



Town of Shelburne, Vermont

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TOWN OF SHELBURNE SOLAR ELECTRIC GENERATION FACILITY SITING STANDARDS ORDINANCE

The scale and siting of future solar electric generation facility installations in the Town of Shelburne and other Vermont communities raises concerns about the negative impacts that such facilities can have on the Town's residential neighborhoods and its scenic, natural, agricultural, and historic resources. As a result, the Shelburne Planning Commission has developed community siting standards for consideration by the municipality and the Public Service Board (PSB). These standards are intended to avoid and mitigate potential impacts of solar electric generation facility development, while promoting new installations in appropriate locations and achieving proportionality with respect to Shelburne's contribution to State-wide renewable energy targets.

Authority

This Ordinance is authorized and enacted pursuant to 24 V.S.A. §§ 2291(28), 4414(15), 30 V.S.A. § 248(b)(1)(B), and 24A V.S.A. § 147-1.6.

SOLAR ELECTRIC GENERATION FACILITY SITING AND DEVELOPMENT

Background

Electricity generation and transmission systems powered by solar energy are regulated by the PSB under 30 V.S.A. Section 248 (so-called Section 248 PSB proceedings). These include net-metered distributed energy installations, as well as commercial, utility-scale generation, transmission and distribution facilities. Pursuant to Section 248, the Shelburne Planning Commission, the Chittenden County Regional Planning Commission, and the Shelburne Selectboard will receive notice of a Certificate of Public Good (CPG) application for any such solar electric generation facility proposed to be located in Shelburne. In determining whether to provide a proposed solar electric generation facility project with a CPG, the PSB must give "*due consideration*" to the recommendations of the municipal and regional planning commissions, the Shelburne Selectboard, and the land conservation measures contained in Shelburne's Comprehensive Plan. *See 30 V.S.A. §248(b)(1).*

The PSB must also determine whether a proposed solar electric generation facility will have an "*undue adverse effect*" on aesthetics, historic sites, air and water purity, the natural environment, the use of natural resources, and the public health and safety, with due consideration having been given to the criteria specified in 10 V.S.A. § 1424a(d) (outstanding resource waters) and the Act 250 criteria set forth in 10 V.S.A. §6086(a)(1) through (8) and 9(K). *See 30 V.S.A. §248(b)(5).*

To determine whether a proposed solar electric generation facility will have an adverse impact on the considerations set forth as identified in §248(b)(5) above, PSB Rule 5.108(A) requires the PSB to conduct the so called "*Quechee analysis*" to assess whether a proposed solar electric generation project would have an adverse impact by virtue of being "out of character with its surroundings," and if so, whether the adverse impact qualifies as "undue." *See Rule 5.108(A).* The PSB therefore must consider "the nature of the project's surroundings, the compatibility of the project's design with those surroundings, the

suitability of the project's colors and materials with the immediate environment, the visibility of the project, and the impact of the project on open space." See *Rule 5.108(A)(1)*.

A solar electric generation facility project's location, size, and visibility, together with the context of the surrounding land uses, will be relevant in the PSB's consideration of whether the proposed project would have an undue adverse impact. Among other things, the *Quechee* analysis requires the PSB to consider whether the proposed project would violate a "clear written community standard". Therefore, the effective participation of the Town of Shelburne in the PSB's Section 248 review process requires the development of specific community standards in order to ensure that local conservation and development objectives are appropriately considered and weighed by the PSB in connection with its review of a CPG application for a solar electric generation facility project pursuant to Section 248. Toward that end, the Shelburne Planning Commission has developed the following specific community standards for the siting and development of a solar electric generation facility in the Town of Shelburne.

SHELBURNE COMMUNITY STANDARDS REGARDING SOLAR ELECTRIC GENERATION FACILITIES

Purpose

The purpose of these community standards is to regulate the development of solar electric generation facilities in the Town of Shelburne. These policies, goals and requirements should also be considered in undertaking municipal solar electric generation facility projects and programs, in enacting or updating the Town of Shelburne's zoning bylaws and the Town of Shelburne's Comprehensive Plan to address solar electric generation facility development and in connection with the review of new or upgraded solar electric generation facilities and systems by the Town of Shelburne and in Section 248 PSB proceedings.

Goals

Promote protection of scenic viewsheds in Shelburne by promoting effective screening requirements to shield neighboring properties, where possible, from direct visual connection with solar electric generation facilities.

Policies

1. New solar electric generation facility development in the Town of Shelburne must conform to adopted community standards for energy facility siting and design to receive municipal support or approval.
2. Encourage small-scale and appropriately sited development of renewable energy generation facilities. Such encouragement should consider, but not be limited to the prevention of:
 - a. Undue adverse visual impacts on adjacent properties, scenic corridors and Town of Shelburne view sheds;
3. The Town may participate before the PSB in Section 248 review of new and upgraded solar electric generation and transmission facilities as necessary to ensure that adopted community standards are given due consideration in proposed solar electric generation facility development.
4. The Town of Shelburne, in collaboration with the Chittenden County Regional Planning Commission, neighboring communities and utilities serving the Town, will participate in long-range utility planning to ensure that adopted Comprehensive Plan policies and written community standards are identified and considered in future renewable energy planning and development activities.

General Standards for Solar Electric Generation Facilities

The Town of Shelburne supports the following appropriately sited types of solar electric generation facility development. For purposes of this ordinance, "appropriately sited" shall be defined as renewable energy generation facilities which satisfy the site plan application and review process, as well as the setback, screening and related aesthetic standards described herein. *Small-scale* renewable energy projects are defined as those that generate up to 15 kilowatts (kW) of power. *Community-scale* renewable

energy projects generate greater than 15 kW up to 1 megawatt (Mw), and *utility-scale* renewable energy projects generate over 1 Mw. Small and community scale projects shall be considered *locally sourced*, meaning the energy produced by such facilities is produced and used in Vermont. Utility projects generate power that is available to the broader market. Generated kW power shall be measured in direct current (DC).

Designation of Municipal Body to Make Act 248 Recommendations

The Town of Shelburne Selectboard is hereby designated as the authorized municipal body to make recommendations in connection with any applications subject to proceedings under 30 V.S.A. §248 to which this ordinance may apply.

Use Classification

A small-scale solar electric generation facility intended solely to serve an individual residence or business shall be considered an accessory structure allowed in all zoning districts in which accessory structures are allowed.

Larger scale renewable energy generation projects, including community-scale and utility-scale solar electric generation facilities; transmission and distribution lines; group, net-metered facilities; substations; and other projects requiring a CPG from the PSB shall be reviewed by the Selectboard utilizing the standards and requirements set forth herein prior to or contemporaneously with the PSB consideration of such project.

Prioritization

The Town of Shelburne will support the following types of renewable energy development in order of priority:

- Increased system capacity through state, utility and municipally-supported energy efficiency and conservation programs.
- Individual and small-scale renewable and distributed energy projects.
- In-place upgrades of existing renewable electric generation facilities, including transmission and distribution lines and substations.
- New community-scale and renewable and distributed energy projects.

Natural and Scenic Resources

Land development in the Town of Shelburne is evaluated and sited so as to avoid and/or minimize impacts to the following natural and scenic resources as identified in Shelburne's Comprehensive Plan and Zoning By-Laws:

- Land in active agricultural use,
- Primary agricultural soils,
- Surface waters, wetlands and associated setback and buffer areas,
- Lakeshore setback and buffer areas,
- Historic districts, sites and structures (as listed in Vermont State Historic Register or elsewhere in applicable Town of Shelburne zoning districts),
- Scenic views and vistas (as identified in Shelburne Comprehensive Plan's Significant Views Map), and
- Conserved land on adjacent parcels.

Burial. Utility controls and on-site line connections shall be wireless or buried, except at the point of connection with distribution lines, and designed and located so as to minimize disruption to wildlife habitat, agricultural lands, and scenic areas.

Signs. Solar electric energy generation facilities and structures shall not be used for display or advertising purposes. Except for owner and manufacturer identifications and safety warnings that do not exceed three (3) square feet in total area, all signs are prohibited on all such structures. Signs shall not

be higher than 10 feet from the average grade of the surrounding ground to the highest point of the sign or supporting structure, whichever is higher.

Lighting. Solar electric generation facility lighting should be the minimum necessary for site monitoring and security, should be cast downward, and must not result in light trespass or glare on adjoining properties.

Access to Solar Electric Generation Facilities. Solar electric generation facilities shall be sited in a manner that avoids or, to the greatest extent physically feasible, minimizes the need for new and extended access roads and utility corridors. Facility access should be provided from existing access roads where physically feasible, and access roads and utility corridors should be shared wherever feasible. Identified impacts to public highways from solar electric generation facility construction, operation and maintenance, including highway improvements required to accommodate the facility, shall be mitigated by the developer.

Application Procedure

Applications for site plan review pursuant to this ordinance shall be received by the Shelburne Planning and Zoning Office, forwarded to the Town Manager, and directed to the Selectboard, which shall, when the application is deemed complete, consider the application at a regularly scheduled meeting. The applicant or the applicant's representative shall attend the meeting. The Selectboard shall render a decision within forty-five (45) days of the conclusion of the meeting at which the application is considered.

Site Plan Review For Solar Electric Generation Facilities.

Site Layout and Design. Sites planned for or intended to accommodate solar electric generation facility development, including the location of existing and planned commercial and net-metered generation facilities and utility corridors, shall submit to the Selectboard a site plan showing the proposed solar electric generation facility. In determining whether to issue a recommendation in support of or against a solar electric generation facility at the Public Service Board, the Selectboard shall ensure that the size, scale, arrangement and appearance of the proposed solar electric generating facility is compatible with its setting and context, and that the facility will not have an undue adverse aesthetic impact on site features or on adjoining properties or its surroundings. To achieve a positive recommendation from the Selectboard, the applicant may be required to meet conditions to ensure that the solar electric generation facility is compatible with its setting and context to obtain a positive recommendation from the reviewing board. To obtain a positive recommendation, the reviewing board may impose the following conditions:

- (a) The Selectboard may require increased setback distances from property lines or public rights-of-way in relation to the height, scale, massing or density of development, and landscaping or screening to mitigate the visual impacts of development.
- (b) Structures should be architecturally and visually compatible with historic structures on the site and in the vicinity of the development.
- (c) The Selectboard shall require the submittal of a visual impact analysis for community and utility-scale solar electric generation facility projects and may also require such an analysis for smaller projects where adverse aesthetic impacts are in question. The visual analysis shall address views from sensitive viewing areas and adjoining properties and shall explain measures taken by the developer to mitigate impacts of the project. Particular efforts should be made to prevent a project from becoming the focal point of scenic views.
- (d) Solar electric generation facilities with a generation capacity of greater than 100 kW shall not be located within the Village Overlay and Design Review District or on any of the properties set forth on Table 1.4.1 to the Shelburne Road Form-Based Overlay District.
- (e) The installation of solar electric generation facilities in the Village Overlay and Design Review District or on any of the properties set forth on Table 1.4.1 to the Shelburne Road

Form-Based Overlay District shall be done in accordance with current Secretary of the Interior's Standards for Rehabilitation.

Proposed Site Plan. The site plan of the entire solar electric generation facility site, indicating all improvements, including landscaping, utility lines, screening, and roads, at the same scale as or larger than the Existing Conditions Plan shall show the following:

- (a) Proposed facility location and any appurtenances. It shall indicate property boundaries and setback distances to the base(s) of the solar electric generation facility's platform and the nearest corners of each of the appurtenant structures to those boundaries, and dimensions of all proposed improvements.
- (b) Proposed spot elevations at the base of the proposed solar electric generation facility.
- (c) Proposed utilities, including distance from source of power, sizes of service available and required, locations of any proposed utility lines.
- (d) Any direct or indirect wetlands alteration proposed.
- (e) Detailed plans for drainage of surface and sub-surface water, to control erosion and sedimentation both during construction and as a permanent measure.
- (f) Plans indicating locations and specifics of proposed screening, landscaping, grading, ground cover, fencing, lighting, signs and additional information that may be required.
- (g) Site plans shall incorporate landscaping and screening which preserves and incorporates existing vegetation, is suited to existing site conditions, enhances development and features unique to the site, integrates the development and site with surrounding properties, and serves to buffer or screen the solar electric generation facility from neighboring properties or public rights-of-way.
- (h) The reviewing board may also require a three (3) year landscaping plan.

Landscaping and Screening Requirements For Solar Electric Generation Facilities.

General. Ground mounted solar electric generation facilities shall be screened from view from public roads and sidewalks. Screening shall be treated as an integral part of the Section 248 application review process. The use of landscaping and natural screening materials is encouraged, and may be required to lessen the visual impact of such facilities. The use of existing vegetation and natural landscaping materials is the preferred method of screening. Applicants shall ensure that any required new landscaping will preserve the character of the existing neighborhood (i.e. vegetation should be indigenous to the area, large enough to do well, and planted at intervals in keeping with other neighborhood foliage). Existing site vegetation shall be maintained to the greatest extent practicable. The Reviewing board may require undertakings for the care and maintenance of plantings, including removal of dead or diseased trees or shrubs. The Selectboard may approve fencing, if it determines the aforementioned preferred methods are impractical. The Selectboard may require increased setbacks, buffers, landscaping, screening or building design modifications to mitigate the physical and visual impacts of ground-mounted solar electric generation facilities on adjoining properties, and to maintain the historic appearance and integrity of historic structures. Landscaping plans shall be prepared by a landscape architect, master gardener, nursery professional, arborist, professional landscape designer, or other qualified landscape professional.

Ground mounted solar electric generation facilities shall be screened from adjacent roads and adjoining residential uses. Vegetation used for this purpose may include both conifers for winter screening and deciduous plants to provide summer shade and to create an overhead canopy. At planting, conifers shall be at least five (5) feet tall and deciduous trees shall be at least 2.5 inches in diameter at breast height, and shall be planted no closer than 40 feet from the traveled portion of the adjoining road so as to prevent winter salt kill. Screening may also include features such as berms, low walls or fences, where such features are incorporated into an overall landscape design. Screening may also be achieved by placing smaller buildings between the solar electric generation facility and the road or adjoining residential uses.

It is not expected that screening will create an impenetrable visual barrier with respect to vehicular traffic, pedestrian or other travelers on the road or lands adjacent to the solar electric generation facility. Rather, for those temporarily traveling through the area, the objectives of screening are:

1. To create a pleasant streetscape,
2. To create a visual edge for the public space along the street, and
3. To prevent unobstructed views of the solar electric generation facility.

It is expected that screening will create a year-round visual barrier screening the ground mounted solar electric generation facility from residences within 500 feet of the project. No more than 20% of the solar electric generation facility shall be visible from any part of a residence and its immediate surrounding ½ acre, nor shall more than 60% of the solar electric generation facility be visible from outbuildings or other residential property within 500 feet of the solar electric generation facility. Solar electric generation facilities and accessory structures are to be designed and constructed of materials, colors, and textures that blend into the surrounding natural or built environment to the extent feasible.

Plantings shall be of sufficient height, density and maturity to achieve the aforementioned screening standard from the day of planting, and shall be maintained so as to provide the appropriate screening standard set out above. Maintenance of landscaping and screening shall be the responsibility of the property owner. Dead, dying or diseased plants shall be promptly removed and replaced as soon as possible, consistent with good landscape planting practices.

The screening standards set forth above shall be achieved entirely within the property containing the solar electric generation facility, and not on "borrowed" lands or lands of any affected property owner. Whenever possible, healthy native vegetation shall be preserved and native plantings shall be used and incorporated into the screening to prevent an artificial look. Clear cutting of the property is specifically discouraged.

Severability

If any portion of this ordinance is held unconstitutional or invalid by a competent court or entity with jurisdiction, the remainder of this ordinance shall not be affected.

Adopted July 26, 2016

By the Shelburne Selectboard

Gary von Stange, Chair

Colleen Parker, Vice-Chair

John D. Kerr

Josh Dein

Jerry Storey