Section 1. Title

This Ordinance shall be known and may be cited as the "Town of Bremen Solar Ordinance".

Section 2. Purpose

The purpose of this Ordinance is to establish a municipal review procedure and performance standards for Solar Energy Systems (SES). These standards are intended to.

- A. Establish clear guidelines, and standards for the Town to regulate Solar Energy Systems.
- B. Permit the town to fairly and responsibly protect public health, safety and welfare.
- C. Minimize any potential adverse effect of solar development on surrounding land use and the environment.
- D. Provide for the decommissioning/removal of panels and associated utility structures that are no longer being utilized for generation and transmission purposes.
- E. Support the goals and policies of the Comprehensive Plan, including orderly development, efficient use of infrastructure, and protection of natural, scenic, and agricultural resources.

Section 3. Classification and Permitting

- A. Small Solar Energy Systems (SSES): An MSES shall meet the applicable Section 5 Performance Standards. No permitting is required.
- B. Roof- and Wall-Mounted Solar Energy Systems (RSES and WSES): RSES and WSES that meet all applicable Section 5 Performance Standards are not considered part of the structure on which they are mounted, and are not an expansion or modification of that structure. The area of RSES and WSES is determined by the active area of the solar array. (1) RSES and WSES with a size greater than one hundred (100) square feet shall require an application to and a permit issued by the Code Enforcement Officer (CEO).
- C. Ground-Mounted and Combination Solar Energy Systems (GSES and CSES): GSES and the ground-mounted portion of a CSES are considered separate structures under the provisions of the Town of Bremen Land Use and Shoreland Zoning Ordinances (LUO and SZO). The area of a GSES or GSES component of a CSES is determined by the total footprint of the completed system.
 - (1) GSES and CSES may be constructed as primary or accessory structures as defined by and allowed under the applicable provisions of the LUO and SZO.
 - (2) All GSES and CSES located inside the Shoreland Zone and all GSES and CSES located outside the Shoreland Zone with a size greater than ten thousand (10,000) square feet shall require an application to and approval by the Planning Board and a permit issued by the CEO.
 - (3) GSES and CSES with a size greater than ten thousand (10,000) square feet are prohibited inside the Shoreland Zone.
 - (4) All GSES and CSES located outside the Shoreland Zone and with a size less than ten thousand (10,000) square feet shall require an application to and a permit issued by the CEO.

(5) GSES and CSES with a size greater than forty thousand (40,000) square feet are prohibited in the Town of Bremen.

Section 4. Definitions

- A. Solar Energy: Radiant energy (direct, diffused, and/or reflected) received from the sun
- B. Solar Array: A group of multiple solar panels or modules with the purpose of harvesting solar energy.
- C. Solar Related Equipment: Items including a solar photovoltaic cell, panel, module or array; solar hot air or water collection device panels; lines; pumps; batteries; inverters; transformers; switches; framing; fencing; foundations; or other structures or equipment used or intended to be used as part of a system for collection and management of solar energy.
- D. Solar Energy System (SES): A solar photovoltaic cell, panel, module or array, or solar hot air or water collection device, including all solar related equipment, which relies on solar radiation as an energy source for collection, inversion, storage, and distribution of solar energy for electricity generation or transfer of stored heat.
- E. Small Solar Energy System (SSES): An SES that is not connected to the utility power grid, and is one hundred (100) square feet or less in size.
- F. Ground-Mounted Solar Energy System (GSES): A free-standing SES that is not an MSES, and is structurally mounted directly on or in the ground. A pole-mounted SES is a type of GSES.
- G. Roof-Mounted Solar Energy System (RSES): An SES that is not an MSES, and is mounted on the roof of a legally-existing building or structure.
- H. Wall-Mounted Solar Energy System (WSES): An SES that is not an MSES, and is mounted on the wall(s) of a legally-existing building or structure.
- I. Combination Solar Energy System (CSES): An SES that utilizes a combination of roof-, wall-, and/or ground-mounted solar arrays as part of a single SES.
- J. Size of an MSES, RSES, or WSES: The size of a RSES or WSES is equal to the combined total area (in square feet) of all the solar panels installed on the same parcel of land
- K. Size of a GSES: The size of a GSES is equal to the total land area (in square feet) where the existing vegetation would be permanently removed or altered and/or is maintained at less than three (3) feet above ground for purposes of construction and operation of the SES.
- L. Size of a CSES: The size of a CSES is the combined total area (in square feet) of the roof-, wall-, or ground-mounted components of the SES, the size of each component determined in accordance with the applicable methodology above.
- M. Battery Energy Storage System (BESS): Devices that enable energy from solar energy production to be stored and then released when the power is needed.

Section 5. Performance Standards

- A. All parts of an SES must be installed in accordance with standards set forth by the manufacturer, solar industry, National Electric Code (NEC), and National Fire Protection Association (NFPA).
- B. RSES and WSES clearance requirements: to allow for firefighter access to a structure, all

parts of a RSES must follow appropriate clearances in table 5(A). No part of an RSES or WSES may restrict access to any point of egress, including second floor egress windows.

Table 5(A) Clearance requirements

| Clearance from | Distance (feet) |
|----------------|-----------------|
| Ridge | 3 |
| Roof valley | 3 |
| Rakes | 3 |
| Chimney | 4 |

C. Construction of GSES and CSES:

- a. An erosion control plan and stormwater runoff plan must be submitted prior to construction of all GSES and CSES in the shoreland zone and for systems greater than ten thousand (10,000) square feet. Proper erosion control measures must be installed during construction and removed after construction is complete.
- b. All construction debris must be disposed of off site.
- D. Setback requirements: GSES and CSES are subject to structure setback requirements set forth in Section 5.1 of the LUO.

Section 5. Amendments

- A. Amendments: This ordinance may be amended by vote of a Town Meeting.
- B. Conflict with other Ordinances: This ordinance shall not be construed to repeal any existing ordinances or to impair the provisions of private restrictions placed upon property; provided however, that where this ordinance imposes greater restrictions its provisions shall control.
- C. Effective Date: The effective date of this Ordinance shall be the date of the Town Meeting approval.
- D. Severability Clause: If any Section, Clause, Paragraph, Sentence, or Phrase of this ordinance, for any reason is held to be invalid or unconstitutional, such invalid Section, Clause, Paragraph, Sentence, or Phrase is hereby declared to be severable; and any invalid Section, Clause, Sentence, or Phrase of this Ordinance shall in no way affect the remainder of this Ordinance.

Section 6. Special considerations

A. Panel Damage due to inclement/severe weather and or other outside forces must be repaired within thirty (30) days. Prior to panel repair, actions must be taken to contain

- any potential contamination to the environment and to prevent harm to people, property, or the environment.
- B. Battery Energy Storage systems: Battery energy storage systems may be housed in businesses, residences, or accessory structures. Lithium ferro phosphate and lead-acid Battery energy storage systems with a capacity of greater than 15kWh require fire department notification and a floor plan to be submitted showing the location of the battery energy storage system within the structure.