

Town of Orleans

Solar Energy Law

1. Authority

This Zoning for Solar Energy Law is adopted pursuant to sections 261-263 of the Town Law, of the State of New York, which authorize the Town of Orleans to adopt zoning provisions that advance and protect the health, safety, and welfare of the community, and “to make provision for, so far as conditions may permit, the accommodation of solar energy systems and equipment and access to sunlight necessary therefor.”

2. Statement of Purpose

- A. This Zoning for Solar Energy Law is adopted to advance and protect the public health, safety, and welfare of the Town of Orleans, including:
- 1) Taking advantage of a safe, abundant, renewable, and non-polluting energy resource;
 - 2) Decreasing the cost of energy to the owners of commercial and residential properties, including single-family houses; and
 - 3) Increasing employment and business development in the region by furthering the installation of Solar Energy Systems.

3. Definitions

BUILDING INTEGRATED PHOTOVOLTAIC SYSTEM: A combination of photovoltaic building components integrated into any building envelope system such as vertical facades including glass and other façade material, semitransparent skylight systems, roofing materials, and shading over windows.

GROUND-MOUNTED SOLAR ENERGY SYSTEM: A Solar Energy System that is anchored to the ground and attached to a pole or other mounting system, detached from any other structure for the primary purpose of producing electricity for onsite consumption.

LARGE-SCALE SOLAR ENERGY SYSTEM: A Solar Energy System that is ground-mounted and produces energy primarily for the purpose of off-site sale or consumption.

LOT COVERAGE FOR SOLAR FACILITY: The area measured from the outer edge of the ground mounted arrays, inverters, batteries, storage cells and all other mechanical equipment used to create solar energy, exclusive of fencing and roadways and paths between rows of modules. When measuring the outer edge of an array, the greatest possible footprint shall be identified and considered in the calculations.

ROOF-MOUNTED SOLAR ENERGY SYSTEM: A solar panel system located on the roof of any legally permitted building or structure for the purpose of producing electricity for onsite or offsite consumption.

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

SOLAR ENERGY SYSTEM: An electrical generating system composed of a combination of both Solar Panels and Solar Energy Equipment.

SOLAR PANEL: A Photovoltaic device capable of collecting and converting solar energy into electrical energy.

4. Applicability

The requirements of this law shall apply to all Solar Energy Systems installed or modified after its effective date, excluding general maintenance and repair and Building-Integrated Photovoltaic Systems.

5. Solar as an Accessory Use or Structure

A. Roof-Mounted Solar Energy Systems.

- 1) Roof-Mounted Solar Energy Systems that use the electricity onsite or offsite are permitted as an accessory use in all zoning districts when attached to any lawfully permitted building or structure. A valid Zoning Permit shall be obtained through the Town of Orleans Zoning Enforcement Officer prior to installation.
- 2) Roof mounted solar energy systems require a building permit. All work shall be completed in accordance with the NYS Building Code and National Electric Code.
- 3) Height. Solar Energy Systems shall not exceed the maximum height restrictions of the zoning district within which they are located and are provided the same height exemptions granted to building-mounted mechanical devices or equipment.
- 4) Aesthetics. Roof-Mounted Solar Energy System installations shall incorporate, when feasible, the following design requirements:
 - a. Panels facing the front yard must be mounted at the same angle as the roof's surface with a maximum distance of 18 inches between the roof and highest edge of the system.
 - b. Roof mounted solar structures shall be color coordinated to harmonize with roof material and other colors of the structure.
 - c. Solar panels shall be placed and arranged such that reflected solar radiation or glare shall not be directed onto adjacent buildings, properties, or roadways.
- 5) Roof-Mounted Solar Energy Systems that use the energy onsite or offsite shall be exempt from site plan review under the local zoning code or other land use regulations.

B. Ground-Mounted Solar Energy Systems.

- 1) Ground-Mounted Solar Energy Systems that use the electricity primarily onsite are permitted as accessory structures with a Zoning Permit within all zoning districts except the Resort Districts. Within the Resort 1 and 2 Districts, a Special Use Permit shall be required.
- 2) Ground mounted solar arrays require a building permit. All work shall be completed in accordance with the NYS Building Code and National Electric Code.
- 3) Height. Ground Mounted Solar Energy Systems that use the electricity primarily onsite shall not exceed 15 feet in height when oriented at maximum tilt.
- 4) Lot Coverage. Systems are limited to a maximum coverage of 50 percent. The surface area covered by Ground-Mounted Solar Panels shall be included in total lot coverage.
- 5) Setbacks. Ground-Mounted Solar Energy Systems shall adhere to the setback requirements of the underlying zoning district. All solar collectors must be located in compliance with DEC and federal flood plain regulations and specifications as they pertain to waterways, waterbodies and designated wetlands.
- 6) Size. The overall footprint of a Ground-Mounted Solar Energy System that uses the electricity primarily onsite shall not exceed 650 square feet in the Rural Residence, Residential, Resort 1 and 2 Districts and 2,000 square feet in all other Districts.
- 7) All such Systems in Rural Residence, Residential and Resort 1 and 2 Districts shall be installed in the side or rear yards.

6. Approval Standards for Large-Scale Solar Systems as a Special Use

- A. Large-Scale Solar Energy Systems are permitted through the issuance of a special use permit within Agriculture and Rural Residence, Business and Industrial Districts, subject to the requirements set forth in this Section, including site plan criteria. Applications for the installation of a Large-Scale Solar Energy System shall be reviewed by the Zoning Enforcement Officer and referred, with comments, to the Town Planning Board for its review and action, which can include approval, approval on conditions, and denial.
 - 1) All solar Energy Systems shall be designed by a NYS licensed architect or licensed engineer and installed in conformance with the applicable International building Code, International Fire Prevention Code and National Fire Protection Association (NFPA) 70 Standards, and National Electric Code.
 - 2) All solar collectors must be located in compliance with DEC and federal flood plain regulations and specifications as they pertain to waterways, waterbodies and designated wetlands.
- B. Special Use Permit Application Requirements. For a special permit application, the Special Use Permit application is to be used as supplemented by the following provisions.

- 1) If the property of the proposed project is to be leased, legal consent between all parties, specifying the use(s) of the land for the duration of the project, including easements and other agreements, shall be submitted.
- 2) Plans showing the layout of the Solar Energy System signed by a Professional Engineer or Registered Architect shall be required.
- 3) The equipment specification sheets shall be documented and submitted for all photovoltaic panels, significant components, mounting systems, and inverters that are to be installed.
- 4) Property Operation and Maintenance Plan. Such plan shall describe continuing photovoltaic maintenance and property upkeep, such as mowing and trimming.
- 5) Decommissioning Plan. To ensure the proper removal of Large-Scale Solar Energy Systems, a Decommissioning Plan shall be submitted as part of the application. Compliance with this plan shall be made a condition of the issuance of a Special Use Permit under this Section. The Decommissioning Plan must specify that after the Large-Scale Solar Energy System can no longer be used, it shall be removed by the applicant or any subsequent owner. The plan shall demonstrate how the removal of all infrastructure and the remediation of soil and vegetation shall be conducted to return the parcel to its original state prior to construction. The plan shall also include an expected timeline for execution. A cost estimate detailing the projected cost of executing the Decommissioning Plan shall be prepared by a Professional Engineer or Contractor. Cost estimations shall take into account inflation. Removal of Large-Scale Solar Energy Systems must be completed in accordance with the Decommissioning Plan. If the Large-Scale Solar Energy System is not decommissioned after being considered abandoned, the municipality may remove the system and restore the property and impose a lien on the property to cover these costs to the municipality.

C. Special Use Permit Standards.

- 1) Height. Large-Scale Solar Energy Systems shall adhere to the height requirements of the underlying zoning district.
- 2) Setbacks. Large-Scale Solar Energy Systems shall adhere to the setback requirements of the underlying zoning district. In addition, a minimum 50' setback shall be maintained between any adjoining residence and a large-scale solar energy system.
- 3) Lot Coverage. A Large-Scale Solar Energy System that is ground-mounted shall not exceed 75 percent lot coverage of the lot on which it is installed. Only surface area covered by Solar Panels shall be included in calculation of total lot coverage.
- 4) Fences. If a Large-Scale Solar Energy Systems is to be enclosed by fencing, warning signs with the owner's contact information shall be placed on the entrance and perimeter of the fencing. The fencing shall be reviewed and approved by the Town Planning Board. The fencing and the system may be further screened by any landscaping needed to avoid adverse aesthetic impacts.

- 5) Screening. All large scale Solar Energy Systems shall have the least visual effect practical on the environment, as determined by the Planning Board. Based upon site specific conditions, including topography, existing structures and roadways, reasonable efforts shall be made to minimize visual impacts by preserving natural vegetation, and providing landscape screening to adjacent residential properties, public roads and from public sites known to include important views or vistas. Screening should minimize the shading of solar collectors. Appurtenant structures such as inverters, batteries, equipment shelters, storage facilities, transformers, should be screened from adjoining residences.
- 6) Signage. Warning signs with the owners contact information shall be placed on the entrance and perimeter of the fencing. Solar equipment shall not be used for displaying any advertising. All signs, flags, streamers or similar items, temporary or permanent, are prohibited on solar equipment except: (a) manufacturer's or installer's identification; (b) appropriate warning signs and placards; (c) signs that may be required by a federal agency; and (d) signs that provide a 24 hour emergency contact phone number and warn of danger.
- 7) Glare. Solar panels shall be placed and arranged such that reflected solar radiation or glare shall not be directed onto adjacent buildings, properties, or roadways.
- 8) Noise. Noise producing equipment such as substations and inverters shall be located to minimize noise impacts on adjacent "non-participating" properties. A Noise Assessment pursuant to NYS DEC guidance document Assessment and Mitigating Impact shall be required.
- 9) Access. A road shall be provided to assure adequate emergency and service access. Maximum use of existing roads, public or private, shall be made. Access Roads shall be gated at the point of connection with public roadways.
- 10) The Town Planning Board may impose conditions on its approval of any Special Use Permit under this Section in order to enforce the standards referred to in this Section or in order to discharge its obligations under the State Environmental Quality Review Act (SEQRA).

7. Abandonment

Solar Energy Systems are considered abandoned after 24 months without electrical energy generation and must be removed from the property. Applications for extensions are reviewed by the Town Planning Board for a period of 6 months. The site shall be restored to its original condition within one year of abandonment determination.

8. Solar Rights

- A. Pursuant to Chapter 263 of New York Town Law, all parcels within the Town of Orleans shall be permitted to enjoy access to direct sunlight.
- B. No structure shall be constructed or vegetation installed that limits direct solar access greater than 50 percent of the ground surface of adjoining lots to less than 6 hours on any day of the year.

9. Enforcement

Any violation of this Solar Energy Law shall be subject to the same civil and criminal penalties provided for in the zoning regulations of the Town of Orleans.

10. 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.