Land Use Law Center Gaining Ground Information Database

Topic: Solar Energy; Zoning

Resource Type: Regulations New Jersey State: **Jurisdiction Type:** Municipal

Municipality: Township of Delaware

2011 Year:

Rural; Suburban Community Type - applicable to:

Township Title: Delaware Ordinance

> #2011-06LU: An Ordinance Supplementing and Amending the Land Use Ordinance Township of Delaware by

Permitting Solar Energy Systems

Document Last Updated in Database: June 6, 2018

Abstract

The town of Delaware, New Jersey provides specific lot-size requirements based on the type of solar facility. Ground-mounted Minor Solar or PV Energy Facility or Structure must be located on lots of at least one acre gross, while Major Solar or PV Energy Facility or Structure must be located on lots of at least twenty acres gross.

Resource

See separate attached PDF.

DELAWARE TOWNSHIP ORDINANCE #2011-06LU

AN ORDINANCE SUPPLEMENTING AND AMENDING THE LAND USE ORDINANCE OF THE TOWNSHIP OF DELAWARE BY PERMITTING SOLAR ENERGY SYSTEMS. #2011-06LU

WHEREAS, it is the purpose of this ordinance to promote the safe, effective and efficient use of solar energy systems to reduce the on-site consumption of utility-supplied electricity; and

WHEREAS, the Township Committee of the Township of Delaware, County of Hunterdon and State of New Jersey has determined the following:

- 1. Solar energy is an abundant, renewable, and nonpolluting energy resource;
- 2. Converting solar rays to electricity will reduce our dependence on nonrenewable energy resources, and decrease air and water pollution that results from the use of conventional energy sources;
- 3. Solar energy systems also enhance the reliability and quality of the power grid, reduce peak power demands, and help diversify the State's energy supply portfolio;
- 4. Solar energy systems make the electricity supply market more competitive by promoting customer choice; and

WHEREAS, New Jersey's Renewable Portfolio Standards (RPS) require each supplier/provider, as defined at N.J.A.C. 14:8-1.2, that sells electricity to retail customers in New Jersey to provide a percentage of their retail electricity sales from renewable energy sources, 7.4 percent as of June 1, 2010, and increasing to 22.5 percent by June 1, 2021, and

WHEREAS, a purpose of the Municipal Land Use Law (NJSA 40:55D-2.n) is "to promote utilization of renewable energy sources", and

WHEREAS, the Township Committee finds that it is necessary to standardize and streamline the requirements for solar panels so that this clean, renewable energy resource can be utilized in a cost-effective and timely manner in our municipality.

NOW, THEREFORE, BE IT ORDAINED by the Township Committee of the Township of Delaware that the Revised General Ordinances of the Township of Delaware are hereby amended as follows:

SECTION 1.

The Land Use Ordinance of the Township of Delaware, Section 1:5, "Definitions," is supplemented by adding the following definitions:

MINOR SOLAR OR PHOTOVOLTAIC ENERGY FACILITY OR STRUCTURE. A fuel cell, solar or photovoltaic panel or system of panels for the collection of energy and conversion to electrical energy, which is located on the power beneficiary's premises; is designed and intended primarily to offset up to 110% of the beneficiary's requirements for energy consumption on site as documented through the submission of power company electricity usage bills or another form of documentation acceptable to the Delaware Township Zoning Officer; and is secondary to the beneficiary's use of the premises for other lawful purposes.

MAJOR SOLAR OR PHOTOVOLTAIC ENERGY FACILITY OR STRUCTURE. A system of fuel cells, solar or photovoltaic panels and equipment for the production of energy that is not a minor photovoltaic energy facility of structure.

SECTION 2.

The Land Use Ordinance of the Township of Delaware, Section 3:5.2(A)(8) (accessory uses in the A-1 zone), Section 3:6.2(A)(8) (accessory uses in the A-2 zone) and Section 3:7.2B (accessory uses in the C-1 zone) are supplemented by adding the following to the list of permitted accessory uses in those zones:

Roof-mounted or ground-mounted Minor Solar or Photovoltaic Energy Facilities and Structures, provided the requirements of Section 3:1.23 are met.

SECTION 3.

The Land Use Ordinance of the Township of Delaware, Section 3:8.2(B) (accessory uses in the residential section of the V-1 zone; and by reference from Section 3:8A.2(C), accessory uses in the VE zone), and Section 3:8.3(B) (accessory uses in the commercial section of the V-1 zone), are supplemented by adding the following to the list of permitted accessory uses in each of those zones:

Roof-mounted Minor Solar or Photovoltaic Energy Facilities and Structures, provided the requirements of Section 3:1.23 are met.

SECTION 4.

The Land Use Ordinance of the Township of Delaware, Section 3:9.2(B) (accessory uses in the residential section of the V-2 zone) and Section 3:9.3(B) (accessory uses in the commercial section of the V-2 zone), are supplemented by adding the following to the list of permitted accessory uses in each of those zones:

Roof-mounted Minor Solar or Photovoltaic Energy Facilities and Structures, provided the requirements of Section 3:1.23 are met.

SECTION 5.

The Land Use Ordinance of the Township of Delaware, Section 3:13 (Regulations Applying to the V-3 Residential District), Subsection 2 (Development Standards), is supplemented by adding the following new Paragraph S:

S. Roof-mounted Minor Solar or Photovoltaic Energy Facilities and Structures are permitted as accessory structures in the zone, provided the requirements of Section 3:1.23 are met.

SECTION 6.

The Land Use Ordinance of the Township of Delaware, Section 3:1, "Regulations Applying to All Zones," is supplemented by adding the following requirements for roof-mounted and ground-mounted Minor Solar or Photovoltaic Energy Facilities and Structures:

3:1.23, Minor Solar or Photovoltaic Energy Facilities and Structures.

A. Roof-mounted.

- 1. <u>No roof-mounted Minor Solar or Photovoltaic Energy Facilities or Structures shall be installed on a non-conforming structure.</u>
- 2. A roof-mounted Minor Solar or Photovoltaic Energy Facility or Structure shall be mounted parallel to the roof angle and shall not exceed a height of 12" above the edge of the roof line or above the highest point of the roof surface or structure.
- 3. A roof-mounted Minor Solar or Photovoltaic Energy Facility or Structure that is to be mounted on a flat roof may be angled to achieve maximum sun exposure but shall not exceed 5 feet above the roof.
- 4. <u>In no instance shall any part of a roof-mounted Minor Solar or Photovoltaic Energy Facility or Structure extend beyond the roof edge.</u>
- 5. All exterior electrical or plumbing lines must be painted a color scheme that matches as closely as reasonably possible the color of the structure and adjacent materials.

6. An external disconnect switch shall be provided, and the owner must file a map with the Fire and Police Departments clearly showing where the disconnect switch is located.

B. Ground-mounted.

- 1. A ground-mounted Minor Solar or Photovoltaic Energy Facility or Structure shall be located on lots of one acre gross or more and shall not exceed 20% of lot coverage.
- 2. A ground-mounted Minor Solar or Photovoltaic Energy Facility or Structure shall comply with all principle building setbacks in the applicable zone.
- 3. A ground-mounted Minor Solar or Photovoltaic Energy Facility or Structure shall not exceed 12 feet in height.
- 4. All power transmission lines from a ground-mounted Minor Solar or Photovoltaic Energy Facility or Structure to any building, structure or utility connection shall be located underground.
- 5. <u>Inverter noise shall not exceed 40dBA at the property line.</u>
- 6. Roadways within the site shall not be constructed of impervious materials and shall be designed to minimize the extent of roadways constructed and soil compaction.
- 7. An external disconnect switch shall be provided, and the owner must file a map with the Fire and Police Departments clearly showing where the disconnect switch is located.

SECTION 7.

The Land Use Ordinance of the Township of Delaware, Section 3:5.2(B) (conditional uses in the A-1 zone), Section 3:6.2(B) (conditional uses in the A-2 zone) and Section 3:7.2(C) (conditional uses in the C-1 zone), are supplemented by adding the following to the list of permitted conditional uses in the zone:

Major Solar or Photovoltaic Energy Facilities and Structures, provided the requirements of Section 4:18 are met.

SECTION 8.

The Land Use Ordinance of the Township of Delaware, Article IV, "Conditional Uses," is supplemented by adding the following new subsection setting forth the conditions under which Major Solar or Photovoltaic Energy Facilities and Structures may be constructed:

4:18, Major Solar or Photovoltaic Energy Facilities and Structures

- 1. <u>All Major Solar or Photovoltaic Energy Facilities and Structures shall be ground-mounted.</u>
- 2. Any commercial farm or any farmland assessed property seeking to install a Major Solar or Photovoltaic Energy Facility or Structure shall comply with the requirements of the State Agricultural Development Committee, including any relevant Agricultural Management Practice.
- 3. A Major Solar or Photovoltaic Energy Facility or Structure shall be located on lots of 20 acres gross or greater.
- 4. <u>A Major Solar or Photovoltaic Energy Facility or Structure shall not exceed 20% lot coverage.</u>
- 5. A Major Solar or Photovoltaic Energy Facility or Structure shall comply with the setback and screening requirements in Table 4:18.22.
- 6. <u>A Major Solar or Photovoltaic Energy Facility or Structure shall not exceed 20 feet in height.</u>
- 7. <u>All mechanical equipment shall comply with the setback requirements in Table 4:18.22.</u>
- 8. <u>All mechanical equipment and inverters shall be fenced by an 8 foot fence.</u> Barbed or razor wire and electrified fencing is not permitted.
- 9. A sign not to exceed 2.25 square feet shall be attached to the fence adjacent to the main access gate and shall list the facility name, owner and phone number.
- 10. A landscaped buffer, if required pursuant to Table 4:18.22, shall be provided around all mechanical equipment and solar panels to provide screening from adjacent residential properties and Township, County and State roads and shall consist of a variety of native, drought-resistant evergreen plants. The minimum landscape buffer shall provide a minimum of 75% opacity at time of planting. Such screening shall have a height at time of planting equal to the maximum height of the solar panels or mechanical equipment. Refer to Section 11:12.1.D.5 for a list of preferred plantings.
- 11. A Maintenance Guarantee pursuant to Section 14:4.3 shall be required for the landscape buffer.
- 12. All power transmission lines to any building, other structure and/or utility connection shall be located underground.
- 13. <u>Inverter noise shall not exceed 40dBA at the property line.</u>

- 14. Roadways within the site shall not be constructed of impervious materials and shall be designed to minimize the extent of roadways constructed and soil compaction.
- 15. All panels shall have natural ground cover under and between the rows.
- 16. A Major Solar or Photovoltaic Energy Facility or Structure shall be designed to comply with all storm water, grading and soil disturbance regulations of the Land Use Ordinance.
- 17. A Major Solar or Photovoltaic Energy Facility or Structure shall provide emergency vehicle access to all components.
- 18. The electrical disconnect switch shall be clearly identified and unobstructed, and the owner must file a map with the Fire and Police Departments clearly showing where the disconnect switch is located.
- 19. In addition to standard checklist items pursuant to Article 10 of the Land Use Ordinance required for an application to be deemed complete, minor and major site plan applications shall depict the following:
 - a. <u>Location of proposed and existing overhead and underground utility and transmission lines.</u>
 - b. <u>Location of any proposed or existing substations, inverters or transformers.</u>
 - c. Description of how the energy generated by the facility will be connected to the electrical distribution or transmission system or the electrical system of the intended energy user.
 - d. <u>Description of any necessary upgrades or modifications to existing</u> substations or the necessity for new substations.
 - e. <u>Location of all proposed landscape buffers and sight lines from roads and adjacent properties.</u>
 - f. A geological report identifying the depth to bedrock, soil characteristics, and recommendations for foundation supports, if required.
 - g. A "Glint and Glare Study" shall be provided to demonstrate that the panels are located and installed so that the sum of glare is directed away from an adjoining property or public rights of way.
- 20. The use of lead acid batteries shall not be permitted except as standby power supplies for control equipment.

- 21. All applications shall be accompanied by a decommissioning plan to be implemented upon abandonment, or cessation of activity, or in conjunction with removal of the Major Solar or Photovoltaic Energy Facility or Structure. Prior to issuance of a building permit, the owner or operator of the facility or structure shall post a performance bond or other suitable guarantee in a face amount of not less than one hundred fifty (150) percent of the estimated cost, as determined by the Township Engineer, to ensure removal of the facility or structure in accordance with the decommissioning plan described below. The form of the guarantee must be reviewed and approved by the Township Engineer and Township Attorney, and the guarantee must remain in effect until the system is removed. Review of the guarantee by the Township Engineer and Township Attorney shall be paid from an escrow established by the applicant. Prior to removal of a Major Solar or Photovoltaic Energy Facility or Structure Solar Energy System a demolition permit for removal activities shall be obtained from the Delaware Township construction official.
 - a. If the applicant ceases operation of the Major Solar or Photovoltaic Energy Facility or Structure for a period of 18 months, or begins but does not complete construction of the project within 18 months after receiving final site plan approval, the applicant will submit a decommissioning plan that ensures that the site will be restored to a useful, non-hazardous condition without delay, including but not limited to the following:
 - i. Removal of above ground and below ground equipment, structures and foundations.
 - ii. Restoration of the surface grade and soil after removal of equipment.
 - iii. Re-vegetation of restored soil areas with native seed mixes, excluding any invasive species.
 - iv. The plan shall include a timeframe for the completion of site restoration work.
 - b. In the event that construction of the Major Solar or Photovoltaic Energy Facility or Structure has been started but is not completed and functioning within 18 months of the issuance of the final site plan the Township Zoning Officer (or such other official as is designated by the governing body) may notify the operator and/or the owner to complete construction and installation of the facility within 180 days. If the owner and/or operator fails to perform, the Township official may notify the owner and/or operator to implement the decommissioning plan. The decommissioning plan must be completed within 180 days of notification by the Township official.
 - c. Upon cessation of activity of a fully constructed Major Solar or Photovoltaic Energy Facility or Structure for a period of 1 year, the Township Zoning Officer (or such other official as is designated by the governing body) may notify the owner and/or operator of the facility to

- implement the decommissioning plan. Within 180 days of notice being served, the owner and/or operator can either restore operation equal to 80% of approved capacity, or implement the decommissioning plan.
- d. If the owner and/or operator fails to fully implement the decommissioning plan within the 180 day time period and restore the site as required, the Township may, at its own expense provide for the restoration of the site in accordance with the decommissioning plan and may in accordance with the law recover all expenses incurred for such activities from the defaulted owner and/or operator. The cost incurred by the Township shall be assessed against the property, shall become a lien and tax upon said property, shall be added to and become a part of the taxes to be levied and assessed thereon, and enforced and collected with interest by the same officer and in the same manner as other taxes.
- 22. All Major Solar or Photovoltaic Energy Facilities and Structures shall comply with the setbacks and screening requirements for solar panels and mechanical equipment set forth in the following Table:

Table 4:18.22

System Height	Size of solar panel footprint	Minimum setback to existing adjacent residence	Minimum setback to property line or public roadway	Required Screening
Up to 2 feet	Up to 1 acre	200 feet	100 feet	Not required
Up to 10 feet	Greater than 1 acre up to 10 acres	300 feet 400 feet	150 feet 300 feet	Required Not Required
Up to 20 feet	Greater than 10 acres	300 feet 500 feet	300 feet 400 feet	Required Not required

SECTION 9.

The Land Use Ordinance of the Township of Delaware, Article XIV, "Fees for Development Applications, Affordable Housing Development Fees, Performance and Maintenance Guarantees and Inspection Fees," is amended and supplemented by adding the following escrow requirements for Major Solar or Photovoltaic Energy Facilities and Structures:

14:1.4. <u>Subdivision and Variance Application</u> Review Escrow Fees. The following <u>subdivision and variance application</u> review escrow fees are hereby required and shall be in addition to site plan review fees when site plan approval is also required.

K. Major Solar or Photovoltaic Energy Facilities and Structures -- \$7, 500.00.

SECTION 10.

The Land Use Ordinance of the Township of Delaware, Article XV, "Fee Schedule," is supplemented by adding the following fees for Major Solar or Photovoltaic Energy Facilities and Structures:

15:2, Application Fees, Miscellaneous.

E. Major Solar or Photovoltaic Energy Facilities and Structures -- \$5,000.

SECTION 11.

Repealer. All ordinances and resolutions, or parts thereof, inconsistent with this Ordinance, are hereby repealed.

SECTION 12.

Severability. If any section, paragraph, subsection, clause or provision of this Ordinance shall be adjudged to be invalid, such adjudication shall apply only to the section, paragraph, subsection, clause or provision so adjudged and the remainder of this Ordinance shall be deemed valid and effective.

SECTION 13.

This ordinance may be renumbered for codification purposes.

SECTION 14.

Effective Date. This Ordinance shall take effect immediately upon its passage and publication, as required by law.

ATTEST:	
	Kenneth J. Novak, Mayor

Judith A. Allen, RMC Township Clerk July 11, 2011 Published 7/28/11

PLEASE TAKE NOTICE that the Delaware Township Committee approved the above ordinance on first reading at its Regular Meeting held on July 11, 2011. It will be considered on second reading for final adoption and will have a public hearing at a Regular Meeting beginning at 8:00 p.m. on August 8, 2011 at the Delaware Township Municipal Bldg., 570 Rosemont Ringoes Rd. (County Rt. 604), Sergeantsville, NJ. At that time an opportunity will be given for all interested citizens to be heard.