

CRAVEN COUNTY

**AN ORDINANCE REGULATING
THE OPERATION AND MAINTENANCE OF
SOLAR ENERGY FACILITIES**

WHEREAS, the proposed Ordinance regulating the operation and maintenance of solar energy facilities (“Ordinance”) will: (i) establish a uniform method of regulating solar energy facilities; (ii) establish the rights, duties and obligations of developers and operators of solar energy facilities; (iii) balance the interests of the general public with the development rights of individual property owners; and (iv) promote the health, safety and general welfare of the public; and,

WHEREAS, the proposed Ordinance is consistent with the County’s Land Use Plan’s goals and objectives, and with the County’s overall land use regulations and ordinances; and,

WHEREAS, the proposed Ordinance will further the purposes of the Code of Ordinances as to other ordinances and actions designed to implement the County’s Land Use Plan; and,

WHEREAS, the Planning Staff recommends approval of the proposed amendments; and,

WHEREAS, on October 6, 2016, the County’s Planning Board voted 5 to 0 to recommend that the Board of Commissioners approve the proposed Ordinance set forth herein; and,

WHEREAS, the Board of Commissioners held a duly-noticed public hearing on November 7, 2016 to consider adopting the Ordinance.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COMMISSIONERS as follows:

SECTION I

The proposed Ordinance is found to be consistent with the County’s Land Use Plan, and other land use regulations, ordinances and policies; and otherwise promotes the public health, safety and general welfare. Therefore, the Ordinance is hereby adopted as set forth here.

SECTION II

1. *That a new Appendix I (“An Ordinance Regulating the Operation and Maintenance of Solar Energy Farms”) of the Craven County Code of Ordinances be adopted as follows:*

I-1.1 Title.

This Ordinance may be known and may be cited as "Ordinance Regulating the Operation and Maintenance of Solar Energy Facilities."

I-1.2 Purposes and objectives.

The purposes and objectives for which this Ordinance is passed are as follows:

- (1) To preserve the dignity and aesthetic quality of the environment in Craven County.
- (2) To preserve the physical integrity of land in close proximity to residential areas.
- (3) To protect and enhance the economic viability and interests of the citizens and residents of Craven County who have made substantial financial investments in homes, businesses, and industry in Craven County.

I-1.3 Definitions.

For the purpose of this Ordinance, certain terms and words are hereby defined; words used in the present tense shall include the future; words used in the singular number shall include the plural number; and the plural the singular; and the word "shall" is mandatory and not discretionary.

Building: Any structure having a roof supported by columns or walls, and designated or intended for the shelter, support, enclosure or protection of persons, animals or chattels.

Fence: A continuous barrier extending from the surface of the ground to a uniform height of not less than six feet from the ground at any given point, constructed of dirt, wood, stone, steel, or other metal, or any substance of a similar nature and strength.

Gate: A door or other device attached to a fence which, when opened, provides a means of ingress and egress of persons and things for which it was intended, and which, when closed, forms a continuous barrier as a part of the fence to which it is attached.

Improved area: Area containing solar panels, electrical inverters, storage buildings and access roads.

Opaque fence: A continuous opaque (non-transparent), unperforated barrier extending from the surface of the ground to a uniform height of not less than six feet from the ground at any given point, constructed of dirt, wood, stone, steel, or other metal, or any substance of a similar nature and strength which will hide the solar energy facility.

Photovoltaic: A material or device in which electricity is generated as a result of exposure to light.

Public road: Any road or highway which is now or hereafter designated and maintained by the North Carolina Department of Transportation as part of the State Highway System, whether primary or secondary, hard-surfaced or other dependable roads. Setbacks for improved areas shall be measured from the road right of way.

Residence: A building used as a dwelling for one or more families or persons.

Solar energy facility (also "SEF"): An energy facility or area of land principally used to convert solar energy to electricity, which includes, but is not limited to, the use of one or more solar energy systems. This definition shall exclude those facilities that are installed on the roof of a building, the primary purpose of such building not being for the commercial production of solar energy.

I-1.4 Prohibitions.

It shall be unlawful after the effective date of this Ordinance for any person, firm, or corporation, or other legal entity to operate, maintain or establish in any unincorporated area of Craven County a solar energy facility which the site plan has not been approved by the Craven County Planning Board. Modifications to an existing solar energy facility that increases the area by more than 20 percent of the original footprint or changes the solar panel type shall be subject to this Ordinance.

I-1.5 Location.

- (a) Improved areas shall not be located in a federally designated Special Flood Hazard Area - AE.
- (b) All solar energy facilities located in areas covered by the most recent AICUZ report or subsequent reports must be sent to the MCAS Cherry Point base commander or designated official for comment. The base commander must be given 21 days for a response.
- (c) All improved areas shall be at least 100 feet from a public road and 25 feet from the fence line.
- (d) Improved areas shall be at least 100 feet from a primary residential, commercial, church, or institutional structure upon property not associated with a Solar Energy Facility.

- (e) All access roads and storage areas shall be established on a 30-foot minimum easement to a public right-of-way.
- (f) All solar energy facilities shall have a minimum landscape buffer of 50 feet. The buffer shall contain one (1) row of evergreen trees or bushes planted no more than eight feet apart and at least four feet tall at time of planting. The buffer shall obtain a height of ten feet within three growing seasons. The trees or bushes may be trimmed but no lower than a height of ten feet.

I-1.6 Fencing; Security.

Solar energy facilities shall be fenced completely as defined in section I-1.3 above. The perimeter fence shall be designed to restrict unauthorized access.

I-1.7 Supplemental regulations.

- (a) The manufacturers or installer's identification and appropriate warning sign shall be posted on or near the panels in a clearly visible manner.
- (b) On site power lines between solar panels and inverters shall be placed underground.
- (c) The design of solar energy facilities buffers shall use materials, colors, textures, screening and landscaping, that will blend the facility into the natural setting and existing environment.
- (d) If the solar energy facility consists of batteries or storage of batteries, adequate design must be provided to ensure all local, state and federal requirements regulating outdoor battery storage have been met.
- (e) The applicant must obtain from NC Department of Transportation a driveway permit.
- (f) The design and construction of solar energy facilities shall not produce light emissions, either direct or indirect (reflective), that would interfere with pilot vision and/or traffic control operations as stated in the most recent AICUZ report, as well as low level military training routes as then utilized by any branch of the US Department of Defense.
- (g) The design and construction of solar energy facilities shall not produce electrical emissions that would interfere with aircraft communications systems or navigation equipment as stated in the most recent AICUZ report, as well as low level military training routes as then utilized by any branch of the US Department of Defense.
- (h) A copy of the application to the utility company that will be purchasing electricity from the proposed site shall be provided to the county.
- (i) A fully executed copy of an agreement between the lot owner and the facility's owner or operator confirming the owner or operator has permission of the property owner to apply for the necessary permits for construction and operation of the solar energy facility.
- (j) Any other relevant studies, reports, certificates and approval as may be reasonably required by Craven County.

- (k) A description of the proposed technology to include type of solar panel and system, fixed mounted verses solar tracking, number of panels, and angles of orientation.
- (l) An information sign shall be posted and maintained at the entrance(s) which lists the name and phone number of the operator.
- (m) It is the responsibility of the parcel owner to remove all obsolete or unused systems within 12 months of cessation of operations. Reusable components are to be recycled whenever possible.
- (n) A copy of all permits and/or approvals issued by the North Carolina Utilities Commission.
- (o) Each owner, operator or maintainer of a solar energy facility to which this Ordinance applies shall utilize good husbandry techniques with respect to said landscaping buffer, including but not limited to, proper pruning, proper fertilizer, and proper mulching, so that the vegetation will reach maturity as soon as practical and will have maximum density in foliage. Dead or diseased vegetation shall be removed and must be replanted at the next appropriate planting time. Plants or grasses not part of the landscaping buffer shall be maintained by the facility operator not to exceed 12 inches in height.
- (p) The owner or operator shall submit a current Phase 1 environmental assessment report at the time of application, dated not more than 90 days prior to submittal hereunder. When circumstances warrant, the County may require a Phase 2 environmental assessment.
- (q) The operator shall submit a current Phase 1 environmental assessment report at the time of decommissioning or upon an event of abandonment, within 90 days of either event. When circumstances warrant, the County may require a Phase 2 environmental assessment.

I-1.8 Site plan required.

- (a) Owners or operators of solar energy facilities established after the effective date of the Ordinance from which this Ordinance derives shall present three copies of a site plan which conform to the standards of this Ordinance to the Planning Board, as well as payment in full of all fees that may be required by the Craven County Schedule of Fees, if any. The site plan shall include setbacks, panel sizes, and location of property lines, buildings and road rights-of-way.
- (b) The Planning Board shall review the site plan to insure conformity with the requirements of this Ordinance, and make recommendations to the Board of Commissioners to either approve, reject, or approve with conditions. No new solar energy facility shall be operated until the site plan has been approved by the Board of Commissioners; provided, however, that if the Board of Commissioners has not taken action within 90 days after the first Planning Board meeting after the submission of the site plan, said site plan will be deemed to be approved.
- (c) The Board of Commissioners may grant a variance of the design standard requirements of this Ordinance, in accordance with the standards set forth in Section A-206 of the Craven County Code of Ordinances. Applications for such variance shall be made to the Planning Director.

- (d) Prior to final inspection, proof that a permit issued by the state in accordance with applicable provisions of the General Statutes has been issued.
- (e) Appeals of all matters under this Ordinance shall be to Craven County Superior Court.

I-1.9 Abandonment and decommissioning plan

(a) Abandonment:

A SEF that ceases to produce energy on a continuous basis for 12 months will be considered abandoned unless the current responsible party (or parties) with ownership interest in the SEF provides substantial evidence (updated every 6 months after 12 months of no energy production) to the Planning Director or his designee of the intent to maintain and reinstate the operation of that facility. It is the responsibility of the responsible party (or parties) to remove all equipment and facilities and restore the parcel to its condition prior to development of the SEF. Further, it is the responsibility of the operator of the SEF to notify the Planning Director in writing of any cessation of the production of energy, within ten (10) days of the same.

1. Upon determination of abandonment, the Planning Director shall notify the party (or parties) responsible they must remove the SEF and restore the site to its condition prior to development of the SEF within three hundred and sixty (360) days of notice by the Planning Director or his designee.

2. If the responsible party (or parties) fails to comply, the Planning Director or his designee may remove the SEF, sell any removed materials, and initiate judicial proceedings or take any other steps legally authorized against the responsible parties to recover the costs required to remove the SEF and restore the site to a non-hazardous pre-development condition.

(b) Decommissioning:

a. A decommissioning plan signed by the party responsible for decommissioning and the landowner (if different) addressing the following shall be submitted prior to the issuance of the development permit.

- i. Defined conditions upon which decommissioning will be initiated (i.e. end of land lease, no power production for 12 months, abandonment etc.)
- ii. Removal of all non-utility owned equipment, conduit, structures, fencing, roads, solar panels and foundations.
- iii. Restoration of property to condition prior to development of the SEF.
- iv. The timeframe for completion of decommissioning activities.

- v. Description of any agreement (e.g. lease) with landowner regarding decommissioning.
- vi. The party currently responsible for decommissioning.
- vii. Plans for updating this decommissioning plan.
- viii. A form of surety equal to 125% of the entire cost of decommission under the plan, as estimated by a North Carolina licensed engineer under seal, and approved by the County Planning Director and County Attorney, either through cash, a surety performance bond, irrevocable letter of credit or other instrument readily convertible into cash at face value, either with the County or in escrow with a financial institution designated as an official depository of the County. This surety shall be retained by the County to cover the cost of the decommissioning requirements herein. Following initial submittal of the surety, the cost calculation shall be reviewed annually, and adjusted accordingly based upon an updated estimate of a North Carolina licensed engineer under seal, of the estimated decommissioning costs; provided however, any such periodic adjustment must be approved by the Director of the Craven County Planning Department. Failure to comply with any requirement of this Section shall result in the immediate termination and revocation of all prior approvals and permits; further, County shall be entitled to make immediate demand upon, and/or retain any proceeds of, the surety, which shall be used for decommissioning and/or removal of the Solar Energy Facility, even if still operational.

I-1.10 Aviation Notification

(a) For consideration of potential impacts to Cherry Point MCAS and Seymour Johnson AFB flying operations, notification of intent to construct an SEF shall be sent to the respective Base Commanders or designated officials 30 days before the regularly scheduled Planning Board meeting. Notification shall include location of SEF (i.e. map, coordinates, address, or parcel ID), technology (i.e. roof-mounted PV, ground-mounted fixed PV, tracked PV, solar thermal, etc.), and the area of system (e.g. 5 acres). Proof of delivery of notification and date of delivery shall be submitted with permit application.

(b) For consideration of potential impacts to civilian flight paths for airport operations located within five (5) nautical miles from an airport listed in the National Plan of Integrated Airport Systems, notification of intent to construct an SEF shall be sent to the airport manager or designated official and the Federal Aviation Administration's (FAA) Airport District office (ADO) with oversight of North Carolina. Notification shall include location of SEF (i.e. map, coordinates, address, or parcel ID), technology (i.e. roof-mounted PV, ground-mounted fixed PV, tracked PV, solar thermal, etc.), and the area of system (e.g. 5 acres). Proof of delivery of

notification and date of delivery shall be submitted with permit application. The airport must be given 30 days for review.

(c) For consideration of potential impacts to civilian flight paths for airport operations located within five (5) nautical miles from an airport not listed in the National Plan of Integrated Airport Systems, except military airports, notification of intent to construct an SEF shall be sent to the airport manager or designated official. Notification shall include location of SEF (i.e. map, coordinates, address, or parcel ID), technology (i.e. roof-mounted PV, ground-mounted fixed PV, tracked PV, solar thermal, etc.), and the area of system (e.g. S acres). Proof of delivery of notification and date of delivery shall be submitted with permit application. The airport must be given 30 days for review.

(d) After receiving notification of intent to construct an SEF as described in Section I-1.10, B and C; if requested, the proponent of the SEF shall use the latest version of the Solar Glare Hazard Analysis Tool (SGHAT), per its user's manual to evaluate the solar glare aviation hazard, as indicated in D (i) and D (ii). The full report for each flight path and observation point, as well as the contact information for the zoning administrator, shall be sent to the authority indicated below at least 30 days prior to site plan approval. Proof of delivery of notification and date of delivery shall be submitted with permit application.

- i. Airport operations at an airport in the National Plan of Integrated Airport Systems (NPIAS) within 5 nautical miles of the center of a proposed SEF: provide required SGHAT analysis information to the airport manager or designated official and the Federal Aviation Administration's (FAA) Airport District office (ADO) with oversight of North Carolina.
- ii. Airport operations at airport *not* in the NPIAS, except military airports, as defined in Section Ten, subsection C, within 5 nautical miles of the center of proposed SEF: provide required SGHAT analysis information to the management of the airport for non-military airports.

(e) Proposed SEFs within the Cherry Point MCAS Airspace Control Surfaces Area as defined in the most recent Air Installation Compatible Use Zones (AICUZ) or subsequent AICUZ reports will be evaluated for potential impacts to Cherry Point MCAS and Seymour Johnson AFB flying operations as described below.

- i. After receiving notification of intent to construct the SEF (to include all SGHAT PV parameters), the Cherry Point MCAS Base Commander or designated official will notify the designated Craven County official if the SGHAT needs to be utilized by the SEF proponent or not.
- ii. If the SGHAT does not need to be utilized, the Cherry Point MCAS Commander or designated official will respond to the designated Craven County official.

iii. If the SGHAT does need to be utilized, the SEF proponent shall contact the Cherry Point Base Commander or designated official to receive the military data needed for the SGHAT (e.g., locations, increments, and elevations of observation points, as well as air traffic control tower information). The SGHAT shall be used per its user manual and reports must be run over the entire calendar year (each time zone). Upon receiving the SGHAT reports, the Cherry Point Base Commander or designated official will respond to the designated Craven County official.

(f) Any applicable SEF design changes (e.g. module tilt, module reflectivity, etc.) after initial submittal shall be rerun in the SGHAT tool and the new full report shall be sent without undue delay to the contact specified in sections I-1.10(d)(i and ii) and I-1.10(e) above for accurate records of the as-built system.

I-1.11 Violation shall be a misdemeanor.

(a) Any person, firm, corporation, or other entity who maintains or operates or who controls the maintenance of a solar energy facility in violation of this Ordinance shall be guilty of a misdemeanor and subject to prosecution, and if convicted, shall be punished by a fine not to exceed \$500.00 or by imprisonment not to exceed 30 days, or both, in the discretion of the court. Each day that said solar energy facility shall be maintained or operated in violation of this Ordinance shall constitute a separate and distinct offense.

(b) Any act constituting a violation of the provisions of this Ordinance or a failure to comply with any of its requirements shall subject the offender to a civil penalty of \$500.00. If the offender fails to remedy the violation and pay any civil penalty within thirty (30) days after being cited for said violation (or within the time prescribed by a citation if it provides for a longer period of time than thirty days), the civil penalty may be recovered in a civil action in the nature of a debt. Civil penalties begin to accrue from the date of the first notice of violation. Such civil penalties shall be in addition to any abatement costs.

(c) Each day that any violation continues, regardless of the date of notice, shall be considered a separate offense for purposes of the penalties and remedies specified in this section. In such an event, civil penalties begin to accrue from the date of the first notice of violation. For continuing violations, the initial citation and requirement that the civil penalty be paid within the time prescribed therein shall be the only notice required to be given; and shall be deemed to be an on-going citation and notice for continuing violations after the date of the

I-1.12 Enforcement.

(a) The enforcement officer shall be the Planning Director or his designee. The enforcement officer shall review site plans submitted under section I-1.7 and make appropriate recommendations to the planning board. The enforcement officer shall also visit the facilities regulated by this Ordinance as needed in the Planning Director's discretion, and if

the facility does not conform to said Ordinance shall discuss with the owner and/or operator the steps needed to bring the facility into compliance. If these steps are not taken, the enforcement officer shall notify the owner in writing of the steps that must be taken to bring the facility into compliance. If the owner or operator still fails to bring the facility into compliance with this Ordinance, the enforcement officer, after consultation with the county manager, shall institute the necessary steps to enforce this Ordinance in accordance with the provisions of subsection (b) of this section. The enforcement officer shall also assist owners or operators of any solar energy facility in making plans to comply with this Ordinance.

- (b) This Ordinance may be enforced by an appropriate equitable remedy issuing from a court of competent jurisdiction. It may be enforced by injunction and order of abatement. The County may apply for a mandatory or prohibitory injunction and order of abatement commanding the violator to correct any unlawful condition upon or cease the unlawful use of property. The County may request an order of abatement as part of a judgment in the cause any may request the court to close, demolish or remove buildings or other structures or take any other action that is necessary to bring the solar energy facility into compliance with this Ordinance.
- (c) This Ordinance may be enforced by any one or more of the remedies authorized herein.

2. *That this Ordinance is effective upon adoption.*

Adopted and effective this ____ day of _____, 2016.

CRAVEN COUNTY

(County Seal)

GEORGE LINER, Chair

Attest:

GWEN BRYAN, Clerk