

SECTION XIX

SOLAR PHOTOVOLTAIC ARRAY FIELDS

Section 1 – Purpose

The purpose of this Section XIX is to regulate solar photovoltaic array fields by providing standards for the placement, design, construction, operation, monitoring, modification, reconfiguration, and removal of such installations that address public safety, minimize impacts on scenic, natural and historic resources, and provide adequate financial assurance for the eventual decommissioning of such installations.

Section 2 – Applicability

No solar photovoltaic array field shall be constructed, installed, operated, modified, reconfigured, removed, or decommissioned, except in accordance with this Section XIX.

This Section XIX shall not apply to any roof-mounted solar photovoltaic installation or any ground-mounted arrangement of solar photovoltaic panels that does not meet the definition of a solar photovoltaic array field.

Section 3 – General Requirements

Solar photovoltaic array fields shall be subject to the following general requirements:

A. Dimensional Requirements

Setbacks: Front, side, and rear setbacks shall be 50 feet from all lot lines.

Minimum Lot Size: 2 acres.

B. Signs

Any solar photovoltaic array field site shall include a sign that identifies the site operator and provides a 24-hour emergency contact phone number. Solar photovoltaic panels shall not be used for the display of any advertizing except for reasonable identification of the manufacturer and/or the site owner and operator. All signs shall comply with the Town's General and Zoning Bylaws.

C. Emergency Services

The owner or operator of a solar photovoltaic array field shall provide to the Fire Chief a copy of the electrical schematic plan for the solar photovoltaic array, including all means of shutting down the solar photovoltaic array. Upon request, the owner or operator shall cooperate with the Fire Chief in developing an emergency response plan.

The owner or operator shall provide to the Fire Chief the name, address, and telephone number(s) of an emergency contact person or persons to be accessible to the Fire Chief 24 hours per day throughout the operating life of the solar photovoltaic array. Any change in such information shall be provided to the Fire Chief by the effective date of such change.

D. Site Maintenance

Any solar photovoltaic array field site and all structures located thereon shall be maintained in good condition. Maintenance shall include, but not be limited to, painting, structural repairs, and integrity of security measures. Site access shall be maintained to a level acceptable to the Fire Chief. The owner or operator shall be responsible for all maintenance costs.

E. Decommissioning

Any solar photovoltaic array field that has reached the end of its useful life, or has been abandoned as set forth in Subsection 3.F hereof, shall be decommissioned. The owner or operator shall notify the Planning Board by certified mail of the proposed date of discontinued operations and plans for decommissioning, which shall consist of:

1. Physical removal of all structures, equipment, security barriers, transmission lines, and other components of the solar photovoltaic array field not later than 150 days after the date of discontinued operations.
2. Disposal of all solid and hazardous waste in accordance with local, state, and federal waste disposal regulations.
3. Stabilization and/or re-vegetation of the site as necessary to minimize erosion, provided that landscaping and designated below-grade foundations may be left in place in order to minimize erosion and disruption to vegetation.

F. Abandonment

Absent written notice of a proposed date of decommissioning or written notice of extenuating circumstances from the owner or operator of the site, a solar photovoltaic array field shall be considered abandoned when it fails to operate for more than one year without the written consent of the Planning Board. If the owner or operator of the site fails to remove all structures, equipment, security barriers, transmission lines, and other components of the solar photovoltaic array field within 150 days of abandonment or the proposed date of decommissioning, the Town may enter the site and perform any required decommissioning work, in accordance with Subsection 3.E hereof, at the expense of the site owner.

Section 4 – Site Plan Review

No building permit for a new or modified solar photovoltaic array field shall be issued until the site owner has obtained site plan approval from the Planning Board, as provided herein.

A. General Requirements

All plans and maps shall be prepared, stamped and signed by a Professional Engineer or Registered Land Surveyor licensed to practice in Massachusetts.

B. Required Documents

An application for site plan review shall include 8 copies and one original of the following documents:

1. A Site Plan showing:
 - a. Property lines and physical features, including roads, for the project site.
 - b. Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, screening vegetation and structures.
 - c. Blueprints or drawings of the solar photovoltaic array field signed by a Professional Engineer licensed to practice in the Commonwealth of Massachusetts showing the proposed layout of the system and any potential shading from nearby structures.
 - d. One or three line electrical diagram detailing the solar photovoltaic installation, associated components, and electrical interconnection methods, with all National Electrical Code compliant disconnects and overcurrent devices.
 - e. Documentation of the major system components to be used, including, but not limited to, the PV panels, mounting system, and inverter.
 - f. The direction, intensity, and effect of solar glare to abutting properties.
 - g. Any drainage impacts and any necessary of stormwater controls.
2. The name, address, and contact information of:
 - a. Property owner;
 - b. Applicant, if not the owner;
 - c. Site operator, if not the owner or applicant;
 - d. Solar photovoltaic array field installer;
 - e. Any agents representing the owner, applicant, site operator, or installer.

3. Evidence of site control sufficient to allow for the construction and operation of the proposed solar photovoltaic array field.
4. Evidence that the Holden Municipal Light Department has approved the solar photovoltaic array field as proposed.
5. An operation and maintenance plan, which shall include measures for maintaining safe access to the site, storm water controls, as well as general procedures for operational maintenance of the site.
6. Zoning district designation for the parcel(s) of land comprising the project site (submission of a copy of a Zoning Map with the parcel(s) identified as suitable for this purpose).
7. Description of proposed financial surety, either through escrow account, bond or otherwise, to cover the cost of removal in the event the Town must remove the solar photovoltaic array field as set forth in Subsection 3.F hereof. The applicant shall submit a fully inclusive estimate of the costs associated with removal, prepared by a qualified engineer, along with a mechanism for calculating increased removal costs due to inflation. Municipal or state-owned solar photovoltaic array fields shall be exempt from this requirement.

Upon request by the applicant, the Planning Board may waive any documentary requirements, as it deems appropriate.

C. Additional Submission Requirements

An application for site plan review shall also include the following:

1. Certified List of Abutters showing the names and addresses of each party entitled to notice, pursuant to M.G.L. c.40A, §11.
2. Two stamped addressed envelopes for each party shown on the Certified List of Abutters.
3. Filing fee of \$200.

D. Review Procedures

Upon receipt of an application for site plan review, the Planning Board shall transmit copies of the application to the Fire Chief, the Director of the Department of Growth Management, and the General Manager of the Holden Municipal Light Department. The Planning Board shall provide notice pursuant to M.G.L. c.40A, §11, and hold a public hearing on the application within 65 days from the date of filing. Approval of the site plan application shall require a majority vote of the Planning Board. A decision on the application shall be made within 90 days following the date of the public hearing, and a written decision shall be filed with the Town Clerk within 14 days after the vote of the Planning Board.

E. Approval Criteria

The Planning Board shall approve an application for site plan review if it finds the following:

1. The clearing of natural vegetation will be limited to what is necessary for the construction, operation and maintenance of the solar photovoltaic array field.
2. Sufficient buffering (including, but not limited to, evergreen vegetation, stockade fencing, and landforms) will be provided to screen the solar photovoltaic array field and appurtenant structures from view from all adjacent streets and properties, and wherever possible, structures will be clustered to avoid adverse visual impacts.
3. Appurtenant structures on the site, if any, will be architecturally compatible with each other.
4. Solar glare to abutting properties will be mitigated through the use of sufficient buffering (including, but not limited to, evergreen vegetation, stockade fencing, and landforms) and/or the repositioning of solar photovoltaic panels.
5. Exterior lighting will be limited to that required for safety and operational purposes, and where feasible, exterior lighting will be shielded from abutting properties, directed downward, and will incorporate full cut-off fixtures to reduce light pollution.
6. Reasonable efforts will be made to place all utility connections from the solar photovoltaic array field underground, unless there are no negative aesthetic impacts associated with aboveground utility connections or unless underground installation is prohibited by the Holden Municipal Light Department.
7. Financial surety has been provided sufficient to cover the cost of removal in the event the Town must remove the solar photovoltaic array field, as set forth in Subsection 3.F hereof.

In issuing a site plan approval, the Planning Board may impose any reasonable conditions that are consistent with the approval criteria and deemed necessary to carry out the purpose of this Section XIX.