

CITY OF COURTLAND

STATE OF MINNESOTA

COUNTY OF NICOLLET

ORDINANCE NO. 20-103

AN ORDINANCE AMENDING THE COURTLAND ZONING ORDINANCE BY ADDING STANDARDS AND DEFINITIONS FOR RENEWABLE CLEAN ENERGY SYSTEMS INCLUDING WIND ENERGY CONSERVATION SYSTEMS (WECS),

SOLAR ENERGY SYSTEMS, SOLAR ENERGY FARMS AND FOR THEIR INSTALLATION AND USE IN COURTLAND

THE COURTLAND, MINNESOTA CITY COUNCIL ORDAINS:

SECTION 1. AMEND

The following language is hereby added to the Courtland Zoning Ordinance:

ARTICLE 1 SOLAR ENERGY SYSTEMS

Sec. 303.13.1 General Provisions.

a) Purpose and Intent.

Courtland finds that it is in the public interest to encourage the use and development of solar energy systems that have a positive impact on energy conservation with limited adverse impact on nearby properties. As such, the City supports the use of solar energy systems. Courtland also finds that the development of solar energy systems should be balanced with the protection of the public health, safety and welfare. The City intends the following standards to ensure that solar energy systems may be constructed within Courtland while also protecting public safety and the natural resources of the City. Consistent with the Courtland Comprehensive Plan, it is the intent of the City with this Section to create standards for the reasonable capture and use, by households, businesses and property owners, of their solar energy resource and encourage the development and use of solar energy systems.

b) Severability

The provisions of this Section shall be severable and the invalidity of any paragraph, subparagraph or subdivision thereof shall not make void any other paragraph, subparagraph or subdivision of this section.

c) Applicability

These regulations are for all solar energy systems and solar energy farms on properties and structures under the jurisdiction of the Courtland Zoning ordinance except that Courtland requires the owner or operator of solar farms that would generate more than 50 megawatts of power to get approval for such a system from the Minnesota Public Utilities Commission (PUC).

d) Definitions

The following words, terms and phrases, when used in this Article and Section, shall have the meaning provided herein, except where the context clearly indicates otherwise:

Building-Integrated Solar System: An active solar system that is an integral part of a principal or accessory building, rather than a separate mechanical device, replacing or substituting for an architectural or structural component of the building. Building-integrated systems include, but are not limited to, photovoltaic or thermal solar systems that are contained within roofing materials, windows, skylights and awnings.

Community Solar Energy System: A solar-electric (photovoltaic) array that provides retail electric power (or a financial proxy for retail power) to multiple community members or businesses residing or located off-site from the location of the solar energy system.

Ground Mounted Panels: Freestanding solar panels mounted to the ground by use of stabilizers or similar apparatus.

Photovoltaic System: An active solar energy system that converts solar energy directly into electricity.

Roof or Building Mounted SES: Solar energy system (panels) that are mounted to the roof or building using brackets, stands or other apparatus.

Roof Pitch: The final exterior slope of a building roof calculated by the rise over the run, typically, but not exclusively, expressed in twelfths such as 3/12, 9/12, 12/12.

Solar Access: A view of the sun, from any point on the collector surface that is not obscured by any vegetation, building, or object located on parcels of land other than the parcel upon which the solar collector is located, between the hours of 9:00 AM and 3:00 PM Standard time on any day of the year.

Solar Collector: A device, structure or a part of a device or structure that the primary purpose is to transform solar radiant energy into thermal, mechanical, chemical or electrical energy.

Solar Energy: Radiant energy received from the sun that can be collected in the form of heat or light by a solar collector.

Solar Energy System (SES): An active solar energy system that collects or stores solar energy and transforms solar energy into another form of energy or transfers heat from a collector to another medium using mechanical, electrical, thermal or chemical means.

Solar Farm: A commercial facility that converts sunlight into electricity, whether by photovoltaics (PV), concentrating solar thermal devices (CST), or other conversion technology, for the primary purpose of wholesale sales of generated electricity. A solar farm is the primary land use for the parcel on which it is located.

Solar Hot Water System: A system that includes a solar collector and a heat exchanger that heats or preheats water for building heating systems or other hot water needs, including residential domestic hot water and hot water for commercial processes.

- e) Types of Solar Energy Systems:
- i) Rooftop solar energy systems: accessory to the primary land use, designed to supply energy for the primary use.
 - (1) These systems are permitted accessory uses in all districts in which buildings are permitted.
 - (2) No City land use or site permit is required.
 - (3) The owner or contractor shall receive a building or mechanical permit before installing a rooftop solar energy system.
 - ii) Roof-mounted solar panel systems shall comply with the following:
 - (1) Solar panel systems shall be permitted on the roof of a building provided that the panels are not located on a front or side roof slope facing any public street or a rear roof slope facing a street with two or more lanes as shown.
 - (2) Solar panel systems shall have a top edge that is parallel to the roof ridge and shall conform to the slope of the roof.
 - (3) Solar panel systems may be located on any roof slope of an accessory building or structure, such as a patio cover or detached garage, subject to the regulations in this Sub-section ii, Paragraphs 2 and 5.

- (4) Solar panel systems mounted on flat roofs shall not exceed the maximum height permitted within the zoning district and shall be screened in accordance with Section 303.13, Subd 7 of this ordinance.
 - (5) Solar panel systems shall be positioned on the roof so as not to extend above or beyond the edge of any ridge, hip, valley, or eave.
- iii) Ground-mount solar energy systems are not permitted within the city limits of Courtland.
- iv) Community solar energy systems: Roof-mount solar energy systems, may be either accessory or primary use, designed to supply energy for off-site uses on the distribution grid, but not for export to the wholesale market or connection to the electric transmission grid. These systems shall be subject to the following conditions:
 - i) Rooftop community solar energy systems are permitted in all districts in which buildings are permitted.
 - ii) Roof-mounted solar panel systems shall comply with the following:
 - (1) Solar panel systems shall be permitted on the roof of a building provided that the panels are not located on a front or side roof slope facing any public street or a rear roof slope facing a street with four or more lanes as shown in the Thoroughfare Plan.
 - (2) Solar panel systems shall have a top edge that is parallel to the roof ridge and shall conform to the slope of the roof.
 - (3) Solar panel systems may be located on any roof slope of an accessory building or structure, such as a patio cover or detached garage, subject to the regulations in this Sub-section b, Paragraphs 2 and 5.
 - (4) Solar panel systems mounted on flat roofs shall not exceed the maximum height permitted within the zoning district and shall be screened in accordance with Section 303.13, Subd 7 of this ordinance.
 - (5) Solar panel systems shall be positioned on the roof so as not to extend above or beyond the edge of any ridge, hip, valley, or eave
 - iii) Prohibitions: The City prohibits community solar energy systems within:
 - (1) Six Hundred (600) feet of areas designated or protected from development by Federal, State or County agencies as wildlife habitat or wildlife management areas
 - (2) Wetlands to the extent required by the Minnesota Wetland Conservation Act, Courtland Wetland regulations and the Courtland Shoreland Standards
 - (3) All Floodplain Districts.
 - iv) An interconnection agreement must be completed with the electric utility in whose service territory the system is located.
 - v) All structures must meet the setback, height and coverage limitations for the district in which the system is located.

- v) Solar farms: ground-mount solar energy arrays that are the primary use on the lot or of a property, designed for providing energy to off-site uses or export to the wholesale market will not be permitted within the city limits of Courtland.
- f) Additional standards.

In addition to the standards allowed above, all solar energy systems shall meet the following standards.

- i) The owners or operators of electric solar energy systems that are connected to the electric distribution or transmission system, either directly or through the existing service of the primary use on the site, shall obtain an interconnection agreement with the electric utility in whose service territory the system is located. Off-grid systems are exempt from this requirement.
- ii) Electric solar system components that are connected to a building electric system must have an Underwriters Laboratory (UL) listing.
- iii) All solar energy systems shall meet the standards of the Minnesota and National Electric Code.
- iv) All rooftop solar systems shall meet the standards of the Minnesota Building Code.
- v) All solar energy systems using a reflector to enhance solar production shall minimize glare from the reflector that affects adjacent or nearby properties. Steps to minimize glare nuisance may include selective placement of the system, screening on the north side of the solar array, reducing use of the reflector system or other remedies that limit glare.
- vi) Building- or roof- mounted solar systems shall not exceed the maximum allowed height in any zoning district. For purposes of height measurement, solar systems other than building-integrated systems shall be considered to be mechanical devices and are restricted consistent with other building-mounted mechanical devices for the zoning district in which the system is being installed, except that solar energy systems shall not be required to be screened.
- vii) Commercial rooftop systems shall be placed on the roof to limit visibility from the public right-of-way or to blend into the roof design, provided that minimizing visibility still allows the property owner to reasonably capture solar energy.
- viii) Setbacks. All equipment and structures shall meet the setback and coverage limitations for the zoning district in which the system is located.

ARTICLE 2 WIND ENERGY CONSERVATION SYSTEMS (WECS)

Sec 303.13.2 General Provisions

Courtland finds that it is not in the public interest to encourage the use and development of wind energy conservation systems (WECS) within the city limits of Courtland and as such deems that no form of WECS will be permitted to be constructed within the city limits of Courtland.

a) Severability

The provisions of this Section shall be severable and the invalidity of any paragraph, subparagraph or subdivision thereof shall not make void any other paragraph, subparagraph or subdivision of this section.

b) Applicability

These regulations are for all wind energy conservation systems (WECS) on properties and structures under the jurisdiction of the Courtland Zoning ordinance

c) Definitions

The following words, terms and phrases, when used in this Article and Section, shall have the meaning provided herein, except where the context clearly indicates otherwise:

Micro-WECS - Micro-WECS are WECS of five (5) kW nameplate generating capacity or less mounted on a tower.

Tier I WECS - Utility Scale WECS of equal to or greater than 200 kW in total name plate generating capacity.

Tier II WECS - A WECS less than 200 kW in total name plate generating capacity, these include systems that are primarily used for power on-site or those that are net-metered.

Tier III WECS - Small WECS that are exclusively behind-the-meter turbines up to 40 KW in capacity, including micro turbines that may be found in urban area.

WECS - Wind Energy Conversion System - An electrical generating facility comprised of one or more wind turbines and accessory facilities, including but not limited to: power lines, transformers, and substations that operate by converting the kinetic energy of wind into electrical energy. The energy maybe used on-site or distributed into the electrical grid.


Wind Turbine - A wind turbine is any piece of electrical generating equipment that converts the kinetic energy of blowing wind into electrical energy through the use of airfoils or similar devices to capture the wind.

SECTION 3. EFFECTIVE DATE:

This ordinance shall take full effect and be in full force from and after passage and publication according to law.

Passed by the City Council of the City of Courtland, Minnesota on the 6th day of August, 2020.

Signed: 
Al Poehler, Mayor

Attest: 
Julie Holm, City Clerk

