

Article **XX**. Shall an ordinance entitled “2023 Amendments to the Zoning Ordinance of the Town of Casco Regarding Solar Energy Systems” be enacted?

(The proposed ordinance is available for review and inspection at the Town Clerk’s Office and will be available at the Town Meeting.)

2023 AMENDMENTS TO THE ZONING ORDINANCE OF THE TOWN OF CASCO REGARDING SOLAR ENERGY SYSTEMS

The Zoning Ordinance of the Town of Casco shall be amended as follows (additions are underlined and deletions are ~~struck out~~):

1. Amend Article 2, Section 215-2.1, Word usage and definitions, as set forth below:

ARTICLE 2: DEFINITIONS

• • •

KILOWATT (kW)

A unit for measuring power that is equivalent to 1,000 watts.

MEGAWATT (MW)

A unit for measuring power that is equivalent to one million watts, or 1,000 kilowatts.

NAMEPLATE CAPACITY

The maximum rated output of A/C electric power production of the solar energy system.

SOLAR ENERGY SYSTEM

A device or structural design feature, a substantial portion of which is intended for the collection, and distribution of solar energy. Solar energy systems are subject to the dimensional standards contained §§ 215-5.35 and 215-5.36 of this Code, as applicable and as may be amended, but are not considered buildings for purposes of calculating maximum building coverage.

SOLAR ENERGY SYSTEM, GROUND-MOUNTED

An active solar energy system that is structurally mounted to the ground and is not roof-mounted.

SOLAR ENERGY SYSTEM, GROUND-MOUNTED, AREA

The total amount of disturbed ground area necessary for the proper installation and maintenance of a ground-mounted solar energy system. This figure is inclusive of, among other things, the total area of all ground-mounted solar energy equipment, all areas enclosed by a perimeter fence, and the total area of all driveways and access ways.

SOLAR ENERGY SYSTEM, GROUND-MOUNTED, LARGE-SCALE

A ground-mounted solar energy system whose total area is greater than 1,500 square feet but not greater than 30 acres and/or that generates a nameplate capacity of 1 MW or greater.

SOLAR ENERGY SYSTEM, GROUND-MOUNTED, SMALL-SCALE

A ground-mounted solar energy system whose total area is less than 1,500 square feet, and/or that generates a nameplate capacity of less than 20 kW. Small-scale ground-mounted solar energy systems may only be used to generate electricity that will be consumed on-site.

SOLAR ENERGY SYSTEM, ROOF-MOUNTED

A solar energy system that is mounted on the roof of a building or structure.

SOLAR PANEL

A device used for the direct conversion of sunlight into useable solar energy, including electricity or heat.

SOLAR-RELATED EQUIPMENT

Items including a solar photovoltaic cell, solar panel, module, or array, or solar hot air or water collector device panels, lines, pumps, mounting brackets, framing and possibly foundations or other structures used or intended to be used for the collection of solar energy.

2. Amend Article 4, Section 215-4.5, Village District (V), as set forth below:

§ 215-4.5 Village District (V)

• • •

B. Permitted Uses

- (1) The following uses are permitted:

• • •

(g) Solar energy system, roof-mounted.

3. Amend Section 215-4.6, Residential District (R), as set forth below:

§ 215-4.6 **Residential District (R)**

• • •

B. Permitted Uses

(1) The following uses are permitted:

• • •

(h) Solar energy system, roof-mounted.

(2) The following require site plan review:

• • •

(s) Solar energy system, ground-mounted, small-scale.

(t) Solar energy system, ground-mounted, large-scale.

4. Amend Article 4, Section 215-4.7, Commercial District (C), as set forth below:

§ 215-4.7 **Commercial District (C)**

• • •

B. Permitted Uses

(1) The following uses are permitted:

• • •

(h) Solar energy system, roof-mounted.

• • •

(2) The following require site plan review:

• • •

(jj) Solar energy system, ground-mounted, small-scale.

(kk) Solar energy system, ground-mounted, large-scale.

5. Amend Article 5, Performance Standards, as set forth below:

§ 215-5.35 **Solar energy systems: ground-mounted large-scale.**

A. Submission Requirements. Applicants seeking site plan review for a large-scale ground-mounted solar energy system shall submit, in addition to all other application materials required by § 215-74, the following:

- (1) A description of the owner of the solar energy system, the operator if different, and details of the qualifications and track record of one or both to run the facility;
- (2) If the operator will be leasing the land, a copy of the agreement (minus financial compensation) clearly outlining the relationship between the owner, operator, and any other third party;
- (3) A copy of the agreement and schematic details of the interconnection arrangement with the applicable transmission system, clearly indicating which party is responsible for the various requirements;
- (4) A description of the components of the solar energy system to be installed, including make and model;
- (5) A construction plan and timeline, identifying known contractors, site control, and anticipated on-line date;
- (6) An operations and maintenance plan, including site control and projected operating life of the solar energy system. Such a plan shall include measures for maintaining safe access to the installation. Additionally, such plans shall include efforts to promote beneficial flora and fauna, as well as a commitment to not use pesticides and herbicides;
- (8) An emergency management plan for anticipated hazards, which shall be reviewed and approved by the Fire Chief prior to the Planning Board's issuance of final site plan approval;
- (9) A stormwater management plan, prepared and certified by a licensed Maine engineer, that demonstrates that stormwater from the solar energy system will not cause an unreasonable increase in stormwater runoff on to existing properties when compared to pre-development conditions on the site;
- (10) A pre-development noise measurement for the site as performed by a qualified professional;
- (11) Proof of financial capacity to construct and operate the proposed solar energy system;
- (12) If the proposed solar energy system has a total area equal to or greater than three (3) acres, a decommissioning plan, including:

- (a) A description of the trigger for implementing the decommissioning plan. There is a rebuttable presumption that decommissioning is required if 10% or less of the solar energy system's permitted capacity is generated for a continuous period of twelve (12) months, or if the ground lease for the solar energy system has expired for a period of at least three (3) months. The Applicant may rebut the presumption by providing evidence, such as a force majeure event that interrupts the generation of electricity, that although the project has not generated electricity for a continuous period of twelve (12) months, the solar energy system has not been abandoned and should not be decommissioned.
- (b) A description of the work required to physically remove all components of the solar energy system, including associated foundations, buildings, cabling, electrical components, and any other associated facilities to the extent they are not otherwise in or proposed to be placed into productive use. All earth disturbed during decommissioning must be revegetated.
- (c) An estimate of the total cost of decommissioning, including an itemization of estimated major expenses and the projected costs of measures taken to minimize or prevent adverse effects on the environment during the implementation of the decommissioning plan. The itemization of major costs may include, but is not limited to, the cost of the following activities: panel removal, foundation and building removal, stabilization of soil, transmission corridor removal, and road infrastructure removal.
- (d) Demonstration in the form of a performance bond, surety bond, letter of credit, or other form of financial assurance as may be acceptable to the Town, that upon the end of the useful life of the solar energy system the Applicant will have the necessary financial assurance in place for 125% of the estimated total cost of decommissioning, subject to a review of such cost by the Code Enforcement Officer. The financial assurance shall include a provision granting the Town the ability to access the funds and property and perform the decommissioning if the facility is abandoned or the Applicant or subsequent responsible party fails to meet their obligations after reasonable notice, to be defined in the agreement and approved by the Planning Board.
- (13) A landscaping plan for the entirety of the proposed development.

(14) An erosion control plan consistent with erosion and sedimentation control best management practices established by the Maine Department of Environmental Protection.

B. Performance Standards. In addition to all other standards listed in § 215-7.5 of the Code, a site plan review application for a ground-mounted, large-scale solar energy system may only be approved by the Planning Board upon demonstrated compliance with the following standards:

(1) Dimensional Standards. All solar-related equipment shall be set back at least fifty (50) feet from all lot lines. The maximum height of the solar energy system, as measured from existing, pre-development grade, shall be fifteen (15) feet. In no circumstances may any solar energy system exceed 30 acres in total area.

(2) Interconnection Agreement. The Applicant shall demonstrate that it has a legally enforceable interconnection agreement with a transmission and distribution utility. If necessary, the Planning Board may grant site plan approval subject to the condition of approval that an executed interconnection agreement is received by the Town by a date certain.

(3) Required Signage. A sign consistent with the provisions of § 215-5.28 of this Code, as may be amended, shall be installed at every point of ingress and egress from the subject property and at least every 100 feet around the subject property's perimeter. Such signage shall identify the owner/operator of the solar energy facility and shall provide a 24-hour emergency contact phone number. Said signs may not be used for advertising in any way.

(4) Fencing. All properties containing large-scale, ground-mounted solar energy systems shall be fully enclosed by a perimeter fence. Perimeter fences shall be of an agricultural style (not chain-link); shall be a minimum of seven (7) feet in height; and shall maintain a continuous boundary with securely gated points of access for personnel, vehicles, and maintenance equipment. The bottom of such fences shall be lifted six (6) inches above ground level to allow for wildlife passage.

(5) Landscaped Buffer. A landscaped buffer may be required and shall be maintained around the entire perimeter of subject property. Existing vegetation on the subject property may be used to satisfy this requirement. The solar energy system shall, to the greatest practical extent, be screened from abutting properties and, to the greatest practical extent, shall not be viewable from Hackers Hill, or from any great pond or similarly-regulated body of water.

- (6) Glare. The solar energy system shall be situated, to the satisfaction of the CEO, so as to mitigate concentrated glare at the property boundaries of the site.
- (7) Lighting. Onsite lighting, to the extent proposed, shall be consistent with § 215-5.12 of this Code, as may be amended.
- (8) Utility Connections. All connections between the solar energy system and the electrical grid shall be underground, to the greatest practical extent, as determined by the Planning Board.
- (9) Removal. When any portion of the solar energy system is removed, any earth disturbance must be graded and re-seeded.

C. Decommissioning.

- (1) Any ground-mounted solar energy system that has reached the end of its useful life, ceases to generate power, or has been abandoned, shall be removed in accordance with the provisions of this section. Decommissioning shall occur consistent with a decommissioning plan submitted to and approved by the Planning Board as part of the initial approval process, if required by this Article.
- (2) All solar-related equipment shall be removed to the satisfaction of the Code Enforcement Officer within 180 days of operations ceasing. The owner or operator shall notify the Code Enforcement Officer by certified mail, return receipt requested, of the proposed date of discontinued operations and plans for removal.
- (3) Absent a notice of a proposed date of decommissioning, a ground-mounted solar energy system shall be considered abandoned when it fails to generate 10% or less of its permitted capacity for a continuous period of twelve (12) months, without first having received the consent of the Code Enforcement Officer. In any event, the final determination of abandonment of a ground-mounted solar energy system shall be made by the Code Enforcement Officer.
- (4) Decommissioning shall consist of:

 - (a) Physical removal of all solar-related equipment, structures, equipment, security barriers, and transmission lines from the site;
 - (b) Disposal of all solid and hazardous waste in accordance with local, state, and federal law and regulation; and
 - (c) Stabilization or re-vegetation of the site as necessary to minimize erosion.

- (5) If a solar energy system is not fully decommissioned within 180 days of its abandonment or proposed date of decommissioning, the Town of Casco may use all or some of the performance guarantee and any and all legal means necessary to cause an abandoned ground-mounted solar energy system to be completely removed.

§ 215-5.36 Solar energy systems: ground-mounted, small-scale.

A. Performance Standards.

- (1) Area. The total area of a small-scale, ground-mounted solar energy system may not exceed 1,500 square feet or 10% of the subject property's total lot area, whichever is less.
- (2) Dimensional standards. Small-scale ground-mounted solar energy systems must be sited, to the greatest practical extent, in a location out of view from neighboring properties and roadways. In no event may such solar energy systems be located less than 50 feet from any boundary line. The maximum height of such a solar energy system, as measured from existing grade, shall be fifteen (15) feet.
- (3) Glare. The solar energy system shall be situated, to the satisfaction of the CEO, so as to mitigate concentrated glare at the boundaries of the subject property.

§ 215-5.37 Solar energy systems: roof-mounted

A. Submission Requirements.

- (1) A structural report from a qualified professional, demonstrating that the Applicant's roof is structurally capable of supporting the collateral load of the solar energy system.

B. Performance Standards.

- (1) Glare. Siting of the roof-mounted solar energy system shall eliminate concentrated glare onto nearby structures and roadways.
- (2) Safety. The roof-mounted solar energy system shall not present any unreasonable safety risks, as outlined in IRC Section 324, including but not limited to:
- (a) Weight load;
- (b) Wind resistance; and
- (c) Ingress or egress in the event of a fire or other emergency.

- (3) Height. Solar energy systems are subject to structure height limitations for principal structures within the applicable zoning district.

DRAFT