of the Solar Energy Law will result in the same assessment of civil and criminal penalties already laid out in the existing enforcement provision(s) of the municipality's zoning code.

If a municipality is particularly concerned about enforcement and adherence to permit requirements, the municipality should provide solar specific training for enforcement officers.

13. Severability

The invalidity or unenforceability of any section, subsection, paragraph, sentence, clause, provision, or phrase of the aforementioned sections, as declared by the valid judgment of any court of competent jurisdiction to be unconstitutional, shall not affect the validity or enforceability of any other section, subsection, paragraph, sentence, clause, provision, or phrase, which shall remain in full force and effect.

2.1 Appendix 1: Lot Size Requirements

The following table displays the size requirements of the lot for Ground-Mounted Solar Energy Systems to be permitted.

Table 1.1: Lot Size Requirements

Zoning District	Tier 3 & 4
Residential Low Density	≥ 2 acres
Residential High Density	—
Commercial / Business	≥ 5 acres
Light Industrial	N/A
Heavy Industrial	N/A
Agricultural / Residential	≥ 5 acres

Key:

—: Not Allowed

N/A: Not Applicable

2.2 Appendix 2: Setback Requirements

The following table provides parcel line setback requirements for Ground-Mounted Solar Energy Systems. Fencing, access roads and landscaping may occur within the setback.

Table 2.1: Parcel Line Setback Requirements for Tier 3 Solar Energy Systems

Zoning District	Tier 3		
	Front	Side	Rear
Residential Low Density	100'	100'	100'
Residential High Density	—	—	—
Commercial / Business	30'	15'	25'
Light Industrial	30'	15'	25'
Heavy Industrial	30'	15'	25'
Agricultural / Residential	30'	15'	25'

Key:

—: Not Allowed

Table 2.2: Parcel Line and Other Setback Requirements for Tier 4 Solar Energy Systems

Zoning District	Tier 4			Non-Participating Occupied Residence
	Front	Side	Rear	
Residential Low Density	100'	100'	100'	250'
Residential High Density	—	—	—	—
Commercial / Business	50'	50'	50'	250'
Light Industrial	50'	50'	50'	250'
Heavy Industrial	50'	50'	50'	250'
Agricultural / Residential	50'	50'	50'	250'

Key:

—: Not Allowed

2.3 Appendix 3: Height Requirements

The following table displays height requirements for each type of Solar Energy Systems. The height of systems will be measured from the highest natural grade below each Solar Panel.

Table 3.1: Height Requirements

Zoning District	Tier 1 Roof-Mounted	Tier 1 & 2 Ground-Mounted	Tier 3 & 4 Ground-Mounted
Residential Low Density	2' above roof	10'	15'
Residential High Density	2' above roof	10'	—
Commercial / Business	4' above roof	15'	20'
Light Industrial	4' above roof	15'	20'
Heavy Industrial	4' above roof	15'	20'
Agricultural / Residential	2' above roof	15'	20'

Key:

—: Not Allowed

2.4 Appendix 4: Example Decommissioning Plan

Date: [Date]

Decommissioning Plan for [Solar Project Name], located at: [Solar Project Address]

Prepared and Submitted by [Solar Developer Name], the owner of [Solar Farm Name]

As required by [Town/Village/City], [Solar Developer Name] presents this decommissioning plan for [Solar Project Name] (the "Facility").

System decommissioning shall be required as a result of any of the following conditions:

1. The land lease – if any – ends, unless the project owner has acquired the land.
2. The Solar Energy System ceases to generate electricity on a continuous basis for [12] months.
3. The Solar Energy System is damaged and will not be repaired or replaced by [Solar Developer Owner].

If any of the above conditions are met, and upon notification or instruction by the [Village/Town/City], [Solar Developer Name] shall implement this decommissioning plan. System decommissioning and removal, as well as all necessary site restoration or remediation activities, shall be completed within [12] months.

The owner of the Facility, as provided for in its lease with the landowner, and in accordance with the requirements of the [Village/Town/City] zoning law, shall restore the property to its condition as it existed before the Facility was installed, pursuant to which shall include the following:

1. Removal of all operator-owned equipment, concrete, conduits, structures, fencing, and foundations located less than 36-inches below the soil surface, and/or less than 48-inches below the soil surface in areas consisting of [Mineral Soil Groups (MSG) 1-4 and/or Active Agricultural Lands].
2. For projects located on areas consisting of [MSG 1-4 and/or Active Agricultural Lands], removal of all operator-owned equipment, concrete, conduits, structures, fencing, and foundations in accordance with the decommissioning requirements contained in the NYS Department of Agriculture and Markets' "Guidelines for Solar Energy Projects - Construction Mitigation for Agricultural Lands."
3. Removal of any solid and hazardous waste caused by the Facility in accordance with local, state and federal waste disposal regulations.
4. Removal of all graveled areas and access roads unless the landowner requests in writing for it to remain.

An appendix is included in this plan to provide a project schedule detailing a breakdown of tasks required for the decommissioning removal of the system, including:

1. Time required to decommission and remove the system and any ancillary structures.
2. Time required to repair any damage caused to the property by the installation and removal of the system.

The cost of system decommissioning and removal, as well as all necessary site remediation and restoration activities, is estimated to be \$[XXX] as of the date and time this application is filed. A decommissioning security [has been OR will be] executed in the amount of [115]% of the cost of system decommissioning, removal, and site restoration.

This cost estimate and decommissioning surety will be revisited every [5] years and updated as needed to account for inflation or other cost changes.

The owner of the Facility, currently [Solar Developer Name], is responsible for this decommissioning.

Facility Owner Signature: _____ Date: _____