**Article II - Definitions**

**Ground-Mount.** A solar energy system mounted on a rack or pole that rests or is attached to the ground.

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

**Solar Array.**  A collection of two or more connected solar modules or panels.

**Solar Collector**. A device, structure or a part of a device or structure for which 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)**: A commercial facility that converts sunlight into electricity, whether by photovoltaics (PV), concentrating solar thermal devices (CST), or other conversion technology, as well as energy storage technology, for the primary purpose of wholesale sales of generated electricity and stored electricity. A SES is the principal land use for the parcel on which it is located. A SES site may include an array of devices, or structural design features, the purpose of which is to provide for generation of electricity, the collection, storage and distribution of solar energy.

**Utility (in reference to Wind and Solar Energy Systems).** Any entity engaged in this state in the generation, transmission or distribution of electric energy including, but not limited to, a private investor owned utility, cooperatively owned utility, and a public or municipal utility.

**Section 4.01.02 Conditional Uses**

37. Solar Energy Systems (SES). Provided they meet the requirements of 5.32

**CHAPTER 5.32 Solar Energy Systems (SES).**

**Section 5.32.01. Purpose.**

The purpose of this Section is to facilitate the construction, installation, operation and decommission of Solar Energy Systems in a manner that promotes economic development and ensures the protection of health, safety, and welfare while also avoiding adverse impacts to important areas such as agricultural lands and other sensitive lands. This ordinance will not impede personal or business solar collector development for the primary use of self-sustaining energy. This ordinance is not intended to replace safety, health or environmental requirements contained in other applicable codes, standards, or ordinances. The provisions of this ordinance shall not nullify any provisions of local, state or federal law.

**Section 5.32.02. Private Solar Energy System (PSES).**

PSES shall be permitted as an accessory use and shall meet the requirements of the zoning district. A PSES shall be for a single use commercial or residential structure and used primarily for on-site consumption of power.

**Section 5.32.03. Permitting.**

* 1. No SES shall be erected, built, or constructed without a conditional use permit having been approved by the Board of Adjustment.
  2. Application(s) for SES Conditional Use Permits shall be accompanied by:

1. Site plan as required by 5.32.05 (4)
2. Boundaries of the site proposed for SES and associated facilities on United States Geological Survey Map or other map as appropriate.
3. Map of easements for SES, if applicable.
4. Affidavit attesting that necessary easement agreements with landowners have been obtained, if applicable.
5. Aviation/Airport protection if required. 5.32.05 (6)
6. The fencing and gates required to be around the exterior perimeter. 5.32.05 (9)
7. The decommissioning plan. 5.32.06
8. Weed/Grass control plan 5.32.05 (14)
9. Haul roads identified. 5.32.05 (15)
10. Project schedule
11. Any other factors relevant to the proposed system.

3. All copies of the preliminary plan and overall site layout must be submitted, signed and sealed by an engineer.

4. The Board of Adjustment may require an independent engineer, chosen by the County, to review plans at the petitioner’s expense. Findings by the independent engineering firm are to be submitted to the Board of Adjustment.

**Section 5.32.04. Compliance.**

1. All SES are subject to the State of South Dakota Storm Water Management regulations and National Pollutant Discharge Elimination System (NPDES) permit requirements, if applicable.
2. The Board of Adjustment may provide for a final site inspection before the facility is authorized to become operational.
3. An emergency contact name and phone number must be posted at the point of access on all SES sites.
4. The permit holder will allow the County, or its Authorized Agent (appointed by the County), access to the property upon an inspection request by the County. In the event of an emergency, the County, or its Authorized Agent, has the right to access the premises.
5. All SES shall meet or exceed applicable standards and regulations of any state or federal agency.

**Section 5.32.05. General Provisions for Solar Energy Systems.**

Ground-mount solar energy, designed for providing energy to off-site uses or export to the wholesale market, are permitted under the following standards:

1. Ground Cover and Buffer Areas. Ground-mount systems shall be maintained. Topsoils shall not be permanently removed from the project area during development or construction unless part of a remediation effort. Soils shall be planted to and maintained in perennial vegetation to prevent erosion, manage run off and build soil. It is required that any crops planted follow all federal and state laws protecting endangered species. This will also include pollinators such as bees. Foundations, gravel or compacted soils are considered impervious. Ground-mount systems shall be exempt from impervious surface calculations if the soil under the collector is not compacted and maintained in vegetation, including any access or service roads. A minimum sixty (60) foot managed vegetative buffer shall always be present and maintained around the perimeter of the exterior of the site.
2. Foundations. 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.
3. Power and Communication Lines. Power and communication lines running between banks of solar panels are allowed. Power and communication lines running between banks of solar panels and to nearby electric substations or interconnections with buildings may be required to be buried underground. Exemptions may be granted in instances where the natural landscape interferes with the ability to bury lines, or distance makes undergrounding infeasible. For power and communication lines inside the project site, the Permittee has the option to install them underground or above ground.
4. Site Plan Required. A detailed site plan for both existing and proposed conditions must be submitted, showing location of all solar arrays, other structures, property lines, rights-of-way, service roads, floodplains, wetlands and other protected natural resources, topography, electric equipment, and all other characteristics requested by the Board of Adjustment.
5. Setbacks. Projects including multiple, adjoining properties as part of the project plan, need not adhere to setbacks at point of connection between the adjoining properties. Solar panels will be kept at least one (1) mile from an occupied dwelling to include modular and manufactured homes. Solar panels will be kept at least one thousand (1,000) feet from property lines of non SES project parcels. Exception: The Board of Adjustment may allow setback/separation distances to be less than the established distance identified, if the applicant obtains waivers from all dwellings and owners of property within the separation distance. If approved, such agreement is to be recorded and filed with the County Register of Deeds. Said agreement shall be binding upon the heirs, successors, and assigns of the title holder and shall pass with the land.
6. Every SES shall be setback at least one hundred (100) feet from the highwater mark of any lake, stream or river.
7. The above shall not apply to buried infrastructure, access roads, or junction boxes for cable splicing and other infrastructure related to these components.
8. Aviation/Airport Protection: If required by state or federal agencies the applicant must complete and provide the results of the Solar Glare Hazard Analysis Tool (SGHAT) for the Airport Traffic Control Tower cab and final approach paths, consistent with the Interim Policy, FAA Review of Solar Energy Projects on Federally Obligated Airports, or most recent version adopted by the FAA.
9. Appearance, Color, Finish: Be coated with a non-reflective surface, be non-reflective and of an unobtrusive color.
10. Glare: All solar energy systems shall minimize glare from affecting adjacent or nearby properties. Measures to minimize glare include selective placement of the system, screening on the north side of the solar array, modifying the orientation of the system, reducing use of the reflector system, or other remedies that limit glare.
11. Safety Fencing/Gates and Locks.
    * 1. All SES shall be fenced around the exterior of the SES with a fence at least six (6) feet in height.
      2. All fencing and gates shall be constructed to substantially lessen the likelihood of entry into a SES by unauthorized individuals.
      3. All gates to the fences of all SES shall be equipped with locks and shall always remained locked except for those times when the owner and/or operator, or their respective agents is/are using the gate for ingress and/or egress or is/are otherwise present and monitoring the SES.
      4. The fencing and gates shall be maintained in serviceable condition. Failure to maintain the fencing or gates required hereunder shall constitute a violation of this ordinance.
      5. The fencing and gate requirements specified hereunder shall continue notwithstanding the fact that a SES is no longer operational and/or falls into disuse unless and until the SES is properly decommissioned.
      6. Fences are exempt from Section 5.03 and may further be constructed on property and right-of-way lines.
12. Maximum height: Solar panel arrays shall be no more than twenty-five (25) feet in height, not including power lines, substation, meteorological stations, or inverters.
13. Lighting: If lighting is provided at the project site, lighting shall be shielded and downcast such that the light does not spill onto the adjacent parcel.
14. Noise: SES and SES facilities may not exceed fifty-five (55) dB(A), as measured at the closest property line at the time the Building Permit application is filed. The level, however, may be exceeded during short term events, such as utility outages or wind storms.
15. Outdoor Storage: Only the outdoor storage of materials, vehicles, and equipment that directly support the operation and maintenance of the solar farm shall be allowed.
16. Weed/Grass Control Plan: The applicant shall submit an acceptable weed/grass control plan for property inside and outside the fenced area for the entire property. The operating company or successor during the operation of the SES shall adhere to the approved weed/grass control plan.
17. Roads.
18. Public Roads. Prior to commencement of construction, the permittees shall identify all state, county or township “haul roads” that will be used during the construction of the SES project and shall notify the state, county or township governing body having jurisdiction over the roads to determine if the haul roads identified are acceptable. The governmental body shall be given adequate time to inspect the haul roads prior to use of these haul roads. Where practical, existing roadways shall be used for all activities associated with the SES. Where practical, all-weather roads shall be used to deliver cement, solar collectors and components, and all other heavy components to and from the site.
19. The permittees shall, prior to the use of approved haul roads, make satisfactory arrangements with the appropriate state, county or township governmental body having jurisdiction over approved haul roads for construction of the SES for the maintenance and repair of the haul roads that will be subject to extra wear and tear due to transportation of equipment and SES components. The permittees shall notify the County of such arrangements upon request of the County.
20. Private Roads. The permittees shall promptly repair private roads or lanes damaged when moving equipment or when obtaining access to the site, unless otherwise negotiated with the affected landowner.
21. Control of Dust. The permittees shall utilize reasonable measures and practices of construction to control dust.
22. If an SES, which has a previously issued county permit, changes ownership, the new owner has sixty (60) days in which to apply for a transfer of ownership in order to keep the current permit valid. The new owner will be required to abide by the permit requirements and letter of assurances that were issued under the permit application. If no transfer is completed within sixty (60) days, the new owner will be required to submit a new application for approval.

**Section 5.32.06. Decommissioning/Restoration/Abandonment.**

1. Cost Responsibility. The owner or operator of a SES is responsible for all costs associated with decommissioning the SES facility and any associated facilities.
2. Decommissioning Plan. At least thirty (30) days prior to construction, the applicant shall file a decommissioning plan for Board of Adjustment approvalin accordance with the requirements of paragraphs (2), (3) and (4) below. The plan shall include an acceptable financial assurance plan as set forth in paragraph (3) below, which estimates the decommissioning cost and a description of the manner in which the permittees will ensure that it has the financial capability to carry out these restoration requirements when they go into effect. The permittees shall ensure that it carries out its obligations under paragraph (3) below to fulfill these requirements. The County may at any time request the permittees to file a report with the County describing how the permittees are fulfilling this obligation.
3. Financial Assurance. The Board of Adjustment shall require a performance bond, surety bond, escrow account, letter of credit, corporate guarantee or other form of financial assurance that is acceptable to the Board of Adjustment to cover the anticipated costs of decommissioning the SES facility. The financial assurance plan is subject to the following provisions:
4. A decommissioning account is to be funded by the project owner annually at a rate of two thousand five hundred dollars ($2,500) per megawatt of installed DC capacity per year for the first 30 years, commencing no later than the commercial operation date. The Board of Adjustment may defer to the State of South Dakota if the State imposes decommissioning requirements.
5. The Board of Adjustment may allow a decreased annual payment, if the Board of Adjustment determines the full rate as identified in the financial assurance plan is not necessary to cover costs of decommissioning.
6. All interest earned by any financial assurance account remains in the account.
7. A financial assurances statement is to be provided upon request to the administrative official.
8. The financial assurance plan follows ownership of the SES. The Board of Adjustment may allow current and subsequent SES owners to request a change in the type of financial assurance instrument to be utilized.
9. The financial assurances are not subject to foreclosure, lien, judgment, or bankruptcy.
10. Beginning in year ten (10) following the beginning of operation and each fifth year thereafter, the SES owner shall submit to the Board of Adjustment an estimated decommissioning date, if established, and estimated decommissioning costs and salvage values.  Based on the verification of the information in this filing the Board of Adjustment may change the annual financial assurance funding rate to more closely match the estimated amount needed for decommissioning.
11. Funds from the financial assurances are to be paid to the SES owner at the time of decommissioning.  Said funds are to be paid as decommissioning costs are incurred and paid for by the SES owner.
12. If the SES owner fails to execute the decommissioning requirement, the funds are payable to the landowner as the landowner incurs and pays decommissioning costs.
13. Site Restoration. The decommissioning of the SES shall begin within eight (8) months of the expiration of this permit, or earlier termination of operation of the SES and be completed within eighteen (18) months of the expiration of this permit or earlier termination of operation of the SES. The permittees shall have the obligation to dismantle and remove from the site all solar collectors and components, transformers, overhead and underground cables, foundations, buildings and ancillary equipment to a depth of four (4) feet. To the extent possible the permittees shall restore and reclaim topsoil quality. All access roads shall be removed unless written approval is given by the affected landowner requesting that one or more roads, or portions thereof, be retained. Any agreement for removal to a lesser depth or for no removal shall be recorded with the County and shall show the locations of all such foundations and underground cables. All such agreements between the permittees and the affected landowner shall be submitted to the County prior to completion of restoration activities. The site shall be restored in accordance with the requirements of this condition within eighteen (18) months after expiration.
14. Failure to Decommission. If the SES owner or operator does not complete decommissioning, the Board of Adjustment may take such action as may be necessary to complete decommissioning, including requiring forfeiture of the bond or other forms of final assurances. The entry into a participating landowner agreement shall constitute agreement and consent of the parties to the agreement, their respective heirs, successors, and assigns, that the Board of Adjustment may take such action as may be necessary to decommission a SES facility.

**Section 5.32.07. Prohibited Uses and Structures.**

1. Cadmium. Any solar devices that include cadmium are prohibited within a SES.
2. The use of batteries for storing solar energy for a SES.

Add to Administrative Manual

**WALWORTH COUNTY**

**SOLAR ENERGY SYSTEM (SES) APPLICATION**

**PERMIT NUMBER \_\_\_\_\_**

**APPLICANT** (PRINT): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **PHONE:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**ADDRESS**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**OWNER** (PRINT): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **PHONE**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*IF DIFFERENT THAN APPLICANT*

**ADDRESS**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**DEVEOPMENT SITE LEGAL DESCRIPTION:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**DEVELOPMENT SITE STREET ADDRESS**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**EXISTING ZONING DESIGNATION**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**REQUIRED APPLICATION SUBMISSIONS**:

* Haul roads identified.
* Decommissioning plan.
* Boundaries of the site proposed for SES and associated facilities on United States geological survey map or other map as appropriate.
* Map of occupied residential structures, businesses and public buildings.
* Map of site for SES, access roads and utility lines.
* Proof of utility right-of-way easement for access to transmission lines.
* Project schedule.
* Fencing and Gates.
* Aviation/Airport protection, if required.
* Weed/Grass control plan.
* Glare/Mitigation measures if required.

**ESTIMATED PROJECT CONSTRUCTION COST** (including labor): **$\_\_\_\_\_\_\_\_\_\_\_\_**

NOTE: A SITE AND AREA PLAN OF THE PROPOSED SES SHALL ACCOMPANY THIS APPLICATION, SHOWING THE FOLLOWING:

1. NORTH DIRECTION 5. DIMENSIONS OF FRONT AND SIDE SETBACKS

2. DIMENSIONS OF PROPOSED STRUCTURE 6. LOCATION OF ADJACENT EXISTING BUILDINGS

3. STREET NAMES 7. OTHER INFORMATION AS MAY BE REQUESTED

4. LOCATION OF PROPOSED STRUCTURE ON LOT

I hereby certify that I have read and examined this application and know the information contained herein to be true and correct. All provisions of laws and ordinances governing this type of work will be complied with whether specified herein or not. I further understand and agree that the granting of a permit does not presume to give authority to violate, cancel or variance the provisions of the Walworth County Zoning Ordinance or any other federal, state, or local law regulating construction or the performance of construction.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

SIGNATURE OF CONTRACTOR DATE SIGNATURE OF APPLICANT DATE SIGNATURE OF OWNER DATE

(IF DIFFERENT THAN APPLICANT)

**FOR OFFICIAL USE ONLY**

**\_\_\_\_ FEE PAID: DATE:**

**\_\_\_\_ PERMIT ISSUED DATE:**

**\_\_\_\_ PERMIT EXPIRES DATE:**

REASONS FOR DENYING PERMIT:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_