

ORDINANCE NO. 915

AN ORDINANCE AMENDING THE UNIFIED LAND DEVELOPMENT ORDINANCE OF THE CITY OF GLENWOOD, IOWA BY ADDING PROVISIONS PERTAINING TO SOLAR ENERGY SYSTEMS WITHIN THE CITY OF GLENWOOD, IOWA.

BE it enacted by the City of Glenwood, Iowa:

CHAPTER ADDED: Section 184, of the Unified Land Development Ordinance, is hereby added to read in full as follows:

SECTION 184 SOLAR ENERGY SYSTEMS

184.1 PURPOSE. The purpose of this chapter is to provide regulations for construction, installation, and operation of solar energy systems in the city limits of Glenwood, Iowa.

184.2 DEFINITIONS. For the purpose of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

- (1) **Ground-Mounted Solar Energy System:** Solar energy system that is free standing, directly installed on specialized solar racking systems, which are attached to an anchor in the ground and wired to connect to an adjacent home or building. Ground mounted systems may be applicable where insufficient space, structural and shading issues, or other restrictions prohibit rooftop solar. For the purposes of this chapter, solar powered lights used to illuminate exterior areas shall not be included in this definition.
- (2) **Mounting:** The manner in which a solar PV system is affixed to the roof or ground (i.e., roof mount, ground mount, pole mount).
- (3) **Off Grid Solar Photovoltaic Systems:** Solar photovoltaic electricity systems designed to operate independently from the local utility grid and provide electricity to a home, building, boat, RV, and the like. These systems typically require a battery bank to store the solar electricity for use during nighttime or cloudy weather. Typical system components include PV panels, battery bank, charge controller, inverters, and associated electrical safety gear.
- (4) **Passive Solar Energy System:** A system that captures solar light or heat without transforming it to another form of energy or transferring the energy via heat exchanger.
- (5) **Photovoltaic (PV) System:** The solar energy system that produces electricity by the use of semiconductor devices called photovoltaic cells, which generate electricity when exposed to sunlight. A PV system may be roof mounted, ground mounted, or pole mounted.
- (6) **Pole-Mount Systems:** A solar energy system as directly installed on specialized solar racking systems, which are attached to a pole or poles, which is anchored firmly affixed to a concrete foundation in the ground and wired underground to an attachment point at the building's meter.
- (7) **Principal Structure:** The main structure or building on a lot or parcel in which the primary permitted use by right occurs.
- (8) **Roof-Mounted Solar Energy System:** A solar energy system consisting of solar panels installed directly on the roof of a home, commercial building, and/or

an accessory structure. Solar panels are mounted and secured using racking systems specifically designed to minimize the impact on the roof and prevent any leaks or structural damage. Roof-mount systems can be mounted flush with the roof or tilted toward the sun at an angle.

- (9) **Solar Energy System:** A system capable of collecting and converting solar radiation into heat or mechanical or electrical energy in transferring these forms of energy by separate apparatus to storage or point of use. This definition includes solar thermal, photovoltaic, and passive solar systems.
- (10) **Solar Thermal System:** A solar energy system that directly heats water or other liquid using sunlight. The heated liquid is used for such purposes as space heating and cooling, domestic hot water, and heating pool water.

184.3 PERMIT PROCESS. All owners of residential or commercial property shall acquire a building permit from the City of Glenwood prior to the construction and installation of any solar energy systems within the corporate limits of the City of Glenwood.

184.4 APPLICABILITY.

- (a) This Ordinance applies to all distributed solar systems installed and constructed after the effective date of this Ordinance. Solar energy system means a distributed solar energy system as defined herein.
- (b) Solar energy systems constructed prior to the effective date of this Ordinance shall not be required to meet the requirements of this Ordinance until the system is replaced or substantially repaired.
- (c) All solar energy systems shall be designed, erected, and installed in accordance with applicable local, state, utility, and national codes, regulations, and standards.

184.5 SOLAR ENERGY SYSTEM REQUIREMENTS

- (A) **Height:** Roof-mounted solar energy systems in residential applications shall not be higher than 10 inches above the roof at any point. Ground-mounted solar energy systems in residential applications shall not exceed 15 feet in height from grade at total extended height.
- (B) **Location:** The locations of ground mounted systems should avoid being in eyesight from the street. Roof-mounted systems must be placed on rear or side-facing roofs, which do not front any public street, unless a shade report or equivalent documentation from a licensed solar installer can be shown that such locations would be ineffective or impractical.
- (C) **Setbacks:** Ground-mounted solar energy systems shall meet all set back requirements for the applicable zoning district for accessory structures. Roof-mounted systems shall not extend beyond the exterior perimeter of the building on which the system is mounted.
- (D) **Easements:** Solar energy systems shall not encroach on any platted public easement.

- (E) **Uses:** A solar energy system shall provide power for the principal use and/or accessory use of the property on which the solar energy system is located.
- (F) **Aesthetics:** All solar energy systems shall use colors that blend with the surrounding settings. Reflection angles from collector surfaces shall be oriented away from neighboring windows.
- (G) **Maximum Area of unit.** Ground-mounted solar energy systems shall be treated as an accessory structure and thus are limited in area to the accessory structure limitations as set by the City Code. The total size of all solar energy systems may not produce any amount of energy, in addition to other alternative energy systems beyond the average annual consumption.
- (H) **Compliance with Federal Regulations:** Solar energy systems must comply with applicable Federal regulations.
- (I) **Compliance with State ~~National~~ Electric Code:** Building permit applications for solar energy systems shall be accompanied by a line drawing of the electrical components in sufficient detail to allow for a determination that the manner of installation conforms to the State Electrical Code.
- (J) **Utility Notification:** No solar energy system shall be installed until evidence has been given that the electric utility provider has been informed of the customer's intent to install an interconnected customer-owned generator and the customer can show proof that they have received, understand and agree to abide by the utility's requirements for net metering and distributed generation installation. A disconnect will be required at the time of installation and the electric utility provider shall be notified of this installation. A written statement from the utility company shall be presented at the time of applying for a construction building permit showing compliance with the disconnect requirement.
- (K) **Safety:** Feeder lines, Utility connects, and any other feature shall have appropriate markings, warnings, and safety features to prevent harm to persons, wildlife, or personal property.
- (L) **General Requirements on Operation:** The owner of a solar energy system shall defend, indemnify, and hold harmless the City of Glenwood and their officials from and against any and all claims, demands, losses, suits, causes of action, damages, injuries, costs, expenses, and liabilities whatsoever including attorney fees arising out of the actions or omissions of the operator or the operator's contractors concerning the construction or operation of the solar energy facility without limitation, whether said liability is premised on contract or tort. Owner's submittal for a building permit for a solar energy system shall constitute agreement to defend, indemnify, and hold harmless the City of Glenwood and their officials.
- (M) **Maintenance:** All solar energy facilities shall be maintained in operational condition at all times, subject to reasonable maintenance and repair outages. Any and all maintenance required to repair an inoperable system must be completed within thirty (30) days of date of failure.

i. **Notice of Abandonment:** The City of Glenwood may issue a Notice of Abandonment to the owner of a solar energy system that is deemed not meeting the requirements or conditions associated with the solar energy system for a continuous 6 month period. The owner shall have the right to respond to the Notice within thirty (30) days from receipt date. The Zoning Official shall withdraw the Notice and notify the owner that the Notice has been withdrawn should the owner provide satisfactory information that demonstrates the solar energy system has not been abandoned.

ii. **Removal:** If the solar energy system is determined to be abandoned, the owner, at their sole expense, shall restore the site to original condition and vegetation restored within 120 days. This determination shall include the requirements or conditions associated with the solar energy system not being met for a continuous 6 month period. 3

- (N) **DISPLAY:** The solar energy system shall not be used to display permanent or temporary advertising including signage, streamers, pendants, spinners, reflectors, banners or similar materials. The manufacturer's and equipment information , warning or indication of ownership, shall be allowed on any equipment of the solar energy system, provided it is in compliance with any prevailing sign regulation.
- (O) The City of Glenwood may enforce any violation of this Ordinance by way of issuance and prosecution as a municipal infraction in addition to any other available remedies provided in this Ordinance and in the City's Unified Land Development Ordinance.

PASSED by the Glenwood City Council this 22nd day of February, 2022, and approved the 22nd day of February, 2022.

Ron Kohn, Mayor

ATTEST:

_____, City Clerk

I certify that the foregoing was published as Ordinance No. ____ on the ____ day of _____, 2022.

_____, City Clerk

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