

WORKING DRAFT- January 12, 2023

Solar Energy Systems Zoning Amendment

Add the following definitions to Article II:

SOLAR ENERGY SYSTEM (SES) - A structure composed of multiple components that relies upon sunshine as an energy source and is capable of collecting, distributing, and/or storing energy. A Solar Energy System may be:

- a) Roof-mounted Solar Energy System - A Solar Energy System that is attached to the roof of a building. It is not a separate structure.
- b) Tracking Solar Energy System - A Solar Energy System that is ground-mounted and moves to track the motion of the sun.
- c) Fixed Solar Energy System - A Solar Energy System that is fixed to the ground and does not have tracking capabilities.

Solar energy systems may be further defined by size as follows:

- a) Small Solar Energy System - A Solar Energy System that is either roof-mounted or ground-mounted with a cumulative footprint of 2,000 square feet or less. This footprint area is measured by totalling the land area occupied by all of the components of the solar collection system including, but not limited to mounting equipment, panels and ancillary parts of the system. The horizontal area of the panels will be used to measure the area of a Small Solar Energy System. The area of the footprint of a pedestal for a tracking system or racks for a fixed system shall be excluded from this area calculation.

- b) Medium Solar Energy System - A Solar Energy System that is ground-mounted with a cumulative footprint larger than 2,000 square feet but occupying no more than 43,560 square feet. This footprint area is measured by totalling the land area occupied by all of the components of the solar energy system including, but not limited to mounting equipment, panels and ancillary parts of the system. In addition, the footprint also includes the land area in between components of the system.
- c) Large Solar Energy System - A Solar Energy System that is ground-mounted with a cumulative footprint larger than 1 acre up to a maximum of 7 acres. This footprint area is measured by totalling the land area occupied by all of the components of the solar collection system including, but not limited to mounting equipment, panels and ancillary parts of the system. In addition, the footprint also includes the land area in between components of the system.

For the calculation of size of a Solar Energy System, the measurement of cumulative footprint does not include fences and equipment housed in a pre-existing structure or access roads not within the system boundaries.

GROUP NET METERED SYSTEM - A Solar Energy System that supplies energy or energy credits to the host lot and/or a lot or lots other than the one on which the system is located.

Add to section 4.42:

D. Solar Energy Systems (see Article XIV)

Add a new Article XIV – Solar Energy Systems:

Article XIV SOLAR ENERGY SYSTEMS

14.10 Purposes. The purposes of this article are to:

- a) Encourage the use of Solar Energy Systems (SES) and group net metering opportunities;
- b) Define the authority of the Town of Lyme to regulate SES;
- c) Provide standards and requirements for the operation, siting, design, appearance, construction, modification, and removal of SES;
- d) Protect the historical, cultural, natural, and aesthetic resources of the Town of Lyme and property values therein by minimizing the adverse impacts of SES; and
- e) Locate SES in a manner which promotes the safety, health, welfare, and quality of life of the residents of the Town of Lyme and those who visit.

14.20 Small Solar Energy Systems. Small Solar Energy Systems are allowed as an accessory use in all districts if they meet the following conditions:

- a) if a roof-mounted SES modifies the building footprint or height of the structure on which it is mounted, the resulting structure must conform to the dimensional controls of the Lyme Zoning Ordinance;
- b) the highest point of any part of a ground-mounted SES shall be no more than 21 feet measured vertically from the ground;
- c) a ground-mounted SES in the Lyme Common District or the Lyme Center District shall not be located in the area between the public road and any side of the building facing a public road; and
- d) the combined structures on the lot must conform with the footprint and lot coverage standards for the district in which it is located.

14.30 Medium Solar Energy Systems. Medium Solar Energy Systems may be principal or accessory uses in the Rural, Commercial or Skiway Zoning Districts, and shall require a Site Plan Review and a Conditional Use Permit.

14.40 Large Solar Energy Systems. Large Solar Energy Systems may be principal or accessory uses in the Large Solar Energy District (See 14.50b) or the Skiway District, and shall require a Site Plan Review and a Conditional Use Permit.

14.50 Requirements for a Conditional Use Permit. Medium, Large Solar Energy Systems require a Conditional Use Permit which may be granted if the following criteria are met:

- a) Medium Solar Energy Systems are not permitted in any location that requires upgraded utilities on a designated Scenic Road.
- b) Large Solar Energy Systems are only allowed in the Skiway District or the Large Solar Energy District which comprises the area along Rt.10, bounded on the north by the Lyme Common Zoning District and to the south by the border with Hanover. Large Solar Energy Systems must be located within 1900 feet of the Route 10 right of way as measured from the edges of Rt.10 on either side.
- c) Medium and Large Solar Energy Systems may be allowed only if at least 60% of the power generated by each SES will be supplied, per contractual arrangement, to properties in Lyme.
- d) Solar Energy Systems shall be sited in a visually unobtrusive manner as viewed from nearby properties and public right of ways.
- e) Solar Energy Systems larger than 7 acres are not allowed.
- f) Medium and Large Solar Energy Systems shall be located a minimum setback distance of fifty feet from all exterior property lines and existing public rights of way.
- g) A Large Solar Energy System may not be located on a site which has an area of over an acre that has been clear cut within the last 5 years prior to submission of a complete Site Plan Review.

- h) All power and communication lines (both on- site and off- site) serving a Ground-mounted Solar Energy System shall be buried underground up to the point of interconnection with grid components, unless the owner/operator is able to demonstrate the presence of technical or physical constraints (e.g. shallow bedrock, water courses, etc.) that may interfere with the ability to bury lines in certain areas.
- i) The Planning Board may impose conditions on any SES project subject to Conditional Use review to the extent the Board concludes such conditions are desirable to minimize any adverse effect of the proposed use on adjoining properties, and to preserve the intent of the purposes of the Zoning Ordinance as set forth in section 1.20.

14.60 Submission Requirements for a Conditional Use Permit.

- a) Applications for Conditional Use Permits shall be the same as that used for Site Plan review, except that submission of plans for traffic impact, parking, septic system may be waived by the Planning Board.
- b) The Applicant shall supply manufacturer's specifications for all proposed equipment.
- c) The Applicant shall supply a statement detailing potential glare onto abutting properties and nearby roadways estimating the interaction of sun to panel angle, time of year and visibility locations.
- d) The Applicant shall supply estimates of any equipment noise on the site based on equipment specification materials. If after installation, the Planning Board determines that noise from the SES is a nuisance, the Applicant may be required to implement sound mitigation features to address the nuisance.

- e) All Large Solar Energy Systems and associated equipment must be removed once the system has been out of use for 12 consecutive months. The Applicant shall submit a decommissioning plan to the Planning Board as part of the application for a Conditional Use Permit. This plan shall include provisions for the removal of all structures, foundations and electrical transmission components, including all below grade components, and the restoration of soil and vegetation within eighteen months of the system being out of use.
- f) The Planning Board may require that the owner or operator post a bond, letter of credit, escrow account or some other surety for the decommissioning.

Amend Table 4.1 to include the Solar Energy Systems District.

TABLE 4.1

Table 4.1

	Lyme Center	Lyme Common	Commercial District	Rural District	East Lyme	Skiway	Mountain & Forest	Holt's Ledge	Solar Energy Systems District
AGRICULTURE									
Agriculture	Y	Y	Y	Y	Y	Y	Y	Y	N/A
Agritourism	SPR	SPR	SPR	SPR	SPR	SPR	SPR	SPR	N/A
Forestry	Y	Y	Y	Y	Y	Y	Y	Y	N/A
RESIDENTIAL									
Single Dwelling	Y	Y	Y	Y	Y	N	Y	Y	N/A
Multi-Dwelling Conversion	SPR	SPR	SPR	SPR	N	N	N	N	N/A
Affordable Housing	SEE ARTICLE XI								N/A
Lot Size Averaging	Y	Y	Y	Y	Y	N	Y	Y	N/A
Senior Housing	N	SPR	N	N	N	N	N	N	N/A
INSTITUTIONAL									
Government Use	SPR	SPR	SPR	SPR	SPR	N	SPR	SPR	N/A
Institution	SPR	SPR	SPR	SPR	SPR	N	SPR	SPR	N/A
BUSINESS									
Clinic	SPR	SPR	SPR	SPR	SPR	N	SPR	SPR	N/A
Cottage Industry	SPR	SPR	SPR	SPR	SPR	N	SPR	SPR	N/A
Day Care	SPR	SPR	SPR	SPR	SPR	N	SPR	SPR	N/A
Excavation	N	N	Y	Y	Y	Y	Y	N	N/A
Home Occupation	Y	Y	Y	Y	Y	N	Y	Y	N/A
Light Manufacturing or Processing	N	N	SPR	N	N	N	N	N	N/A
Lodging Accommodations	SPR	SPR	SPR	SPR	N	N	N	N	N/A
Office Building, New	N	N	SPR	N	N	N	N	N	N/A
Office/Studio/Restaurant Conversion	SPR	SPR	SPR	SPR	SPR	N	SPR	N	N/A
Outdoor Recreation Activities	Y	Y	Y	Y	Y	Y	Y	Y	N/A
Planned Development	N	SPR	SPR	N	N	N	N	N	N/A
Restaurant	N	N	SPR	N	N	N	N	N	N/A
Retail Use	SPR	SPR	SPR	N ¹	N ¹	N ¹	N ¹	N	N/A
Sawmill	N	N	N	SPR	SPR	SPR	SPR	SPR	N/A
Service Use	SPR	SPR	SPR	N	N	N	N	N	N/A
Skiing Facilities	N	N	N	N	SPR	SPR	N	SPR	N/A
Solar Energy Systems									
Small Solar Energy Systems	Y	Y	Y	Y	Y	Y	Y	Y	Y
Medium Solar Energy Systems	N	N	SD	SD	N	SPR/CU	N	N	SPR/CU
Large Solar Energy Systems	N	N	SD	SD	N	SPR/CU	N	N	SPR/CU

Y - Use permitted by right, provided that all other requirements of Federal, State, and Town laws, rules, ordinances, and regulations have been met. A permit is not required for agricultural, forestry, or home occupation uses.

SPR -Use permitted by Site Plan Review provided that all other requirements of Federal, State, and Town laws, rules, ordinance, and regulations have been met and approval has been granted by the Planning Board.

N - Use not permitted.

SD – Allowable within the Solar Energy System District with Site Plan Review and Conditional Use Permit.

N/A - Not applicable to this district see underlying Zoning District.

¹ The retail sales of products resulting from accessory use are permitted in these districts.

CU - Conditional Use Permit Required.