

ORDINANCE NO. 2024-26

AN ORDINANCE AMENDING THE CODE OF ORDINANCES OF THE CITY OF VAN METER, IOWA, BY AMENDING PROVISIONS PERTAINING TO CHAPTER 165 ZONING CODE

Be It Enacted by the City Council of the City of Van Meter, Iowa:

SECTION 1. SECTION ADDED. Section 165.22 (9) is added to Chapter 165 Zoning Regulations of the Code of Ordinances of the City of Van Meter, Iowa, as shown below:

165.22 (9) SOLAR ENERGY SYSTEMS/SOLAR PANELS.

1. Purpose. The purpose of the regulations of this Section is to balance the need for clean, renewable energy sources with the need to protect the public health, safety, and welfare. The regulations of this Section are found to be necessary to ensure that solar energy conversion systems are appropriately designed, sited, and installed in the corporate limits of the City.

2. Definitions. For the purpose of this Section, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

A. "Solar Energy System (SES)" means an aggregation of parts including the base, supporting structure, photovoltaic or solar thermal panels, inverters, and accessory equipment such as utility interconnection and battery banks, in such configurations as necessary to convert radiant energy from the sun into mechanical or electrical energy.

B. "Large Solar Energy System (LSES)" means a solar energy system that has a nameplate rated capacity of over twenty-five (25) kilowatts in electrical energy for non-single-family residential uses and which is incidental and subordinate to a principal use on the same parcel. A system is considered an LSES only if it supplies electrical power or thermal energy solely for use by the owner on the site, except that when a parcel on which the system is installed also receives electrical power supplied by a utility company in accordance with Section 199, Chapter 15.11(5) of the Iowa Administrative Code, as amended from time to time.

C. "Small Solar Energy System (SSES)" means a solar energy system that has a nameplate rated capacity of up to fifteen kilowatts in electrical energy or fifty kBtu of thermal energy for residential uses and that is incidental and subordinate to a principal use on the same parcel. A system is considered an SSES only if it supplies electrical power or thermal energy solely for use by the owner on the site, except that when a parcel on which the system is installed also receives electrical power supplied by a utility company, excess electrical power generated and not presently needed by the owner for on-site use may be used by the utility company in accordance with Section 199, Chapter 15.11(5) of the Iowa Administrative Code, as amended from time to time.

D. "Solar Energy System, Building Integrated" means a solar photovoltaic system that is constructed as an integral part of a principal or accessory building and where the collector component maintains a uniform profile or surface with the building's vertical walls, window openings, and roofing. Such a system is used in lieu of an architectural or structural component of the building. A building integrated system may occur within vertical facades, replacing glazing or other facade material; into semitransparent skylight systems; into roofing systems, replacing traditional roofing materials; or other building or structure envelope systems. To be considered a building integrated solar energy system, the appearance of the collector components must be consistent with the surrounding materials.

E. "Solar Energy System, Building Mounted" means a SES that is securely fastened to any portion of a building roof, whether attached directly to a principal or accessory building.

F. "Total System Height for Building Mounted System" means the height above roof surface measured perpendicular to the roof specific to the installation on a sloped roof or the height above the roof surface specific to the installation on a flat roof.

G. "Off Grid" means an electrical system that is not connected to a utility distribution grid.

H. "Solar Access" means a property owner's right to have sunlight shine on his land.

I. "Solar Energy" means radiant energy received from the sun at wavelengths suitable for heat transfer, photosynthetic use, or photovoltaic use.

J. "Utility Scale Solar Energy System" means a solar energy system that supplies electrical power or thermal energy solely for use by off-site consumers.

K. "Kilowatt (kW)" is equal to 1,000 watts.

L. "Watt (W)" is the International System of Units' standard unit of power, the equivalent of one (1) joule per second.

M. "(kBtu)" means kilo (thousand) British thermal units, a common unit of energy management.

3. Permitted SES. The following solar energy systems (SES) are permitted in all zoning districts with the corporate limits of the City, subject to the stated limitations:

A. A building integrated system is allowed in any zone.

B. A building mounted system attached to a roof of a principal or accessory building is allowed in any zone.

C. Large solar energy systems (LSES) are not allowed in residential zones.

D. Utility scale solar energy systems are not allowed unless approved and authorized by the City Council.

E. Off grid solar energy systems are not allowed.

4. Requirements for Construction or Installation.

A. Interconnection Agreement. In order to install and construct any SES, the owner or operator is required to complete the Interconnection Agreement and submit to the City of Van Meter.

B. Building Permit Required. It shall be unlawful to construct, erect, install, alter, or locate any SES within the corporate limits of the City, unless approved with a building permit. The application for a building permit shall include:

(1) A site plan drawn to scale showing the following:

- a. Existing structures on the lot;
- b. Proposed system location;
- c. Property lines;
- d. Setbacks of existing and proposed structures;
- e. Right-of-ways and easements; and
- f. Utility diagram applicable to proposed system.

(2) Elevation views and dimensions.

(3) Manufacturer's photographs.

(4) Manufacturer's spec sheet including capacity.

(5) Standard drawings, specifications of system components, and dimensional representations of the system and all its parts, including the supporting frame and footings.

(6) A single line drawing in accordance with the Interconnection Agreement diagram in sufficient detail to allow for determination that the manner of installation conforms to the National Electric Code and the requirement of the utility provider.

(7) Systems to be mounted on existing buildings, an engineered analysis showing sufficient structural capacity of the receiving structure to support the SES per applicable code regulations, certified by an Iowa licensed professional engineer.

C. Compliance with all Governmental Regulations. The owner/operator of the SES shall obtain any other permits required by other federal, state, and local agencies/departments prior to erecting the system.

D. Installation and Inspections. Installation shall be subject to inspections by the City building inspector. Installation must be done according to manufacturer's recommendations. All work must be completed according to the applicable building, fire, and electrical codes. All electrical components must meet code recognized test standards.

E. Color. The color of the support base of the SES shall be a neutral color. All surfaces shall be non-reflective to minimize glare that could affect adjacent or nearby properties. Measures to minimize nuisance glare may be required including modifying the surface material, placement, or orientation of the system, and if necessary, adding screening to block glare.

F. Lighting. No lighting other than required safety lights or indicators shall be installed on the SES.

G. Signage. No advertising or signage other than the manufacturer's identification logo and signage as required by applicable building codes and electrical codes.

H. Maintenance. The SES shall be well maintained in an operational condition that poses no potential safety hazard. Should the SES fall into disrepair and be in such a dilapidated condition that it poses a safety hazard or would be considered generally offensive to the senses of the general public, the SES may be deemed a public nuisance and will be subject to abatement as such.

I. Displacement of parking prohibited. The location of the SES shall not result in the net loss of minimum required parking.

J. Utility Notification. No SES that generates electricity shall be installed until evidence has been given that the utility company has been informed of and is in agreement with the customer's intent to install an interconnected customer owned generator.

K. Interconnection. The SES, if interconnected to a utility system, shall meet the requirements for interconnection and operation as set forth by the utility and the Iowa Utilities Board.

L. Restriction on Use of Energy Generated. An SES shall be used exclusively to supply electrical power or thermal energy for on-site consumption, except that excess electrical power generated by the SES and not presently needed for onsite use may be used by the utility company in accordance with section 199, chapter 15.11(5) of the Iowa Administrative Code.

M. Shutoff. A clearly marked and easily accessible shutoff for any SES that generates electricity will be required as determined by the Building Inspector.

N. Electromagnetic Interference. The SES shall be designed and constructed so as not to cause radio or television interference. If it is determined that the SES is causing electromagnetic interference, the operator shall take the necessary corrective action to eliminate this interference including relocating or removal of the facilities, subject to the approval of the appropriate city authority. A permit granting an SES may be revoked if electromagnetic interference from the SES becomes evident.

O. Solar Access Easements. The enactment of this Section does not constitute the granting of an easement by the City. The owner/operator may need to acquire covenants, easements, or similar documentation to assure sufficient solar exposure to operate the SES unless adequate accessibility to the sun is provided on site. Such covenants, easements, or similar documentation are the sole responsibility of the

owner/operator to obtain and maintain. Should the owner/operator pursue a solar access easement, the extent of the solar access should be defined, and the easement document executed in compliance with the regulation contained in Iowa Code chapter 564A (access to solar energy).

P. Removal. If the SES remains nonfunctional or inoperative for a continuous period of 180 days, the system shall be deemed to be abandoned. The owner/operator shall remove the abandoned system at their expense. Removal of the system includes the entire structure; collector panels and related equipment from the property excluding foundations. Should the owner/operator fail to remove the system, the SES will be considered a public nuisance and will be subject to abatement as such.

Q. Nonconforming Systems. An SES that has been installed on or before the effective date of this Section and is in active use and does not comply with any or all of the provisions of this Section shall be considered a legal nonconforming structure under the provisions of the Zoning Code sections 165A.26 through 165A.28.

R. Unsafe Condition. Nothing in this Section shall be deemed to prevent the strengthening or restoring to a safe condition of any SES or associated building or structure, or any part thereof, declared to be unsafe by the appropriate authority.

S. Bulk Regulations.

(1) Location.

a. No more than one SES may be placed on any zoned lot unless otherwise specifically approved by the Zoning Administrator.

b. No SES shall be constructed within twenty (20) feet laterally from an overhead electrical power line, excluding secondary electrical service lines or service drops.

i. No part of the SES shall be located within or over drainage, utility, or other established easements, or on or over property lines.

ii. The SES shall be located in accordance with the regulations for accessory use in the Zoning Code section 165A.22 and meet the accessory setbacks as required for the zoned district in which the SES is being placed.

iii. The SES shall not be located with the front yard setback, side yard setback, or street side setback for the zoned area it is being installed.

iv. No portion of the SES shall be located closer than five (5) feet from the principal building or to any other building or structure on the lot or location. In addition, the SES shall not occupy more than 30% of the rear yard.

v. The setback from underground electrical distribution lines shall be a minimum of five (5) feet.

vi. No SES shall be located which may obstruct vision between a height of thirty (30) inches and ten (10) feet on any corner lot with a vision triangle of twenty-five (25) feet formed by intersecting street right-of-way lines.

d. Building Mounted SES.

i. The SES shall be set back not less than one (1) foot from the exterior perimeter of the roof for every one (1) foot the system extends above the parapet wall or roof surface.

ii. Should the SES be mounted on an existing structure that does not conform to current setback requirements, the SES shall be installed to meet the current setback requirements applicable to the structure.

iii. The SES shall be designed to minimize its visual presence to surrounding properties and public thoroughfares. Panel arrangement shall take into account the proportion of the roof surface, and panels shall be placed in a consistent manner without gaps unless necessary to accommodate vents, skylights, or equipment.

iv. Access pathways for the SES shall be provided in accordance with all applicable building, fire and safety codes.

v. The SES shall be located in such a manner that fall protection railings are not required or are not visible from the public thoroughfare.

e. Building Integrated SES.

i. No setback required.

ii. Access pathways for the SES shall be provided in accordance with all applicable building, fire, and safety codes.

iii. The SES shall be located in such a manner that fall protection railings are not required or are not visible from the public thoroughfare.

(2) Height.

a. Building Mounted SES.

i. The collector panel surface and mounting system shall not extend higher than eighteen (18) inches above the roof surface of a sloped roof.

ii. The collector panel surface and mounting system shall not extend higher than seven (7) feet above the roof surface of a flat roof.

b. Building Integrated SES. The collector panel shall maintain a uniform profile of surface with the building's vertical walls, window openings, and roofing.

(3) Size.

a. Unless otherwise defined in this subsection, the size of the SES is calculated by measuring the total surface area of the collector panels for the system.

b. For a Building Mounted SES, the system size will be determined by the available roof area subject to the installation, minus the required setbacks or access pathways.

c. For a Building Integrated SES, the system size will be determined by the available building surface area subject to the installation, minus the required access pathways.

5. PROHIBITED.

A. Ground-Mounted Solar Panels and Ground-Mounted Solar Arrays are prohibited in all zoning districts.

SECTION 2. SEVERABILITY CLAUSE. If any section, provision or part of this ordinance shall be adjudged invalid or unconstitutional, such adjudication shall not affect the validity of the ordinance as a whole or any section, provision or part thereof not adjudged invalid or unconstitutional.

SECTION 3. WHEN EFFECTIVE. This ordinance shall be in effect from and after its final passage, approval and publication as provided by law.

Passed by the Council on the _____ day of _____, _____, and approved this _____ day of _____, _____.

Mayor

ATTEST:

City Clerk

First Reading: _____

Second Reading: _____

Third Reading: _____

I certify that the foregoing was published as Ordinance No. _____ on the _____
day of _____, _____.

City Clerk

PROPOSED