

A460017

Fees: \$0

Pages: 9

Isanti County Office of
Recorder/Registrar of Titles

Certified, Filed, and/or Recorded on:
August 03, 2016 1:10 PM

Connette L. Lindberg Recorder

Well Cert. () Rec'd () Not Req'd

Received from: ISANTI COUNTY ADMINISTRATOR

Returned To: ISANTI COUNTY ADMINISTRATOR



ISANTI COUNTY BOARD OF COMMISSIONERS
NOTICE OF AMENDMENT TO THE ISANTI COUNTY ZONING ORDINANCE

NOTICE IS HEREBY GIVEN that the Isanti County Board of Commissioners took action at their regular meeting on July 20th, 2016 to adopt the following Solar Energy Ordinance.

The Ordinance will read as follows:

A. GENERAL PROVISIONS.

1. Purpose and Intent

Isanti County finds that it is in the public interest to encourage the use and development of renewable energy systems that enhance energy conservation efforts, but result in limited adverse impact on nearby properties. As such, the County supports the use of solar energy collection systems. Isanti County also finds that the development of solar energy systems should be balanced with the protection of the public health, safety and welfare. The County resolves that the following standards shall be adopted to ensure that solar energy systems and Solar Energy Farms can be constructed within Isanti County while also protecting public safety and the natural resources of the County. Consistent with the Isanti County Comprehensive Plan, it is the intent of the County with this Section to create standards for the reasonable capture and use, by households, businesses and property owners, of their solar energy resource, and to encourage the development and use of solar energy.

2. 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.

3. Applicability

These regulations shall apply to all solar energy systems on properties and structures under the jurisdiction of Isanti County Zoning. Those systems shall be defined as solar energy systems generating less than 50 megawatts of power. Isanti County shall refer any application for a large electric power generating plant (LEPGP) to the Minnesota Public Utilities Commission (MN PUC) for

approval. An LEPGP shall be defined as any solar energy system capable of producing more than 50 megawatts of power.

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

Building or Other Architecturally-Integrated Solar Energy System: An Active solar energy system that is an integral part of a principal or accessory building, rather than a separate mechanical device, replacing or substituting for an architectural 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.

CSES: Community Solar Energy System.

Community Solar Energy Systems (also called a “Solar Garden”): 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.

Large Energy Power Generating Plant (LEPGP): Any Solar Energy System capable of producing a 50 megawatt system.

MN PUC: The Minnesota Public Utilities Commission.

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

Roof or Building Mounted Solar Energy System: A solar energy system that is mounted to the roof or building using brackets, standard or other apparatus.

SES: Solar Energy System

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 parcels 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 principal 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: 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 principal purpose of wholesale sales of generated electricity.

Solar Garden: A community solar energy system.

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.

C. **TYPES OF SOLAR ENERGY SYSTEMS:** This Ordinance identifies and regulates the following four types of solar energy systems:

1. Rooftop or other Architecturally-Integrated Solar Energy Systems
2. Ground Mount Solar Energy Systems
3. Community Solar Energy Systems (Solar Gardens/CSES)
4. Solar Farms.

These systems shall be defined and regulated as follows:

1. **Rooftop or other Architecturally-Integrated Solar Energy Systems:**

Systems which are accessory to the principal land use, designed to supply energy for the principal use. Rooftop or other architecturally-integrated systems shall be regulated as follows:

- a) Rooftop or other architecturally-integrated systems are permitted accessory uses in all districts in which buildings and structures are permitted.
- b) A building permit before installing a rooftop or other architecturally-integrated solar energy system.
- c) Commercial rooftop or other architecturally-integrated systems shall blend into the design of the building.

2. **Ground-mount solar energy systems:** Systems which are accessory to the principal use and designed to supply energy for the principal use. Ground-mount systems shall be regulated as follows:

- a) Ground-mount systems are permitted accessory uses in all districts in which buildings and structures are permitted.
- b) Ground-mount systems require a building permit.

- c) Ground-mount Systems shall be subject to the accessory use standards for the district in which they are located, including dimensional standards, such as yard setbacks with the exception that ground mount systems must not exceed 15'.
 - d) The height of ground-mounted components shall not exceed 15 feet.
 - e) No ground-mounted solar energy system shall cover or encompass more than 10 percent of the total property area or lot size.
3. **Community Solar Energy Systems (Solar Gardens/CSES):** Roof or ground-mount CSES's designed to supply energy for off-site users on the distribution grid (but not for export to the wholesale market or connection to the electric transmission grid) shall be allowed as a principal or accessory permitted use, in all districts unless otherwise regulated or prohibited in this section:
- a) Community Solar Energy Systems shall be located on parcels of land no less than five acres in size.
 - b) Ground Mount CSES's which are sited upon a contiguous or aggregate site area footprint larger than 20 acres in size (whether commonly owned/controlled or not-so-owned or operated) shall require a Conditional Use Permit. The site area footprint size shall be computed by a determination of the Zoning Administrator.
 - c) Prohibited Districts: The County prohibits CSES's within the following districts:
 - 1) Shoreland Districts as designated by the Department of Natural Resources (DNR) and the Isanti County Shoreland Management Ordinance;
 - 2) Within Six Hundred (600) feet of areas designated or formally protected from development by Federal, State or County Agencies as wildlife habitat, wildlife management areas or designated as National Wild and Scenic land or corridor;
 - 3) Wetlands, to the extent prohibited by the Minnesota Wetland Conservation Act;
 - 4) The Floodplain District.
 - d) All CSES's and CSES components must meet the setback, height and coverage limitations for the district in which the system is located.
 - e) CSES's shall require a building permit, and are subject to the accessory use standards for the district in which they are located.

- f) Power and communication lines. All on-site power and communication lines running between banks of solar panels and buildings shall be buried underground on premise.
 - g) Decommissioning Plan: the owner/operator shall submit a decommissioning plan for ground-mounted CSES's to ensure that the owner or operator properly removes the equipment and facilities upon the end of the project life or after their useful life. The owner or operator shall decommission the solar panels in the event they are not in use for twelve (12) consecutive months. The plan shall include provisions for the removal of all structures and foundations, the removal of all electrical transmission components, the restoration of soil and vegetation and a soundly-based plan ensuring financial resources will be available to fully decommission the site. The disposal of structures and/or foundations shall meet the requirements of the Isanti County Solid Waste Ordinance. The owner/operator shall provide a current-day decommissioning cost estimate, and shall post a bond, letter of credit or establish an escrow account, including an inflationary escalator, in an amount determined by the County Board, to ensure proper decommissioning.
4. Solar Farms: Ground-mount solar energy arrays which are the principal use on the property, that are designed for providing energy to off-site users or export to the wholesale market shall be a permitted use in the Agricultural/Residential district, except as otherwise regulated or prohibited in this section. Solar Farms shall be subject to the following:
- a) Solar Farms which have a generating capacity of 50 megawatts of power or more shall fall under the jurisdiction of the Minnesota Public Utilities Commission.
 - b) Solar farms shall be located on parcels of land no less than five acres in size.
 - c) Solar farms which are sited upon a contiguous or aggregate site area footprint larger than 20 acres in size (commonly owned/controlled or not so) shall require a Conditional Use Permit.
 - d) Prohibitions: The County prohibits community solar farms within:
 - 1) Shoreland Districts as designated by the Department of Natural Resources (DNR) and the Isanti County Shoreland Management Ordinance
 - 2) Six Hundred (600) feet of areas formally designated or protected from development by Federal, State or County agencies as wildlife habitat, wildlife management areas or designated as National Wild and Scenic land or corridor
 - 3) Wetlands to the extent prohibited by the Minnesota Wetland Conservation Act

- 4) The Floodplain District
- e) All Solar Farm components must meet the setback, height and coverage limitations for the district in which the system is located.
- f) Power and communication lines. All on-site power and communication lines running between banks of solar panels and buildings shall be buried underground on premise.
- g) Decommission Plan: The owner operator shall submit a decommissioning plan for ground-mounted CSES's to ensure that the owner or operator properly removes the equipment and facilities upon the end of project life or after their useful life. The owner or operator shall decommission the solar panels on the event they are not in use for twelve (12) consecutive months. The plan shall include provisions for the removal of all structures and foundations, the removal of all electrical transmission components, the restoration of soil and vegetation and a soundly-based plan ensuring financial resources will be available to fully decommission the site. The disposal of structures and/or foundations shall meet the requirements of the Isanti County Solid Waste Ordinance. The owner/operator shall provide a current-day decommissioning cost estimate, and shall post a bond, letter or credit or establish an escrow account, including an inflationary escalator, in an amount determined by the County Board, to ensure proper decommissioning.

D. ADDITIONAL STANDARDS: In addition to the standards required above, the following shall apply to all Solar Energy Systems.

1. **Compliance with Building Code.** All SES's shall require a building permit, shall be subject to the approval of the County Building Official, and shall be consistent with the State of Minnesota Building Code.
2. **Compliance with State Electric Code.** All Photovoltaic systems shall comply with the Minnesota State Electric Code.
3. **Compliance with State Plumbing Code.** Solar thermal systems shall comply with HVAC-related requirements of the Energy Code.
4. **Compliance with MN energy Code.** All SES's shall comply with HVAC-related requirements of the Energy Code.
5. **Utility Notification.** No grid-intertied photovoltaic system shall be installed until the owner has submitted notification to the utility company of the customer's intent to install an interconnected customer-owned generator. Off-grid systems are exempt from this requirement.

6. **Security and equipment buildings.** Security and equipment buildings on the site of solar farms shall be permitted uses accessory to the solar farm.
7. **Controlled Access.** The owner or operator shall contain all unenclosed electrical conductors located above ground within structures that control access.

E. CONDITIONAL USE PERMIT (CUP) REQUIREMENTS

1. A Conditional Use Permit (CUP) shall be required for a Community Solar Energy System or a Solar Farm which is situated, (or which is staged to be eventually situated) on a contiguous or aggregate site area footprint larger than 20 acres in size, whether commonly owned/controlled or otherwise. Solar Farms and CSES's located on a site area 20 acres or less (contiguous or aggregate) in size shall be permitted uses.
2. A CSES or Solar Farm which has the capacity to generate 50 megawatts or more shall fall under the jurisdiction of the Minnesota Public Utilities Commission and shall not be subject to County review.

3. Landscaping:

Where visible from adjacent residential properties and public rights – of – way, buffer screening and landscaping shall be submitted to minimize the visual impact of above grade site improvements. If an applicant can show that proposed site improvements are not visible from immediate adjacent properties, or rights – of – way by existing vegetation or topography, the screening requirement may be waived. Buffer landscaping is allowed within the setback area, but at full maturity is not allowed in any dedicated rights – of – way or to protrude onto adjacent neighboring properties. All buffer screening must provide year round screening.

The plan shall show the location, size, quantity, and type of landscape materials showing the following:

Two rows staggered of conifer trees which must be a minimum of eight (8) feet in height at the time of installation, and reach a minimum maturity height of twelve (12) feet will be required to screen the use from public rights – of – way and immediately adjacent properties. The County Planning Commission may consider the substitution of other screening plans, where the installation of other types of landscape materials may not be feasible.

Areas of bare ground at each facility shall be re-vegetated with a low growing pollinator friendly seed mix.

Security Fencing: Security fencing will be required at least eight feet (8') in height around the surrounding the facility. The security fence should be of suitable design by the Zoning Administrator.

4. Corridor Preservation:

Natural wildlife, wetland, woodland or other lineal corridors shall remain open to travel by native fauna, reptilian and avialae. Perimeter fencing and security measures must accommodate unimpeded wildlife migration through large solar array development sites and areas. Plan approval may require corridor replacement, relocation, removal, and/or protection as determined by the Zoning Administrator.

Care should be used to preserve the natural landscape, minimize tree removal and prevent any unnecessary destruction of the natural surroundings in the vicinity of the project during construction and maintenance. The Permittee shall minimize the number of trees to be removed and leave undisturbed, to the extent possible, existing low growing species.

5. Conditional Use Permit (CUP) Submittal Requirements.

CUP applications for solar energy systems shall be accompanied by horizontal and vertical elevation drawings, drawn to scale. The drawings shall show the location of the system components on the property, as well as other elements, including but not limited to the following:

- Existing features
- Proposed features
- Property boundaries
- Property zoning designation(s) including district property line and roadway setbacks
- Solar arrays, connecting lines, and all affiliated installations and structures
- Access points, drive aisles, security features, and fencing
- Topography & surface water drainage patterns and treatment systems
- Existing and proposed/preserved/protected wildlife corridors (wetland/woodland/topography connectivity)
- Landscape Plan, including required screening of site perimeter and/or perimeter security fencing
- Floodplains
- Soils
- Historical features
- Archeological features
- Wildlife and ecological habitat
- Environmental mitigation measures
- Description of Project Staging (if applicable)

Glare Study. Solar farms utilizing a reflector system shall conduct a glare study (US Department of Energy's Solar Glare Hazard Analysis Tool) to identify the impacts of the system on occupied buildings and transportation rights – of – way within half mile of the project boundary.

An aviation analysis. If the project is within 2 miles of any airport, 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. If the SGHAT indicates a completion of an Air Space Case Analysis (Form 7460), the applicant must complete the form and provide the results.

Adopted by the Isanti County Board of Commissioners on the 20th day of July, 2016



Kevin VanHooser, County Administrator

