ARTICLE XVIII – SOLAR ARRAY ORDINANCE

A. Purpose and Title

The purpose of this Ordinance is to establish standards for solar energy arrays that will provide for the construction and operation of said systems. All regulations contained herein are adopted to preserve and protect public health and safety. This Ordinance shall be known as The Town of New Denmark Solar Energy Ordinance.

B. Types of Solar Energy Arrays and General Requirements

1. Large-scale Solar Arrays (100 MW or more)- Must be approved by the Wisconsin Public Service Commission and shall be consistent with the general design specifications hereunder. Large-scale systems shall only be allowed Agricultural-Residential (A-R), Agricultural-Farmland Preservation (AG-FP), and Limited Industrial (I-1) zoning districts. All such systems shall require a building permit from the Town. County Shoreland/Floodplain Zoning permit, if applicable, may also be required. The Town may require a conditional use permit and/or developer's agreement as long as no conditions inhibit or preclude the project, per Section 196.491{3)(i), Wis. Stats.

2. Mid-scale Solar Arrays(< 100 MW and> 30 kW) -Are subject to the conditional use permit conditions set forth in Article XIX and the requirements set forth in this ordinance, the Town's building permit requirements, the County's applicable Shoreland/Floodplain requirements, and any other applicable state or federal requirements. Such systems are allowed in all districts except

3. Conservancy (C-1) districts.

4. Small-scale Solar Arrays {30 kW or less) - Are considered to be accessory uses and are permitted in all districts. Such systems are allowed whether or not a principal structure exists on the parcel. A building permit from the Town is required, and a Brown County Shoreland/Floodplain Zoning permit may also be required, if applicable.

C. Requirements for Mid-Scale Solar Arrays.

1. Any mid-scale Solar Array hereafter established, altered, or enlarged shall be subject to the following requirements unless less restrictive requirements are specifically granted by the Plan Commission in the conditional use permit.

a. Setbacks – All systems shall comply with applicable setbacks under the zoning district of the subject parcel. Further, all portions of any system shall not encroach within 25 feet of any non-navigable waterway ordinary high-water mark, easement, well, septic field, or private right-of-way.
b. Height restrictions - Ground mounted components of all systems shall not exceed 15 feet in height as measured at the apex when any tracker is at its maximum tilt in early morning or late evening. Roof-mounted components shall not exceed a zoning district's height limit by more than 5 feet.
c. Glare – All systems, including reflectors, shall be positioned so that glare does not create unsafe conditions for travelers or nuisances for neighboring properties.
d. Sound - The system project's inverters, substations, motors, and other noise emitting equipment collectively shall not exceed the Public Service Commission mandated maximum nighttime sound level that is applicable to a 100 MW system or larger at the walls of the noise sensitive receptor, which shall include as a minimum the residence on any non-participating property. To ensure noise level estimates associated with facility design are conservative, a 5 dBA tonal penalty shall be included in any pre- or post-construction sound analysis.
e. Construction hours - Hours of construction shall be between 7:00 a.m. and 7:00 p.m., Monday through Saturday, and between 10:00 a.m. and 7:00 p.m. on Sunday.
f. Installer -All systems shall be installed by a certified solar installer or other person or entity qualified to perform such work.
g. Foundation -A qualified engineer shall certify that the foundation and design of the solar panels racking and support is within accepted professional standards, given local soil and climate conditions.
h. Screening- All systems shall be appropriately buffered and screened from public view by the system owner or representative. Any structure or vegetation under the control of a neighboring property owner, however, that interferes with the function of a system is considered to be a private nuisance per Section 844.22, Wis. Stats.
i. Town roads - The construction, operation, and decommissioning of a system shall not adversely impact town roads.
j. Code compliance - A system shall comply with all applicable local, state, and federal regulatory codes, including the State of Wisconsin electrical and plumbing codes and the National Electrical Code.
k. Power and communication lines - Power and communication lines running

between banks of ground mounted solar panels to nearby electrical substations, or interconnections with or between structures, shall be buried underground.

l. Orderly development - Upon issuance of a conditional use permit, the permit holder shall notify the Wisconsin Public Service Commission.

m. Decommissioning- When decommissioning of a system is required, all equipment, whether above the ground surface or below, shall be totally removed and properly recycled or disposed of. A bond, letter of credit, or an escrow account is required for all system with a nameplate rating of 1 MW or greater to ensure proper decommissioning.

2. In addition to the application submittal requirements of Article XIX of this ordinance, the application for a system conditional use permit shall include the following:

a. Solar energy system specifications, including the manufacturer and model, generating capacity, total height, collector square footage, wiring plan, means of interconnecting with the electrical grid, and any agreements with public utilities with regard to connecting to their systems.

b. Site layout, including the location of property lines, structures, system; as well as the total extent of system movements, and the interconnection points with the electrical grid.

c. Installers' qualifications and signatures certifying that the system will be installed in compliance with all Town ordinances and any other applicable codes.

d. Surrounding property uses.

e. Percentage of land coverage by the system when panels are in the position that has the largest horizontal area.

f. A decommissioning plan, which shall outline the anticipated means and cost of removing the system at the end of its useful life. Decommissioning of a system must occur in the event the system is not in use for 12 consecutive months. Decommissioning shall consist of removal of the system structures and subsurface foundations and equipment, disposal of all solid and hazardous waste in accordance with all applicable waste disposal regulations, and stabilization of soils and/or revegetation of the site as necessary to minimize erosion. The decommissioning methods shall be

established and cost estimates shall be made by a competent party such as a professional engineer experienced in such matters, a contractor capable of decommissioning, or a party found by the Town to have suitable expertise or experience with decommissioning. The plan shall also identify the financial resources that will be available to pay for the decommissioning and removal of the system. The Town Plan Commission shall review the decommissioning plan and request changes that may be needed to comply with the conditional use permit or to protect the safety and welfare of the community and town properties. The plan shall provide that decommissioning will begin within 180 days from the end of the system useful life or if the system is not in use for 12 consecutive months. Decommissioning shall be completed within 9 months from the start of decommissioning activities.

D. Existing Solar Energy Systems

A solar energy system lawfully existing at the time of the adoption or amendment of this ordinance may be continued even if such a system does not conform to the provisions of this chapter. However, it shall be deemed a nonconforming use or structure, and the provisions of Section XVIII shall apply.