

**CITY OF SCANDIA
ORDNANCE NO.: 210**

**AN ORDINANCE AMENDING THE SCANDIA DEVELOPMENT CODE
CHAPTER 1, SECTION 4.2, REGARDING DEFINITIONS AND
CHAPTER 2, SECTION 4.34, REGARDING SOLAR ENERGY SYSTEMS**

The City Council of the City of Scandia, Washington County, Minnesota hereby ordains:

Section 1 Amendment. Ordinance No. 122, the City of Scandia Development Code (“Development Code”, or “Code”), Chapter One, Section 4.2 Definitions shall be amended for the addition of the underlines as follows

(312) Solar Energy System (SES): A device or structural design feature, a substantial purpose of which is to provide daylight for interior lighting or provide for the collection, storage and distribution of solar energy for heating or cooling, electricity generation, or water heating. **A Distribution Scale Solar Energy System (Distribution SES) operates to distribute energy to predominantly off-site users. A Local Service Solar Energy System (Local SES) operates to distribute energy predominantly to on-site uses.**

Section 2 Amendment. Ordinance No. 122, the City of Scandia Development Code (“Development Code”, or “Code”), Chapter Two, Section 4.34 Solar Energy Systems shall be deleted in its entirety and replaced with the following:

4.34(A) Local Service Solar Energy System – (Local SES). Local Service Solar Energy Systems are a permitted accessory use in all districts. As an accessory use, a Local SES is permitted to the extent that it operates primarily to provide solar energy for the primary use and the permitted accessory uses on the property on which it is located, and shall comply with the following requirements:

- (1) Approvals required
 - (A) Building-integrated, passive solar, and roof-mounted Local SES are allowed as uses in all zoning districts. Building-integrated and passive solar energy systems are exempt from the requirements of this section and shall be regulated as any other building element.
 - (B) One ground-mounted Local SES with a footprint up to a maximum eight hundred square feet (800 sq. ft.) is allowed as an accessory use in all zoning districts. A ground-mounted Local SES with a footprint that exceeds 800 sq. ft. shall require a conditional use permit.
 - (C) All Local SES require a building permit. A building permit application must be submitted and approved by the building official before an accessory solar energy system is installed. The information required and the procedure to be followed

for all Local SES applications shall be the same as that required for a building permit. In addition, the applicant shall submit supplementary information pertaining to the nature of the accessory solar energy system including:

1. Total square footage of the solar energy system.
2. Total energy production for the site.
3. To scale horizontal and vertical (elevation) drawings.
4. Drawings must show the location of the system on the building or on the property including the property lines and proposed screening, if required.

(E) Performance Standards

1. Standards for all SES
 - a. Code Compliance. All Local SES shall comply with the Minnesota State Building Code and Electrical Code.
 - b. Approved Solar Components. All Local SES components must have an Underwriters Laboratories, Inc. (UL) listing.
 - c. Solar Panel Glare. All Local SES shall be designed and located in order to prevent reflective glare toward any inhabited buildings on adjacent properties, as well as adjacent street rights-of-way. Steps to control glare nuisance may include selective placement of the system, screening on the side of the solar array facing the reflectors, reducing use of the reflector system, or other remedies that limit glare.
 - d. Utility Notification. No Local SES shall be installed until evidence has been given to the City that the owner has notified the utility company of the customer's intent to install an interconnected customer-owned generator. Off-grid systems are exempt from this requirement.

- e. Safety Measures. A clearly-visible warning sign concerning voltage must be placed at the base of all pad-mounted transformers and substations. All mechanical equipment, including any structure for batteries or storage cells, shall be completely enclosed by a minimum eight (8) foot high fence with a self-locking gate, and provided with screening in accordance with the screen and landscaping provisions of this Development Code.
- f. Abandonment. If the solar energy system remains nonfunctional or inoperative for a continuous period of twelve (12) months, the system shall be deemed abandoned and shall constitute a public nuisance. The owner shall remove the abandoned system at their expense within ninety (90) days. Removal includes the entire structure including transmission equipment, structures and foundations, and the restoration of soil and vegetation.

2. Roof-Mounted and Building-Mounted Local SES

- a. Roof- and building-mounted Local SES are not accessory structures and are excluded from the size and number limitations for accessory structures in this Development Code.
- b. Building and roof-mounted Local SES shall comply with the primary structure setbacks for the zoning district on which the system is located.
- c. Building and roof-mounted Local SES shall not exceed the maximum allowed building height in any zoning district.
- d. Roof-mounted Local SES on commercial or industrial buildings shall be installed so that they are compatible with the building architecture.
- e. Roof-mounted Local SES shall not extend beyond the perimeter of the building on which the system is mounted or built. Exterior piping for solar hot water systems shall be allowed to extend beyond the perimeter of the building.

3. Ground-Mounted SES

- a. One ground-mounted Local SES with a footprint up to a maximum eight hundred square feet (800 sq. ft.) is allowed as an accessory use in all zoning districts. A ground-mounted Local SES with a footprint that exceeds 800 sq. ft. shall require a conditional use permit.
- b. Ground-mounted Local SES are excluded from the size and number limitations for accessory structures permitted by this Development Code.

- c. Ground-mounted Local SES are excluded from the lot coverage requirements of the Development Code if the area under the SES is permanently vegetated.
- d. Ground-mounted Local SES shall not exceed fifteen (15) feet in height when oriented at maximum tilt.
- e. Ground-mounted Local SES shall be screened from view from the public right of way if: 1) the Local SES requires approval of a CUP, 2) if the Local SES is placed on a parcel located on a lakeshore, or 3) if the Local SES is located within one hundred feet (100') of a roadway right-of-way. Screening may be accomplished by using setbacks, berming, existing vegetation, landscaping, or a combination thereof.

Section 3 Amendment. Ordinance No. 122, the City of Scandia Development Code (“Development Code”, or “Code”), Chapter Two, Section 4.34 Solar Energy Systems shall be amended with the addition of the following:

4.34(B) Distribution Scale Solar Energy System - (Distribution SES) Distribution SES are allowed within the Agriculture Core (AG C) zoning district and require a Conditional Use Permit. As a primary use, a Distribution SES is permitted to the extent that it is the primary use on a property and operates to distribute energy to predominantly off-site users, and shall comply with the following requirements:

(1) Districts and Size Limits

(A) Distribution SES are allowed within the Agriculture Core (AG C) zoning district with a Conditional Use Permit.

(B) Distribution SES are prohibited in the following areas:

- 1. Within areas designated under City of Scandia Ordinance as St. Croix River District or Shoreland District and their associated setback areas.
- 2. Within wetlands to the extent required by the Minnesota Wetlands Conservation Act, and within associated wetland setback areas as designated by the City of Scandia.
- 3. Within the Floodplain District and associated setback areas as designated by the City of Scandia.

(2) Distribution SES uses are exempt from the Residential and Agricultural Accessory Structure standards regarding the square footage and number of structures permitted on a parcel, but must conform to the setback and lot coverage standards as described in (4)(M) of this section and elsewhere in this Development Code.

(3) Permit Application

- (A) Existing Site Plans Required. The applicant for a Distribution SES shall submit a detailed site plan of existing conditions, showing site boundaries; existing access roads, driveways, and easements; existing structures; setbacks; surface water drainage patterns, floodplains, Shoreland districts, delineated wetlands, toe and top of bluffs, ordinary high water mark and other protected natural resources; existing vegetation, soil types, topography (2-foot contour intervals), and all other items required in Chapter 1, Section 5 of this Code for Conditional/Interim Use Permit applications or by the City. The Existing Site Plan shall include a graphic scale not less than 1:100 and a north arrow.
- (B) Proposed Site Plan Required. The applicant shall also submit a site plan of proposed conditions, including the proposed number, location and spacing of solar panels; proposed height of panels; location of access roads; planned location of underground or overhead electric lines connecting the solar farm to the building, substation or other electric load; new electrical equipment other than at the existing building or substation that is the connection point for the solar farm; proposed stormwater management facilities; proposed erosion and sediment control measures, and other information as required by the City. The Proposed Site Plan shall include a graphic scale not less than 1:100 and a north arrow.

The application shall also include two vertical sketch elevations of the premises accurately drawn to a scale identified on the drawing, depicting the proposed solar energy conversion system and its relationship to the surrounding topography and public roadways. The sketches shall depict the proposed system's relationship to structures on adjacent lots as viewed from six (6) feet above ground level at the residential structure wall that site closest to the solar installation, one sketch showing the view without screening and the other sketch showing the view with proposed screening. The sketch elevations shall include a graphic scale not less than 1:50, or as needed to clearly show the vertical relationship between the proposed solar facilities and structures on adjacent lots.

- (C) Use of Public Roads. The applicant shall obtain all necessary approvals from the appropriate road authority for site access and driveways.
- (D) Interconnection Agreement. The applicant shall complete an interconnection agreement with a local utility and provide a copy of the agreement to the City before approval of electrical, building, or other required permits. The system operator shall provide a visible external disconnect if required by the utility. Utility poles shall be limited to one interconnection pole for the solar array system. The proposed placement of all utility poles and any proposed aerially mounted equipment shall be shown in any proposed plans submitted.
- (E) Liability Insurance. The applicant shall maintain 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 and provide proof that it meets the insurance requirement to the city.

- (F) Decommissioning Plan. The applicant shall submit a decommissioning plan to ensure that facilities are properly removed after their useful life. If the Distribution SES remains nonfunctional or inoperative for a continuous period of one year, the system shall be deemed to be abandoned and shall constitute a public nuisance. The plan shall include provisions for removal of all structures and foundations, restoration of soil and vegetation, and a plan ensuring financial resources will be available to fully decommission the site. The City shall require the posting of a bond, letter of credit or the establishment of an escrow account to ensure decommissioning.
- (G) Payment In Lieu of Taxes. Notwithstanding that Minnesota Statutes Section 272.02, Subdivision 24 (or its successor) classifies real property upon which a solar energy generating system is located that is used primarily for solar energy production (subject to the production tax under Minnesota Statutes Section 272.0295) as class 3a, the City may require the applicant to enter into a Payment In Lieu of Taxes Agreement to compensate the City for any prospective tax revenue that may be lost due to such reclassification.

(4) Performance Standards

- (A) The limitations on the number or cumulative generating capacity of Distribution SES is regulated by Minnesota Statutes 216B.164 and related regulations.
- (B) Distribution SES shall be in compliance with all applicable local, state and federal regulatory standards, including the State of Minnesota Uniform Building Code, as amended; the National Electric Code, as amended; the State Plumbing Code, as amended; the Minnesota Energy Code, as amended.
- (C) If the proposed Distribution SES is adjacent to areas designed or formally protected from development by Federal, State, or County agencies as a wildlife management area, scenic byway, or National Wild and Scenic corridor, the applicant shall implement mitigation measures that would protect the resource values of the designated wildlife area or scenic corridor as a condition of approval. Such measures may include, but are not limited to, maintaining wildlife travel corridors, setting the development back from the right-of-way or stream corridor, using the natural topography to screen the project, and retaining or planting vegetation that would fully obscure the view of the energy project within the scenic corridor.
- (D) The nearest solar panel of the Distribution SES shall be setback a minimum 75 feet from all parcel boundaries and 350 feet from existing residential structures on adjacent parcels existing at the time of the permit application. The City may require wider setbacks if it determines that the wider setbacks are warranted by the potential impacts to adjacent properties.
- (E) The nearest solar panel of the Distribution SES shall be setback a minimum of 500 feet from the centerline of minor arterial roadways or 200 feet from the centerline of all other public road right-of-ways.

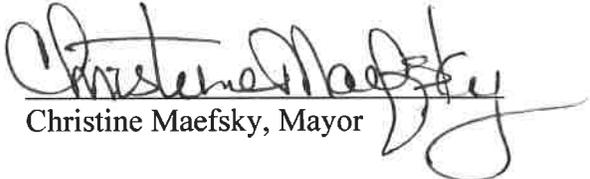
- (F) Ground-mounted solar energy systems shall not exceed twelve feet (12') in height when oriented at maximum tilt. Building-integrated solar energy systems when at maximum tilt shall not exceed the maximum height permitted in the zoning district.
- (G) All components of the Distribution SES shall be screened by setbacks, berming, existing vegetation, terrain, landscaping, or a combination thereof. The solar array shall be screened from view from nearby or affected properties using the same screening elements, and may require a vegetative buffer of height sufficient to provide a visual screen of the solar from adjacent rights-of-way, and from residences on adjacent parcels existing at the time of installation, as viewed from six (6) feet above ground level at the residential structural wall that sits closest to the solar installation. The visual screen shall fully obscure view of the solar panels during the summer months. The required screening shall be achieved within four (4) growing seasons from the date of project approval. At least thirty (30) percent and at most fifty (50) percent of the area of the vegetative buffer, as measured in square feet, shall be composed of evergreen plantings interspersed throughout the screen. The City will require the posting of a bond, letter of credit or the establishment of an escrow account to ensure vegetation is installed and establishes itself as identified in the approved permit, based on an estimated cost for plantings and labor provided by the applicant. The planting and screening plan shall utilize the recommended plant types described in Chapter 2, Section 3.12(4)(G) and must be approved by the City.
- (H) Distribution SES are subject to stormwater management and erosion and sediment control best practices, including DNR guidelines on Wildlife Friendly Erosion Control, and NPDES permit requirements, and shall obtain required permits from the MPCA, local Watershed District, City and others.
- (I) All ground areas under solar array installs that are not occupied by equipment or essential access paths, shall be planted with a deep rooted, native grass and pollinator seed mix suitable to the soil and moisture conditions of the immediate area. Plant growth shall be stable and self-supporting within two (2) growing seasons from the date of project approval.
- (J) All plans submitted for building permit approval must be prepared by a licensed, professional engineer.
- (K) Power and communication lines that are not defined in this ordinance as Essential Services and running between banks of solar panels and the interconnection pole or other point of interconnection shall be buried underground. Exemptions may be granted by the City in instances where shallow bedrock, water courses or other elements of the natural landscape interfere with the ability to bury lines, or the distance to a substation or other point of interconnection reasonably precludes burial.
- (L) All Distribution SES facilities shall be designed and located in order to prevent reflective glare toward any inhabited buildings on adjacent properties, as well as adjacent street rights-of-way. Steps to control glare nuisance may include selective placement of the system, screening on the side of the solar array facing the reflectors, reducing use of the reflector system, or other remedies that limit

glare. Distribution SES utilizing a reflector system shall conduct a glare study to identify the impacts of the system on occupied buildings and transportation rights-of-way within a half mile of the project boundary. The glare study shall also address aviation impacts.

- (M) The surface area of posts and related equipment for ground-mounted systems in combination with driveways, structures and other impervious surfaces on the parcel shall not exceed the maximum lot coverage standard of the applicable zoning district.
- (N) Any fences or barriers installed for the project shall be mounted on wood posts, shall not include any chain link, barbed or razor wire, shall not exceed eight feet in height from the ground, and shall incorporate wildlife-friendly design with a gap at the bottom for passage of birds and small animals. The City will utilize recommendations from the Minnesota DNR to determine if the fence design is wildlife-friendly.
- (O) If lighting is provided at the project, lighting shall be shielded and downcast such that the light does not spill onto adjacent properties.
- (P) If the Distribution SES remains nonfunctional or inoperative for a continuous period of one year, the system shall be deemed to be abandoned and shall constitute a public nuisance. The owner shall remove the abandoned system at their expense after obtaining a demolition permit. Removal includes the entire structure including transmission equipment.

Section 4. Effective Date. This ordinance shall be in full force and effect upon its adoption and publication according to law.

Passed and adopted by the City Council of the City of Scandia this 16th day of April, 2019.


Christine Maefsky, Mayor

ATTEST:


Neil Soltis, Administrator/Clerk