



Memorandum

TO: Alganssee Township Board
FROM: Christopher Khorey, AICP
SUBJECT: **Solar Energy Ordinance**
DATE: July 28, 2021

On the following pages, please find the solar energy ordinance as recommended by the Planning Commission on July 27. The regulations would be placed in a new Section 14.13.

Accessory Solar Energy (i.e. solar panels designed to power primarily one home, farm, or business) would be permitted by right in the following districts:

- AG
- C-1
- I-1
- R-1 (rooftop only)
- R-2 (rooftop only)
- R-3 (rooftop only)

And by Special Use in the following districts:

- R-1 (freestanding, lots over two acres only)
- R-2 (freestanding, lots over two acres only)
- R-3 (freestanding)

Solar Farms (i.e. solar panels designed to produce energy for the electrical grid) would be permitted by Special Use in the following districts, and prohibited in all other districts.

- AG
- C-1
- I-1

Solar energy would not be permitted in the Restricted Development Overlay or the Environmental Preservation Overlay.

The Ordinance also includes setbacks, lot coverage limits, and operational standards, as well as a performance bond requirement for decommissioning.



ALGANSEE TOWNSHIP, BRANCH COUNTY, MICHIGAN

ORDINANCE NO. _____

AN ORDINANCE TO REGULATE SOLAR ENERGY FACILITIES.

ALGANSEE TOWNSHIP ORDAINS:

SECTION I. Ordinance Amendment.

Pursuant to this Ordinance, the Zoning Ordinance of the Algansee Township shall be amended as follows:

A new Section 4.02.J shall be created, including the following text:

J. Accessory solar energy systems capable of producing a maximum of 5,000 kWh per month, subject to the standards in Section 14.13.

A new Section 4.03.P shall be created, including the following text:

P. Solar Farms, subject to the standards in Section 14.13.

A new Section 5.02.H shall be created, including the following text:

H. Accessory solar energy systems located on the roof of a previously existing building, and capable of producing a maximum of 5,000 kWh per month, subject to the standards in Section 14.13.

A new Section 5.03.D shall be created, including the following text:

D. Freestanding accessory solar energy systems that meet the following requirements:

1. Capable of producing no more than 5,000 kWh per month
2. Located on a lot of at least two acres in area
3. Meet the standards in Section 14.13.

A new Section 6.02.J shall be created, including the following text:

J. Accessory solar energy systems located on the roof of a previously existing building, and capable of producing a maximum of 5,000 kWh per month, subject to the standards in Section 14.13.

A new Section 6.03.I shall be created, including the following text:

I. Freestanding accessory solar energy systems that meet the following requirements:

1. Capable of producing no more than 5,000 kWh per month
2. Located on a lot of at least two acres in area
3. Meet the standards in Section 14.13.



A new Section 7.02.I shall be created, including the following text:

I. Accessory solar energy systems located on the roof of a previously existing building, and capable of producing a maximum of 5,000 kWh per month, subject to the standards in Section 14.13.

A new Section 7.03.H shall be created, including the following text:

H. Freestanding accessory solar energy systems that meet the following requirements:

1. Capable of producing no more than 5,000 kWh per month
2. Meet the standards in Section 14.13.

A new Section 8.02.C shall be created, including the following text:

C. Accessory solar energy systems (rooftop or freestanding) capable of producing a maximum of 5,000 kWh per month, subject to the standards in Section 14.13.

A new Section 8.03.F shall be created, including the following text:

F. Solar Farms, subject to the standards in Section 14.13.

A new Section 9.02.C shall be created, including the following text:

C. Accessory solar energy systems capable of producing a maximum of 5,000 kWh per month, subject to the standards in Section 14.13.

A new Section 9.03.G shall be created, including the following text:

G. Solar Farms, subject to the standards in Section 14.13.

A new Section 14.13 shall be created, including the following text:

- A. Accessory solar energy systems capable of producing a maximum of 5,000 kWh per month shall be subject to the following regulations:
1. Solar energy systems shall be designed and located to avoid glare or reflection onto adjacent lots and adjacent roadways, and shall not interfere with traffic or create a safety hazard off-site.
 2. A building permit shall be required for any solar energy system.
 3. All solar energy system owners shall submit a map noting the location of the solar energy system and the panel disconnect to Branch County.
 4. The owner of the solar energy system shall provide written documentation that the public utility company has been informed of the customer's intent to install an interconnected customer-owned generator, and approves of such connection. Off-grid systems shall be exempt from this requirement.



5. No homeowners' agreement, covenant, common interest community, or other contract between multiple lot owners within a subdivision shall restrict or limit solar energy systems.
 6. All freestanding solar panels must be set back at least 20 feet from all lot lines.
- B. Solar farms (principal or accessory solar energy systems capable of producing at least 5,000 kWh per month) shall be subject to the following regulations, in addition to the general standards for special uses:
1. No solar farm shall be erected on any lot less than five acres in area.
 2. **Setbacks.** Setback shall be as follows:
 - i. The minimum setback requirement shall be five (5) feet from a lot line abutting any parcel where the landowner has a lease or other agreement with the solar energy company that would allow solar panels on the land, or that would designate the land as "participating" in the solar farm.
 - ii. The minimum setback requirement shall be two-hundred-fifty (250) feet from a lot line abutting any parcel where the landowner does not have a lease or other agreement with the solar energy company that would allow solar panels on the land, or that would designate the land as "participating" in the solar farm.
 - iii. The minimum setback requirement shall be fifty (50) feet from a public road right-of-way.
 3. A clearly visible warning sign concerning voltage must be placed at the base of all pad-mounted transformers and substations.
 4. All mechanical equipment including any structure for batteries or storage cells, shall be completely enclosed by a six foot high fence with a self-locking gate, and provided with evergreen landscaping that is sufficient to buffer the equipment from view of adjacent streets and lots.
 5. All power transmission lines and other utility wires within the project boundary shall be located underground to the maximum extent possible.
 6. There shall be maintained a current general liability policy covering bodily injury and property damage with limits of at least \$1 million per occurrence and \$1 million in the aggregate.
 7. If the land on which the solar farm is proposed is to be leased, rather than owned, by the solar farm operator, all lots within the solar farm project boundary shall be included in a recorded easement, lease, or consent agreement specifying the applicable uses for the duration of the project. All necessary leases, easements, or other agreements between the solar farm operator and the affected parties shall be in place prior to commencing construction, unless specified otherwise by the special use permit conditions.
- C. The following shall apply to all solar energy facilities, regardless of the maximum kWh capacity:
1. Rooftop and building mounted solar energy systems are subject to the following regulations:



- i. Roof mounted systems shall not extend more than 4 feet above the surface to which it is affixed. Roof mounted systems that do not extend more than 3 inches above the surface of the roof shall be accessory solar energy systems, regardless of the kWh capacity.
 - ii. No solar energy system may protrude beyond the edge of the roof.
 2. Rooftop and building mounted solar energy systems are subject to the following regulations:
 - i. Roof mounted systems shall not extend more than 4 feet above the surface to which it is affixed.
 - ii. No solar energy system may protrude beyond the edge of the roof.
 3. Ground mounted and freestanding solar energy systems are subject to the following regulations:
 - i. All solar energy systems shall have a defensible space for fire protection, as required by the fire department with jurisdiction over the site.
 - ii. **Height.**
 1. The height of the solar energy system and any mounts shall not exceed 15 feet at full tilt.
 2. If the solar energy system is an accessory use is located in the front yard between the required front setback line and front building wall of the principal building, the maximum height for the system shall be 42 inches (3 feet, 6 inches). Evergreen landscaping that is sufficient to completely block the equipment from view from dwelling units or public right-of-way located within a quarter-mile but that will not obstruct the energy collecting surface from solar energy shall be provided.
 - iii. **Area.** No more than 20% of the total lot area may be covered by an accessory ground mounted solar energy system, and no more than 50% of the total lot area may be covered by solar energy system components of a solar farm.
 - iv. **Batteries.** When batteries are included as part of the solar collector system, they must be placed in a secure container or enclosure when in use, and when no longer used shall be disposed of in accordance with applicable laws and regulations.
 - v. **Abandonment.** Abandoned or unused solar panels and associated facilities shall be removed within 12 months of the cessation of operations at the site unless a time extension is approved by the Planning Commission. All decommissioned materials from the solar farm must be removed from Alganssee Township.
 - vi. **Performance Bond.** The Planning Commission shall require a performance bond to guarantee all aspects of the solar energy facility are removed if the solar farm is decommissioned. To determine the amount of the performance bond, the applicant shall provide three estimates, from outside contractors, for the removal of the solar panels, and the performance bond shall be equal to the highest estimate. Every three years, the solar



farm owner shall submit three new estimates to the Township, and the bond shall reflect the highest of the newly submitted estimates.

- vii. A copy of the relevant documents (including the signed lease, deed, license, or land contract) which allows the installation and which requires the applicant to remove the panels and associated facilities upon cessation of operations shall be submitted at the time of application. In the event that any panels or facilities are not removed within the twelve (12) months of the cessation of operations at a site, the panels and facilities shall be removed by the Township and the costs of removal assessed against the real property.

SECTION 2. Conflicts. If any provision of the Zoning Ordinance conflicts with this amendment to the Zoning Ordinance, the most restrictive provision shall apply.

SECTION 3. Severability. This Ordinance and the various parts, sentences, paragraphs, sections, and clauses thereof are hereby declared to be severable. Should any part, sentence, paragraph, section, or clause be declared unconstitutional, null, or void by a court of competent jurisdiction, such declaration shall not have any effect on the validity of the remaining parts, sentences, paragraphs, sections, and clauses of this Ordinance.

SECTION 4. Effective Date: This Ordinance shall be effective upon publication in a newspaper of general circulation within the Township.

This Ordinance is hereby declared to have been adopted by the Township Board of the Alganssee Township, County of Branch, State of Michigan, at a Regular Meeting, called and held on the _____ day of _____, 2021.

YEAS:
NEAS:
ABSENT:

I hereby approve the foregoing Ordinance.

Ann Gary
Clerk

Russ Jennings
Supervisor

Adopted:
Published:
Effective: