**RESOLUTION/ORDINANCE NO. [\_\_\_]**

**A (RESOLUTION/ORDINANCE)[[1]](#footnote-1) TO ADOPT THE TEXT AND MAP OF THE [\_\_\_\_\_\_\_\_\_] ZONING (RESOLUTION/ORDINANCE) ESTABLISHING REGULATIONS FOR SOLAR ENERGY SYSTEMS AS A PERMITTED USE IN THE SOLAR ENERGY ZONING DISTRICT AND ESTABLISHING REGULATIONS GOVERNING THE DEVELOPMENT OF SOLAR ENERGY SYSTEMS**

**WHEREAS**, \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is authorized to adopt a Zoning (Resolution/Ordinance) and Map pursuant to Tennessee Code Annotated § 13-7-101 *et seq*. (13-7-201 *et seq*. for Municipalities); and

**WHEREAS**, the Planning Commission of the [\_\_\_\_\_\_\_\_\_\_] has recommended the following described text of the zoning resolution (ordinance) and map (attached as Exhibit A); and

**WHEREAS**, pursuant to Tennessee Code Annotated § 13-7-104 a public notice was published at least thirty (30) days prior to the meeting. (for municipalities it is 13-7-203 and it is fifteen (15) days).

**NOW, THEREFORE BE IT RESOLVED/ORDAINED** by the [\_\_\_\_\_\_\_\_\_] of the [\_\_\_\_\_\_\_\_\_\_] as follows:

1. **Definitions**.
2. Solar Energy System (“SES”) means a device or structural design feature that provides for the collection of solar energy for electricity generation, consumption, or transmission or for thermal, residential, or utility scale application. For purposes of this section, SES refers only to (1) photovoltaic SESs that convert solar energy directly into electricity through a semiconductor device, or (2) solar thermal systems that use collectors to convert the sun’s rays into useful forms of energy for water heating, space heating, or space cooling. SES includes all components of the electricity generating facility (inverters, transformers, switchgear, substations, communications infrastructure, and other ancillary or related equipment), but does not include transmission lines or generation tie lines connecting the SES to a utility-owned substation.
3. Integrated Solar Energy System (“ISES”) means an SES where solar materials are incorporated into building materials, such that the two are reasonably indistinguishable, or where solar materials are used in place of traditional building components, such that the SES is structurally an integral part of a house, building, or other structure. An ISES may be incorporated into, among other things, a building façade, skylight, shingles, canopy, ground mount system, light, or parking meter.
4. Accessory Solar Energy System (“ASES”) means an SES that is (i) structurally mounted to the roof of a house, building or other structure, (ii) located on property for which the primary use is not related to the production of energy, or (iii) located on the same property as the house, building or other structure in which the energy from the SES is consumed or on property adjacent thereto.

D. Ground Mounted Solar Energy System (“GSES”) means an SES that is structurally mounted to the ground and is larger than twenty (20) acres within the fenced area required by Section 4.B. of this ordinance. If an SES qualifies as either an ISES or an ASES, it shall not be considered a GSES.

1. **Applicability**.
2. This ordinance applies to solar energy systems to be installed and constructed after the effective date of the ordinance.
3. Solar energy systems constructed prior to the effected date of this ordinance shall not be required to meet the requirements of this ordinance.
4. Any upgrades, modifications or changes that alters by fifty percent (50%) or more the size or placement of an existing solar energy system shall comply with the provisions of this chapter.
5. **Application Requirements**. Each applicant shall submit the following to the building official or if no building official then the chair of the planning commission:
6. A complete application form and supporting documentation including payment of all required applicant fees.
7. Documentation demonstrating the ownership of subject parcel(s).
8. Proof the applicant has authorization to act upon the owner’s behalf.
9. Identification of intended utility company who will interconnect to the facility.
10. Site Analysis including aerial imagery and detailed description of existing site features including unique physiographic features.
11. Site Plan documentation depicting the facility and required site improvements including, but not limited to, extent of vegetation disturbance, buffering and landscape plan including wildlife corridor plan, grading plan, erosion and sediment control plan, placement of facilities, access driveway(s) and parking area(s), utilities, and stormwater management plan.
12. Detailed Decommissioning Plan including description of financial surety to be provided.
13. Construction Schedule.
14. **ASES Development Standards**.
15. Accessory Solar Collection Systems shall comply with the provisions of the National Electrical Safety Code and the other applicable codes previously adopted by (County /Municipality). In the event there is a conflict in standards among applicable codes, the code with the higher standard shall be used.
16. The design of the Accessory Solar Collection System shall conform to current industry standards.
17. In heat transfer systems, flammable liquids or gasses shall not be used as the transfer medium. The transfer medium shall not have a flash point less than fifty (50) degrees above the design maximum non-operating temperature attained in the collector.
18. A site plan for the Accessory Solar Collection System is to be reviewed and approved by the Planning Commission.

1. **GSES Development Standards**.
2. Site Plan. A GSES (not on rooftops) is subject to site plan review and approval by the Planning Commission.
3. Security Fence. A GSES shall be enclosed by perimeter fencing of at least six (6) feet in height sufficient to prevent unauthorized access. The security fencing shall be placed on the interior of the buffer area (not to be seen by other properties). The fence shall be maintained at all times of operation and decommissioning.
4. Setbacks. A GSES shall be subject only to the following setbacks: (a) solar panel structures shall be set back at least fifty feet (50’) from all property lines unless a lesser setback is approved as a variance by the Board of Zoning Appeals in accordance with T.C.A. § 13-7-109 and (b) solar panel structures shall be set back at least one hundred feet (100’) from all residential dwelling units occupied at the time of site plan review. The setback requirements of this section do not apply to internal parcels within the same GSES.
5. Support Structures. The design of support buildings and related structures shall use materials, colors, textures, screening, and landscaping that will blend the facilities to the natural setting and surrounding structures. The maximum height of a support building and related structure shall be twenty-five feet (25’) as required in the zoning classification of the subject parcel(s).
6. Access. A permanent access road or driveway and parking area will be constructed and maintained by the owner. The access road or driveway and parking area will be stabilized with gravel, asphalt, or concrete to minimize dust and impacts to adjacent properties.
7. Underground Wiring. All electrical interconnection and distribution lines within the GSES project boundary shall be underground.
8. Electrical. A GSES shall comply with the provisions of the National Electrical Safety Code, latest edition, and other applicable codes adopted by the [City/County]. In the event there is a conflict in standards among applicable codes, the code with the higher standard shall be used. GSESs shall also conform to all applicable industry standards.
9. Electric Power Provider. A GSES shall be subject to the requirements of the electric power utility providing grid electrical power to the property where such systems are to be located.
10. Landscape Buffering. A GSES shall have a visual buffer of natural vegetation, fencing, and/or plantings, that upon maturation, would provide a visual screen to reduce the view of the GSES from adjacent public streets or residential dwelling units on adjacent lots that are occupied at the time of site plan review. Notwithstanding anything to the contrary this section, existing natural tree growth and natural landforms along the perimeter of a GSES that create a reasonably sufficient visual buffer shall satisfy the requirements of this section.

The applicant shall identify an access corridor for wildlife to navigate through the solar facility. The proposed wildlife corridor shall be shown on the site plan submitted to the planning commission Areas between fencing shall be kept open to allow for the movement of migratory animals and other wildlife.

1. Lighting. Site lighting is allowed provided light fixtures are full cut-off LED luminaire type to shield the light source and shall not to exceed twenty-feet (20) in height and the maximum allowable footcandle at any lot line is one (1) footcandle or less. A photometric plan shall be provided to confirm light levels throughout site and along property lines.
2. Signage. A GSES shall have signs (a) stating the risks that may result from contact with a GSES, (b) identifying the owner or operator of the GSES, and (c) providing a 24-hour emergency contact phone number. All signs displayed with respect to a GSES shall comply with the requirements of the applicable zoning district for displaying advertisements.
3. Site Maintenance. Native vegetation shall be planted and maintained to stabilize the site for the duration of the facility’s use and operation. Weed control and mowing shall be performed based upon a schedule approved as part of the site plan approval. Panels shall be repaired or replaced when either nonfunctional or in visible disrepair.
4. Decommissioning. Upon or prior to the expiration or termination of a solar power facility agreement, as defined in T.C.A. § 66-9-207, the owner or operator of the GSES shall safely remove or cause the removal of all components of the solar power facility located on the premises, except for any electrical or communications lines buried more than three feet (3′) below the surface grade of the land, and restore the land comprising the premises to, as near as reasonably possible, its condition as of the date of the commencement of construction of the solar power facility. The owner or operator of the GSES shall deliver to the landowner a decommissioning plan detailing the owner/operator’s plan for performing or causing the performance of these obligations and shall also obtain and deliver to the landowner financial assurance as required in T.C.A. § 66-9-207. The owner or operator of the GSES shall provide the Planning Commission with a copy of its decommissioning plan for their review and shall provide evidence of its financial assurance obtained pursuant to T.C.A. § 66-9-207. The owner or operator of the GSES shall also provide the Planning Commission with a copy of the solar power facility lease upon request.
5. FAA. A GSES shall conform with any applicable Federal Aviation Administration requirements and, if required, secure any necessary approvals prior to commencement of construction of the GSES.
6. Non-GSES Development. Notwithstanding anything provided herein, an ISES and ASES shall be permitted so long as the primary use is permitted. Any other SES that does not qualify as a GSES will be permitted as of right in the Solar Energy Zoning District.

6. **Roof Mounted Solar Energy System Development Standards.**

1. A solar energy system shall conform to the height requirement of the district not to exceed thirty-five (35) feet.
2. The solar system must not produce glare that would constitute a nuisance to occupants of neighboring properties or persons traveling public roads.
3. Roof-mounted solar collector shall be placed in a location least visible from the public street and adjacent properties, without significantly reducing the operating efficiency of the collectors. The location of the roof-mounted solar collector shall be approved as part of the site plan approval.
4. Roof-mounted collectors shall be mounted in-plane on a gabled, hipped, or mansard roof with no extensions above the roof surface except for the actual thickness of the panel.
5. For buildings with flat roofs, the solar system should be installed so that it cannot be seen from the public street.
6. Accessor equipment, particularly plumbing and related fixtures, shall be installed in an attic space or not be visible from the front of the principal structure.

**BE IT FURTHER RESOLVED/ORDAINED** that this Resolution/Ordinance shall become effective upon adoption, the public health, safety, and welfare requiring it.

Approved and adopted by the [\_\_\_\_\_\_\_\_\_\_\_\_\_\_] of the [\_\_\_\_\_\_\_\_\_\_] on \_\_\_\_\_\_\_\_\_\_\_, 20[\_\_]

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

[INSERT NAME], County/City Mayor

Attest:

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

[INSERT NAME], County/City Clerk/Recorder

GUIDANCE TO PREPARER REGARDING ESTABLISHMENT OF BOARD OF ZONING APPEALS

Must include a section establishing a Board of Zoning Appeals if you do not already have one—

Section \_\_\_\_\_\_\_\_\_\_ Creation of the Board of Zoning Appeals

In accordance with the provisions of TCA 13-7-106 (13-7-205 for municipalities) there is hereby created a Board of Zoning Appeals of (3, 5, 7 or 9) members. The provisions as found in TCA 13-7-106, 13-7-107, 13-7-108, and 13-7-109 (for municipalities its 13-7 205,13-7-206, and 13-7-207) shall be followed in the establishment, procedures, and powers of the board of zoning appeals. Until such a time as this zoning resolution (ordinance) establishes zoning districts that utilize a special exception provision, the powers of the board of zoning appeals to enter a decision on such uses are held in abeyance.

1. Municipalities must adopt zoning provisions by ordinance (T.C.A. § 13-7-201). [↑](#footnote-ref-1)