ARTICLE XVIII - SOLAR ENERGY GENERATING SYSTEMS[4]

Footnotes:

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Editor's note— Ord. No. 02-02242020, adopted March 2, 2020, set out provisions intended for use as art. XVIII, §§ 60-1425—60-1432. To preserve the style of this Code, at the editor's discretion, these provisions have been included here as art. XVIII, §§ 60-1501—60-1508.

Sec. 60-1501. - Definitions.

Abandonment means the date at which any part of a solar energy generating system has been out of service for a continuous period of 12 months.

Airport overlay zone means the area that lays within a two-nautical-mile radius of the centerline of the nearest runway of the Auburn Lewiston Airport.

Dual-use systems means solar energy systems where photo-voltaic panels are attached to structures or buildings without any impact on the primary use (e.g. photo-voltaic panels on structures cantilevered over parked cars or benches; solar panels located on a piece of infrastructure such as a sign or light).

Ground mounted solar energy generating system (also known as free-standing solar energy systems) means a solar energy system that is structurally mounted to the ground. The panels may be stationary or revolving and of any size.

Operations and maintenance plan means a plan outlining the operations and maintenance of a solar energy system, to include safety measures and procedures for maintenance.

Roof mounted and building integrated solar energy generating systems means a solar energy system in which solar panels are mounted on top of the roof of a structure either as a flush-mounted system or as modules fixed to frames which can be tilted toward the south at an optimal angle. The definition also includes a solar energy system that is an integral part of a principal or accessory building and include, but are not limited to, photovoltaic or hot water systems that are contained within roofing materials, windows, walls, skylights and awnings.

Solar access means space open to the sun and clear of overhangs or shade, including orientation of streets and lots to the sun, so as to permit the use of active and/or passive solar energy generating systems on individual properties.

Solar energy generating system means a complete assembly consisting of one or more solar collectors and associated mounting hardware or equipment, intended to provide for the collection, storage and distribution of solar energy for heating or cooling, electricity generation, or solar/thermal hot water systems, these may be ground-mounted, dual-use, roof-mounted and building-integrated systems.

Surface area means the total airspace projected over the ground, footprint of accessways and any appurtenant structures associated with the solar energy generating system.

Total height of solar energy system means the total vertical distance as measured from the average elevation of the finished grade adjacent to the fixed base of the support structure, to the highest part of the system.

Total land area of the system means the total area of a parcel(s) physically occupied by the solar energy generating system installation.

Total rated capacity means the maximum rated output of electrical power production of the photovoltaic system in watts of direct current (DC).

(Ord. No. 02-02242020, 3-2-20)

Sec. 60-1502. - Purpose.

The purpose of this section is to allow for the construction and operation of private and public solar energy generating systems designed to produce energy for use on site or off site, by establishing appropriate standards to ensure safe, effective and efficient use of solar energy systems compatible with surrounding uses.

(Ord. No. 02-02242020, 3-2-20)

Sec. 60-1503. - Applicability.

This section shall apply to all solar energy generating systems except the following:

(1) Solar energy generating systems for municipal use.

(2) Building integrated and roof-mounted solar energy generating systems which are permitted by right in all zoning districts in accordance with applicable FAA regulations if within the airport overlay zone.

(3) Non-structural maintenance, like-kind repair or reconstruction of equipment, provided that it does not constitute an expansion of a solar energy generating system. For the purposes of this section, expansion of a solar energy generating system means a change in the total land area of the system or its associated equipment.

(4) Ground-mounted solar energy generating systems intended to satisfy the electricity needs of the principal use of the lot provided the owner or operator completes FAA requirements if within the airport overlay zone.

(Ord. No. 02-02242020, 3-2-2020)

Sec. 60-1504. - Administrative procedures.

(a) The installation of ground-mounted and dual-use solar energy generating systems or devices occupying greater than one acre in total land area shall be permitted by special exception in the industrial district and agriculture and resource protection district after approval by the planning board in accordance with the provisions of division 3 of article XVI of this chapter as well as the supplemental provisions described in these regulations.

(b) Unless subject to the provisions of subsection (a) of this section or listed as an exempt activity in section 60-1503, any other solar energy generating systems, including the replacement and repair of equipment, physical modifications to an existing and permitted solar energy generating systems provided they do not alter the total land area of the system and its associated equipment as defined under subsection 60-45(a) shall be permitted by right in the industrial district and agriculture and resource protection district and subject to review and approval in accordance with subsection 60-1506(b).

(Ord. No. 02-02242020, 3-2-2020; Ord. No. 04-05182020, 6-1-2020)

Sec. 60-1505. - Application requirements.

(a) *Solar energy generating systems permitted by special exception.* In addition to the submission requirements of site plan review, an application for a solar energy generating systems permitted as a special exception shall contain the following information:

(1) All solar energy generating systems permitted by special exception shall be subject to the special exception and site plan review procedures specified in article XVI, divisions 2 and 3 of this chapter.

(2) A narrative describing the proposed solar energy generating system, including an overview of the project; the project location; the total rated capacity of the solar energy system; dimensions of all components and respective manufacturers; and a description of associated facilities and how the system and associated facilities comply with the standards of this article.

(3) An accurate scaled site plan of the subject property showing the planned location of the proposed solar energy generating system and all associated facilities; property lines, adjoining streets and access; topographic contour lines; existing and proposed buildings; fencing; structures; potential shade from nearby trees and structures; vegetation; driveways, parking and curb cuts on the subject property; specifications for all proposed electrical cabling/transmission lines, accessor equipment and landscaping, including the tallest finished height of the solar collectors and name, address, phone number and signature of the project proponent, as well as co-proponents or property owners, if any, the names, contact information and signature of any agents representing the project proponent. The site plan shall show any proposed off-site modifications to provide grid connections, access the installation, or to maintain the proposed solar energy system.

(4) Information on any connections to the grid including evidence of meeting the local electric utility's transmission and distribution interconnection requirements (this may be a condition of approval if a copy of the application for interconnection with the electric utility provider is submitted).

(5) Documentation that the solar generation equipment has been approved under the UL certification program and that the system complies with all applicable local, state and federal codes/regulations with the standards regarding signal interference. Electrical component and connection information shall be in sufficient detail to allow for a determination that it meets state electrical codes.

(6) All parcels within a two-nautical-mile radius of the Auburn Lewiston Municipal Airport, as measured based on the runway centerline closest to the location in question, shall submit a solar glare hazard analysis tool (SGHAT) report, outlining solar panel glare and ocular impacts, for each point of measurement approved by the airport manager at the time of application to the planning board.

(Ord. No. 02-02242020, 3-2-2020)

Sec. 60-1506. - Approval.

(a) *Solar energy generating systems permitted by special exception.* The planning board is authorized to retain experts at the applicant's expense to evaluate technical information or conduct studies that it finds necessary in order to determine whether these standards will be met. In addition to the criteria in sections 60-1277 and 60-1336, the planning board shall consider the following standards:

(1) *Yard requirements.* The setbacks for solar energy generating system installations in the industrial district, including appurtenant structures and parking areas, shall be subject to the following yard requirements:

a. *Rear.* There shall be behind every structure associated with a solar energy generating system a rear yard having a minimum depth of 50 feet or 20 percent of the average depth of the lot, whichever is less.

b. *Side.* There shall be a distance of five feet between any structure associated with a solar energy generating system and the side property line, plus the side yard setback shall be increased one foot for every three feet or part thereof increased in street frontage over 60 feet to a maximum of 35 feet for side yard setback.

c. *Front.* There shall be in front of every structure associated with a solar energy generating system a front yard having a minimum depth of 35 feet or 15 percent of the average depth of the lot whichever is less. No front yard need be any deeper than the average depth of front yards on the lots next thereto on either side. A vacant lot or a lot occupied by a building with a front yard more than 35 feet shall be considered as having a front yard of 35 feet.

(2) *Lot coverage.* The paved, mounting block, or otherwise impervious areas of sites on which ground mounted solar energy systems are installed shall comply with the lot coverage standards as defined in section 60-579(2). For the purposes of this section, photovoltaic cells, panels, arrays, and inverters shall not be considered impervious areas provided the soil underneath the collector is not compacted and remains vegetated in accordance with the standards applicable to vegetation established in Chapter 500, Appendix A(6) Permanent Stabilization.

(3) *Height regulations.* The total height of the solar energy generating system and all appurtenant structures, including but not limited to, equipment shelters, storage facilities, transformers, and substations shall not exceed 30 feet.

(4) *Technical and safety.* A copy of the as-built site plan for the solar energy generating system shall be provided to the local fire prevention officer. All means of shutting down the solar energy generating system shall be clearly marked.

(5) *Maintenance.* The owner or operator of the solar energy generating system shall maintain the facility in good condition. Proper maintenance of the facility means that it is operating as designed and approved. Maintenance shall include, but not be limited to, painting, structural repairs, repairing damaged panels and integrity of security measures. The solar energy generating system must be properly maintained and kept free from all hazards, including, but not limited to, faulty wiring, loose fastenings, being in an unsafe condition or detrimental to public health, safety or general welfare. Site access shall be maintained to a level acceptable by the local fire prevention officer for emergency response. The owner or operator shall be responsible for the cost of maintaining the solar energy generating system and any access road(s), unless accepted as a public way.

(6) *Glare.* Solar panels are designed to absorb (not reflect) sunlight and are generally less reflective than other varnished or glass exterior materials. However, solar panel placement should minimize or negate any solar glare impacting nearby properties or roadways, without unduly impacting the functionality or efficiency of the solar energy system. Parcels located within a two-nautical-mile radius of the Auburn Lewiston Municipal Airport, as measured based on the runway centerline closest to the location in question shall comply with subsection 60-1505(a)(6).

(7) *Visual impact.* An Applicant shall make reasonable efforts, as determined by the planning board, to minimize visual impacts associated with the installation of a solar energy generating system. The board shall consider the size, location and topography of the site, the characteristics of the surrounding property and the amount and type of development on said properties in determining the amount and type of screening and buffering that it deems appropriate.

(8) *Lighting.* Ground-mounted solar energy generating system lighting shall be consistent with local, state and federal law. Lighting of other parts of the installation, such as appurtenant structures, shall be limited to that required for safety and operational purposes, and shall be reasonably shielded from abutting properties. Where feasible, lighting of the solar energy system shall be directed downward and shall incorporate full cutoff fixtures to reduce light pollution.

(9) *Unbuilt areas.* Where possible, in unbuilt areas, solar energy generating system installations shall maintain the permeability of the ground. Clearing of natural vegetation shall be limited to what is necessary for the construction, operation and maintenance of the solar energy

generating system or as otherwise prescribed by applicable laws, regulations and bylaws/ordinances.

(10) *Operation and maintenance plan.* The owner or operator shall submit a plan for the operation and maintenance of ground-mounted and dual-use solar energy systems, which shall include measures for maintaining safe access to the installation, stormwater controls, as well as general procedures for operational maintenance of the installation.

(11) *Standard compliance.* All solar energy generating system installations shall be installed in compliance with the photovoltaic systems standards of the latest edition of the National Fire Protection Association (NFPA) 1, Fire Prevention Code. All wiring shall be installed in compliance with the photovoltaic systems standards identified in the latest edition of the National Electrical Code (NFPA 70).

(b) *Solar energy generating systems permitted by right.* An application for a solar energy generating system permitted by right shall require review and approval by the following departments: planning, engineering, fire, code enforcement, Auburn Lewiston Municipal Airport and a representative of Lewiston-Auburn 911 committee.

(Ord. No. 02-02242020, 3-2-2020; Ord. No. 04-05182020, 6-1-2020)

Sec. 60-1507. - Abandonment or decommissioning.

(a) *Abandonment and removal of ground mounted and dual use solar energy systems.*

(1) The owner or operator shall, at their expense, complete the removal of the solar energy system within six months of the end of the useful life of the solar energy system or within six months of the date of abandonment as defined in section 60-1501. The owner or operator shall notify the economic and community development department by certified mail of the proposed date of discontinued operations and plans for removal. decommissioning shall consist of:

a. Physical removal of all ground-mounted solar energy generating systems including solar photovoltaic installations, 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 waste disposal regulations.

c. Stabilization or re-vegetation of the site as necessary to minimize erosion. The economic and community development department, in conformance with applicable regulations, may allow the owner or operator to leave existing landscaping or specifically designated below-grade foundations in place in order to minimize erosion and disruption to vegetation.

(2) The city may revoke any approvals and/or pursue removal of the solar energy system at the owner or operator's expense in the following circumstances:

a. The solar energy system is not installed and functioning within 24-months from the date of approval under this ordinance; or

b. The solar energy system is at any time left in an unsafe condition in respect to federal, state or local safety standards (as determined by the city); or

c. The solar energy system has not been brought back to a safe condition/operation or removed from the site within the required timeframe; or

d. The solar energy system is defective or abandoned and has not been removed from the site within required timeframe.

(3) *Financial surety.* Before the start of construction, the owner or operator of a solar energy system shall provide a form of surety, either though escrow account, performance bond or letter of credit from a creditable financial institution, in an amount sufficient to cover the cost of

decommissioning in the event the city determines the solar energy system to be abandoned in accordance with subsection (a)(2) above. The financial guarantee shall include a provision granting and guaranteeing the city the authority to access the funds and property and perform the decommissioning should the facility be abandoned and the owner or operator fails to meet their obligations to remove the solar energy system. This amount shall be based upon a fully inclusive estimate of the costs associated with removal, prepared by a qualified engineer, and submitted to the planning board at the time of application. The amount shall include a mechanism for calculating increasing removal costs due to inflation.

(4) If the owner or operator of the solar energy generating system fails to remove the installation in accordance with requirements of this section within six months of abandonment of the end of the useful life or date of abandonment, the city retains the right to use the performance guarantee and all other available means to cause an abandoned, hazardous or decommissioned solar energy generating system to be removed.

(Ord. No. 02-02242020, 3-2-2020; Ord. No. 04-05182020, 6-1-2020)

Sec. 60-1508. - Appeals.

(a) An appeal from a decision of the planning board on a solar energy generating system permitted by special exception shall be in accordance with the provisions of division 5 of article XVI of this chapter.

(b) An appeal from a decision of the staff review committee on a solar energy generating system permitted by right shall be to the board of appeals. The board of appeals is authorized to retain experts at the applicant's expense to evaluate technical information or conduct studies that the board of appeals determines may be necessary in order to render a decision on the appeal.

(Ord. No. 02-02242020, 3-2-2020)