

## **SECTION 29**

### **SOLAR ENERGY SYSTEMS**

#### **29.1 PURPOSE**

The purpose of this section is to define appropriately cited solar energy systems (SES) as an inherently beneficial use for all residential and commercial properties. Solar energy systems preserve the Village's public health, safety, and welfare by reducing the carbon footprint of each property by creating a clean, renewable energy source. Despite its inherent qualities, this section will restrict the use of solar energy systems so as to promote their compatibility with existing and future land uses as described in the Village's Comprehensive Plan.

#### **29.2 CODE COMPLIANCE REQUIRED**

No solar energy system shall be erected, constructed, maintained, or operated in a zoning district except in conformance with the following regulations.

#### **29.3 GENERAL STANDARDS FOR SOLAR ENERGY SYSTEMS**

- 29.3-1** SESs shall be installed under an appropriate building permit and in compliance with Village adopted building codes.
- 29.3-2** No SEEs shall be constructed over existing easements or onsite wastewater systems (e.g. septic systems).
- 29.3-3** SESs over one-half acre in area require approval of the Federal Aviation Administration. Approval shall be in the form of a letter from the FAA showing no impact following review of the planned system. Request for review shall be on an FAA Form 7460-1, Notice of Proposed Construction or

Alteration, which may be submitted online at the FAA's website.

**29.3-4** Roof and building mounted SES's shall comply with applicable height and setback standards for the appropriate use district as an integral part of the building structure. The collector surface and mounting devices for roof-mounted SESs shall not extend more than 12 inches beyond the roof edge or exterior perimeter of the principal structure.

**29.3-5** Ground-mounted SESs shall comply with applicable height, setback, and lot coverage standards for the appropriate use district and Sections 13 and 15 of this Zoning Ordinance. The Community Services Director may approve use of eight-foot chain link fencing for security purposes in Class 2 and 3 systems if it does not adversely impact adjacent properties.

**29.3-6** For purposes of determining compliance with maximum lot coverage of buildings and structures standards of the applicable zoning district, the total horizontal projection area of all ground-mounted and free-standing solar collectors, including solar photovoltaic cells, panels, arrays, inverters, and solar hot air or water collection devices, shall be considered 10 percent impervious coverage if the soil under the collector is not compacted and is maintained in vegetation and the equipment is oriented to drain precipitation to the pervious surface.

A. For a tracing array or other moveable SESs, horizontal projection area shall be calculated at a 33 degree tilt angle.

B. Portions of SESs mounted over existing impervious surfaces shall not be included in the lot coverage area computation.

C. If vegetative cover is used within the previous coverage area, the area must be adequate to ensure the health and proper growth of the vegetation.

29.3-7 When more than one roof-mounted or ground-mounted system is located on a parcel, the SESs shall be reasonably uniform in style and color as judged by the Village's Planning and Zoning Commission.

29.3-8 Written evidence shall be provided at the time a building permit is requested that the utility company has been notified of the customer's intent to install a SES.

#### 29.4 ADDITIONAL STANDARDS FOR SOLAR ENERGY SYSTEMS, CLASS 2 & 3

29.4-1 If lighting is provided, it shall be shielded and downcast such that the light does not spill onto any adjacent parcel or the night sky. No solar collectors shall have supplemental external lighting.

29.4-2 Landscape buffering

A. SESs located at least 150 feet from an adjacent public street right of way, residentially zoned property, or residential use shall not require screening.

B. SESs located less than 15 feet from an adjacent public street right of way, residentially zoned property, or residential use shall require landscaping as prescribed in Section 26.4, Perimeter Landscaping, of this ordinance. In this application, the perimeter landscaping may be placed at the perimeter of the parcel, the perimeter of the SES, or any location in between.

29.4-3 Have approval of the project from the electrical distribution agency serving the site before a building permit is issued.

29.4-4 Decommissioning Plan

A. A decommissioning plan signed by the party responsible for decommissioning and the landowner (if different) acceptable to the zoning official and addressing the following shall be submitted with the construction permit application.

i. Conditions upon which decommissioning will be initiated.

ii. Removal of all non-utility-owned equipment, conduit, structures, fencing, roads, and foundations.

iii. Restoration of property to the conditions prior to the development of the SES or to a condition similar to the existing conditions around the SES at the time of decommissioning.

iv. Time frame for completion of decommissioning activities.

v. Copy of any agreement with the land owner regarding decommissioning.

vi. Plans for updating the decommissioning plan.

B. Before the final inspection, provide a copy of the completed agreement showing it was recorded with McHenry County against the parcel.

## **29.5 APPEARANCE STANDARDS**

29.5-1 No signs, advertising, or logos shall be permitted on or attached to any SES except for appropriate or required security and safety signage.

## **29.6 DISUSE/DISMANTLING**

Any SES that fails to comply with any law or ordinance of the Village of Lake in the Hills shall cease operating immediately upon receipt of notice of such non-compliance and shall be brought into compliance within 30 days of the mailing of such notice or shall be dismantled. Any SES that fails to comply with the above notice or ceases to operate for any six consecutive months will be declared abandoned. A notice to that effect shall be sent by certified mail to the property owner.

At the property owner's expense, an abandoned SES shall be dismantled and removed from the property on which it is located and the property shall be restored to its original condition within 60 days from the date of mailing the notice of abandonment.