To: Paul Luke, Chairman, Skokie Plan Commission  
From: Brian J. Augustine, Zoning Administrator and Permit Manager  
Case: 2023-06P: Zoning Chapter Amendment  
Solar panel changes

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**STAFF ANALYSIS**

As part of the Environmental Sustainability Plan, staff is reviewing various sections of the Zoning Ordinance to find ways to encourage sustainability. Part of the review focused on solar energy systems and ways the Village of Skokie could achieve a SolSmart Gold Level designation. SolSmart is a national designation program that recognizes communities that reduce local barriers to solar energy. The Gold Level designation is the highest level a local government can achieve.

During the review of Sec 118-72. - Solar energy systems it was noted that the zoning ordinance currently has barriers to solar on flat-roofed buildings. Staff conferred with a SolSmart representative and came up language that will remove these barriers.

It is recommended to add language that will allow for solar energy systems up to 10 feet above the existing roof or district height, whichever is less. This will accommodate installation on buildings that are at, under or potentially over the current district height maximum. A typical commercial solar panel is approximately 78 inches long, is installed at an approximate 45-degree angle and has about two feet of mounting equipment. This would result in the top of the panel typically being between 5 and 6 feet above a flat roof. Even if sizes or equipment changes in the future, staff feels the proposed 10-foot height would accommodate solar panels being installed now or in the near future.

The attached roof slope diagram shows examples of different sloped roofs. The proposed 10-foot height would only apply to flat roofs.

**STAFF RECOMMENDATION**

Staff recommends that the following sections of Chapter 118 Zoning of the Skokie Village Code be amended, with text to be added highlighted and text to be removed highlighted and stricken through in the attached draft ordinance.

ARTICLE IV. GENERAL PROVISIONS

...  
Sec. 118-72. - Solar energy systems.

(a) Roof-mounted solar energy system.

(1) Defined as a solar energy system that is structurally mounted to the roof of a building or structure.

(2) Permitted as an accessory structure within all zoning districts.

(3) On a pitched roof (2/12 pitch or greater) the height shall be no more than 15 inches above the highest point of a building's roof or 15 inches above the existing allowable building height in the district, whichever is lower in height. On a flat roof (under 2/12 pitch), the height shall be no more than 10 feet above the highest point of a building’s roof or 10 feet above the existing allowable building height in the district, whichever is lower in height.

(b) Ground-mounted solar energy system.

(1) Defined as a solar energy system that is structurally mounted to the ground and is not roof-mounted.

(2) Permitted as an accessory structure within all zoning districts.

(3) The structure height shall not exceed 8 feet in height.

(4) The structure shall meet setback requirements for accessory structures as per Section 118-60 of this chapter.

(5) The total area of all accessory structures shall not occupy more than 30% of the rear yard of residentially zoned properties.

(c) Electrical transmission lines. All on-site electrical transmission lines connecting a solar energy system to a building or to the electrical distribution system shall be located underground or within the building.

(d) Building permit required. A building permit is required for the construction or installation of a solar energy system.

ATTACHMENTS

1. Roof Slope Diagram
slope = rise/run

- **conventional slope** (4 in 12 and up)
  - rise = 4
  - run = 12

- **low slope** (2 in 12 to 4 in 12)
  - rise = 2
  - run = 12

- **flat** (0 in 12 to 2 in 12)
  - rise = 2
  - run = 12