

CITY OF CHESAPEAKE SOLAR ENERGY POLICY

The City of Chesapeake has established definitions for solar energy systems in the Chesapeake Zoning Ordinance (CZO) based on system attributes that protect the health, safety, and general welfare of the public. An *accessory solar energy system* is an electric generating structure that operates as an accessory to the authorized principal use of the property and is used to produce electric power for direct or net metering consumption by on-site users through the conversion of sunlight into electricity. A *utility solar energy facility* is an electric generating system which operates as a principal use of the property and is used to produce power for consumption by off-site users, consisting of one or more photovoltaic panels, support structures and associated control, conversion and transmission hardware.

The City of Chesapeake promotes the installation and use of accessory solar energy systems by designating them a permitted use in all of the City's zoning districts (except C-1, Conservation District) and requiring only a zoning permit to be issued. Utility solar energy facilities shall be conditionally permitted in the B-2 (General Business District), M-1 (Light Industrial District), M-2 (General Industrial District), M-3 (Waterfront Industrial District), O & I (Office and Institutional), and A-1 (Agricultural) zoning districts and require City Council to review use permit applications on a case-by-case basis in consideration of the factors and criteria set forth in the application submittal.

The City of Chesapeake has generated draft example stipulations that may be applied to mitigate the impacts of a utility solar energy facility (Addendum A) to help guide the City's review of and the applicant's submission of any future applications for a utility solar energy facility. The stipulations provided in Addendum A are comprised generally of stipulations attached to approved conditional use permits for utility solar energy facilities.

The City of Chesapeake seeks to ensure that a utility solar energy facility is consistent with and furthers the goals as found in the most current Comprehensive Plan. Furthermore, Chesapeake desires to balance this land use with the various and valuable existing and planned land uses and resources through the City and to that end, the following elements, at a minimum, should be considered, studied, researched, and vetted with each and every application for a utility solar energy facility:

- a. The City of Chesapeake desires to protect and enhance its agricultural and rural heritage and resources.
 - i. As all conditional uses are presumed to be incompatible with the zoning district in which they are to be conducted, the scale and intensity of a utility solar energy facility should be strongly considered in order to maintain the City's rural character. On-site substations are generally discouraged; thus a facility that includes an on-site substation may render the project incompatible with the surrounding community and may require a separate conditional use permit if located in the A-1, Agricultural zoning district.
 - Documentation justifying the need for the on-site substation should be submitted with the conditional use permit application. Documentation should also describe the components of the substation, physical dimensions including height, and include endorsement from the grid operating utility.

- ii. Siting of a facility on prime agricultural soils is discouraged. Non-agricultural producing lands or land which is of lower agricultural value should be considered first. The State Land Evaluation and Advisory Council (SLEAC) and soils classification should be considered in determining agricultural value.
 - iii. In order to protect the integrity of agricultural soils, mass grading of sites should be limited to the greatest extent possible.
 - iv. Benefits to the City's Open Space and Agriculture Preservation (OSAP) Program which protect and promote the use of land for traditional agricultural practices should be considered, commensurate with the acreage of the facility.
- b. The City of Chesapeake desires to protect, maintain, and improve the quality of the natural environmental systems – air, water, natural habitats and wetlands.
 - i. Site groundcover amid and surrounding the solar arrays should consist of a variety of native groundcovers, including warm season grasses, wildflowers, and native plants that benefit birds, bees, and other insects, as well as support local agricultural production by providing essential foliage for pollinators vital to crop production. Turf grass and gravel as groundcover should be avoided.
 - A minimum score of 145 (Meets Standard) on the Virginia Solar Site Pollinator/Bird Habitat Scorecard is recommended.
 - ii. Groundcover should be expeditiously established following completion of construction activities to minimize erosion and soil loss.
 - iii. Use of synthetic herbicides to control and maintain groundcover should be avoided.
 - iv. Wildlife movement should be considered in the layout and design of a site. Breaks in fencing and equipment should be provided where appropriate.
 - v. Development on wetlands, forested areas, and other valuable habitats should be avoided or minimized to the greatest extent possible.
- c. The City of Chesapeake desires to increase energy efficiency and use of renewable energy sources.
 - i. The generating capacity of the utility solar energy facility, how it will connect to the existing electrical grid, and the intended end user(s) should be considered.
 - ii. Utility solar energy facilities that support local users and create or enhance economic development opportunities are encouraged.
- d. The City of Chesapeake desires to preserve rural viewsheds and reduce the visual impact of utility solar energy facilities. A combination of setbacks, berms, and vegetative buffers should be applied around exterior property lines.
 - i. Utility solar energy facilities should generally not be visible from and along public rights-of-way and residentially-zoned or used property.
 - ii. Unless otherwise modified by City Council, utility solar energy facilities should comply with the following minimum setbacks:
 - Residentially-zoned or used property: 300 feet
 - All other exterior property lines: 150 feet
 - iii. Berms should be located outside the fence line and planted with appropriate groundcover.
 - iv. Vegetative buffers should include predominately native evergreen species to provide visual interest and wildlife habitat.

- e. The City of Chesapeake seeks to reduce exposure to risk and protect the health, safety, and general welfare of the public.
- i. An insurance policy providing general liability and environmental impairment coverage should be maintained during the construction, operation, and decommissioning of the utility solar energy facility. Minimum limits of coverage should reflect industry best practices and be commensurate with the generating capacity of the facility. At minimum, a 20MW facility should include a \$5,000,000 minimum limit per occurrence for general liability and environmental impairment, respectively.
 - ii. Solar panels should be silicon-based and use lead-free soldering.
 - iii. Decommissioning of the site shall be governed by the written agreement required by state and local law, which shall be executed prior to issuance of a conditional use permit. Decommissioning of the site should take place in the minimum amount of time feasible. Between 180-360 days is recommended, per the following guidance:
 - < 150,000 panels – 180 days
 - 150,000 – 250,000 panels – 270 days
 - > 250,000 panels – 360 days
- f. The City of Chesapeake desires to protect its interests at NALF Fentress and NSA Northwest Annex. Any application for a utility solar energy facility shall, pursuant to Chesapeake Zoning Ordinance Section Sec. 2-620.71, consult with the U.S. Navy to determine potential impacts to their mission, to include glare/glint and electromagnetic interference (EMI) considerations.
- g. The City of Chesapeake desires to protect its interests at the Chesapeake Regional Airport and Hampton Roads Executive Airport. Any application for a utility solar energy facility should determine potential impacts to these airports from glare/glint and design all solar panels to minimize the reflection of light.



DRAFT EXAMPLE STIPULATIONS FOR UTILITY SOLAR ENERGY FACILITY

The following stipulations are draft example stipulations that may be a condition of approval for any utility solar energy facility, as defined in the Chesapeake Zoning Ordinance. These stipulations are not all inclusive and additional stipulations may be deemed necessary in order to mitigate impacts based upon specific site conditions. Likewise, the stipulations below may need to be modified or deleted based upon specific site conditions. The Director of Planning or their designee may modify these example stipulations as needed based on approved conditional use permits for utility solar energy facilities and as solar energy technology and industry best practices evolve. Final stipulations set for any use permit will be at the sole discretion of the Chesapeake City Council.

- 1. Operator:** The applicant/owner shall notify the Zoning Administrator in writing within thirty (30) days of a change in ownership of the proposed solar facility. The notification shall include the name, address, and contact information for the new owner and designee in the Commonwealth of Virginia. In addition, the applicant/owner shall provide written proof that the new owner entity has been advised of and agreed in writing to comply with all of the stipulations associated with the Conditional Use Permit. Said written proof shall be subject to the review and approval of the City Attorney, or designee.
- 2. Site Entrances:** The applicant/owner shall construct City Standard Commercial Entrances, CG-11A, at each access point to the site prior to issuance of a Certificate of Occupancy. The entrances shall be depicted on the final site construction plan which is subject to the review and approval of the Director of Development and Permits, or designee.
- 3. Emergency Access:** The applicant/owner shall provide emergency access, including but not limited to include unobstructed access utilizing fire lane marking in accordance with the PFM, Appendix 19, and a Knox Corporation key box or padlock for emergency access via the locked gate, prior to the issuance of a Certificate of Occupancy. The required emergency access and sufficiency of said access shall be subject to the review and approval of the City's Fire Marshal.
- 4. Emergency Management Plan:** Prior to receiving a Certificate of Occupancy, the applicant/owner shall provide an Emergency Management Plan (EMP) to the Director of Development and Permits for the utility solar energy facility. The EMP shall be subject to the review and approval of the Director of Development and Permits, or designee. The goal of this EMP is to provide safety guidelines and procedures for potential emergency-related incidents during all phases of the life of the facility (construction, operation, and decommissioning). The EMP must cover, at a minimum, emergency communications and training, theft and vandalism, inclement weather, high voltage equipment, and fire safety and prevention.

5. **Fencing:** The applicant/owner shall install and maintain a security fence around the entire perimeter of the utility solar energy facility prior to the issuance of a Certificate of Occupancy for the use. Said fence shall be between six (6) to ten (10) feet in height. The fence shall not exceed six (6) feet in height unless the applicant/owner receives a variance from the Board of Zoning Appeals. Furthermore, the applicant/owner shall obtain all required permits and approvals from the Department of Development and Permits prior to the installation of the security fence.
6. **Setbacks:** The applicant/owner shall maintain a minimum setback for the use of one hundred and fifty (150) feet from all exterior property lines and a minimum of three hundred (300) feet if abutting a residentially zoned or use property. The setbacks imposed in this stipulation shall not apply to fencing, berms, and/or landscape buffers.
7. **Substation(s):** The proposed substation(s) shall maintain a minimum setback of one thousand (1000) feet from any residential dwelling unit or a minimum of five hundred (500) feet to the closest property line, whichever is greater.
8. **Landscape Plan:** The applicant/owner shall submit a Landscape Plan pursuant to the Chesapeake Zoning Ordinance prior to final construction plan approval. Said plan shall consist of the following, where necessary: (1) a modified Buffer Yard D, consisting of five (5) small trees, twenty-five (25) shrubs, and a solid row of evergreen trees that are at least 8 feet in height at the time of planting for every 100 linear feet; and (2) earthen berms, at least 4 feet in height, located behind buffer yards and planted with groundcover consisting of native species of warm season grasses. Said Landscape Plan and plant materials shall be subject to the review and approval of the City's Landscape Coordinator and shall be installed prior to the issuance of the Certificate of Occupancy.
9. **Groundcover:** The applicant/owner shall plant and maintain vegetative groundcover amid and surrounding the solar arrays. This groundcover shall consist of native species of warm season grasses and pollinator plants to benefit birds, bees, and other insects and support local agricultural production by providing essential flora for pollinators vital to local crop production. Said plant materials shall be subject to the review and approval of the City's Landscape Coordinator and shall be planted prior to the issuance of the Certificate of Occupancy.
10. **Herbicides:** The applicant/owner shall manage the vegetation on-site without the use of herbicides unless the treatment is approved by the City's Landscape Coordinator.
11. **Run-Off Control Permit** (*if located in NW River Watershed*): The applicant/owner shall obtain a valid Run-Off Control Permit from the Department of Public Utilities prior to the approval of construction plans.
12. **Electromagnetic Interference:** The applicant/owner agrees that the proposed use shall utilize SMA 2200-EV-US, SMA 2500-EV-US, or an alternative solar panel

inverter approved by the Navy and in compliance with the Navy's Electromagnetic Interference (EMI) assessment.

- 13. Decommissioning:** The applicant/owner shall enter into a written agreement to decommission the solar energy equipment, facilities, and devices prior to the issuance of this conditional use permit.
- 14. Solar Panels:** The applicant/owner shall ensure that the proposed utility solar energy facility will only use silicon-based solar panels.
- 15. Wind Speed and Height:** The applicant/owner shall ensure that the solar arrays are designed to withstand 120 mph wind speeds. The height of the solar panel arrays shall not exceed the height of the row of evergreen trees referenced in Stipulation ____ or ten (10) feet in height at max tilt.
- 16. Insurance:** The applicant/owner shall maintain insurance for the duration of the use. The applicant/owner shall provide to the City Attorney, or designee, a Certificate of Insurance providing General Liability Insurance which shall include, at a minimum, the following information: (i) the name of the insurance company, policy number and expiration date; and (ii) the coverage and limits on coverage and including the amount of deductibles or self-insured retentions with a minimum limit of Five Million Dollars (\$5,000,000) per occurrence and Ten Million Dollars (\$10,000,000) aggregate, combined single limit, for bodily injury (including death) or property damage and Environmental Impairment insurance with minimum limits of Five Million Dollars (\$5,000,000) per occurrence. The Certificate of Insurance shall be provided to the City Attorney, or designee, prior to the issuance of a Certificate of Occupancy for the use.
- 17. OSAP Program Incentives** (*Applicant may offer alternative incentives*): In light of and for so long as tax exemptions are afforded to utility solar energy facilities in Virginia and in an effort to promote and preserve agricultural lands, the applicant/owner offers and the City accepts an annual contribution of ____ dollars to the City of Chesapeake's Open Space and Agriculture Preservation (OSAP) Program or similar program as approved by the Director of Planning, or designee. The first contribution shall be paid prior to the issuance of a Certificate of Occupancy for this use and each annual contribution shall be paid every twelve (12) months thereafter.