

February 6, 2017 8:30 A.M.

JONES COUNTY BOARD OF COMMISSIONERS

REGULAR MEETING

JONES COUNTY AGRICULTURAL BUILDING, 110 MARKET STREET

TRENTON, NC 28585

MINUTES

COMMISSIONERS PRESENT:

Frank Emory, Chairperson
Mike Haddock, Vice-Chairperson
Zack Koonce, Commissioner
Sondra Ipock-Riggs, Commissioner
Joseph Wiggins, Commissioner

OFFICIALS PRESENT:

Franky J. Howard, County Manager
Angelica Hall, Clerk
Brenda Reece, Finance Officer
Jack Jones, Interim DSS Director
Wesley Smith, Health Director
Mike Houston, Water Supervisor
Eric Merritt, Emergency Coordinator

COMMISSIONERS ABSENT:

The Chairperson called the meeting to order. Commissioner Zack Koonce gave the invocation.

MOTION was made by Commissioner Mike Haddock, seconded by Commissioner Zack Koonce, and unanimously carried **THAT** the agenda be **APPROVED**.

MOTION made by Commissioner Mike Haddock, seconded by Commissioner Joseph Wiggins, and unanimously carried **THAT** the minutes for Regular Meeting on January 17, 2017 and December 5, 2016 be **APPROVED**.

PUBLIC COMMENT PERIOD:

Mr. Wayne Hurley addressed the Board and stated that he was against the Consolidation of the Health Department and Social Services.

1. SOLAR FARM CONCERNS

Mr. Kevin Aycock presented to the Board his concerns on solar farms coming into Jones County. Mr. Aycock lives on Harriett Lane and explained that the main issue he has with the solar farm is the road maintenance on Harriet Lane because that road is maintained by the community. Currently, the residents on that lane fund and maintain the roads and Mr. Aycock stated that the landowner where the solar panels are to be located has not contributed to the maintenance. Mr. Aycock also expressed concerns about abandonment of the solar farms once the government funding runs out, changes in property value due to the solar farms, storm water runoff, and if Cherry Point had been notified about flying the aircrafts over the solar panels. Mr. Aycock provided the Board with information about solar farms and also Ordinances from several Counties. Mr. Aycock stated that construction has not started on the solar farm and requested from the Board a 2 month moratorium to provide them time to complete an ordinance. At that time, Mr. Jimmie Hicks, County Attorney, advised the Board on the time frame and procedures of a moratorium and an ordinance. Chairperson Emory

thanked Mr. Aycock for the presentation and informed Mr. Aycock that the Board will be discussing the issue with solar farms coming to Jones County. A copy of the information and County ordinances is marked **EXHIBIT A** and is hereby incorporated and made a part of the minutes.

2. CLOSE-OUT PUBLIC HEARING FOR TC2 PROJECT/CDBG-ED

MOTION made by Commissioner Sondra Ipock-Riggs, seconded by Commissioner Zack Koonce and unanimously carried **THAT** the Board go into Public Hearing on the close-out of the TC2 project.

No comments from the public.

MOTION made by Commissioner Sondra Ipock-Riggs, seconded by Commissioner Zack Koonce and unanimously carried **THAT** the Board go out of Public Hearing on the close-out of the TC2 project.

No action needed by the Board.

3. HEALTH DEPARTMENT MONTHLY UPDATE

Mr. Wesley Smith, Health Director, presented the Board with the Monthly Health Department Report. A copy of the monthly Health Department report is marked **EXHIBIT B** and is hereby incorporated and made a part of the minutes.

4. ADDITIONAL WOMEN'S AND CHILDREN'S HEALTH (WIC) FUNDS

Mr. Wesley Smith, Health Director, presented the Board with information pertaining to additional WIC funds. Mr. Smith explained to the Board that the Health Department had been awarded additional funding in the amount of \$454.00 from the NC Division of Public Health, Women's and Children's Health Section, Nutrition Services Branch. This funding is to allow local health departments to enhance its ability to meet the objectives of the WIC program. Mr. Smith requested the Board approve receipt of the additional \$454.00 in WIC funds, and increase their budget for FY 2016-17. **MOTION** made by Commissioner Joseph Wiggins, seconded by Commissioner Sondra Ipock-Riggs and unanimously carried **THAT** the receipt of the additional WIC Funds of \$454.00 be **APPROVED** and the Health Department Budget be increased for FY 2016-17. A copy of the Funding Agreement Addendum is marked **EXHIBIT C** and is hereby incorporated and made a part of the minutes.

5. INTERLOCAL AGREEMENT WITH ONSLOW COUNTY FOR PUBLIC HEALTH PREPAREDNESS

Mr. Wesley Smith, Health Director, presented the Board with an Interlocal Agreement. Mr. Smith would like approval to enter into an Interlocal Agreement with Onslow County Health Department (OCHD) to provide JCHD assistance in order for JCHD to achieve effective completion of the required capabilities of the CDC Public Health Preparedness Cooperative Agreement for JCHD. The term of the agreement is for a period of 6 months from the date the agreement is executed. The funding JCHD receives from the NC Division of Public Health for Public Health Preparedness and Ebola Preparedness will cover the costs associated

with the agreement. Mr. Smith is requesting the Board approve the Interlocal Agreement between Jones County Health Department and Onslow County Health Department.

MOTION made by Commissioner Zack Koonce, seconded by Commissioner Joseph Wiggins and unanimously carried **THAT** the Interlocal Agreement with Onslow County Health Department be **APPROVED** as presented. A copy of the Interlocal Agreement is marked **EXHIBIT D** and is hereby incorporated and made a part of the minutes.

6. ELECTRONIC HEALTH RECORDS FUNDING

Mr. Wesley Smith, Health Director, presented the Board with information pertaining to supplementary funding in the amount of \$20,000 from the NC Division of Public Health, Administrative, Local and Community Support/Local Technical Assistance & Training Branch. Mr. Smith explained that this funding was to enable the health department to acquire and Electronic Health Record (EHR) system. Mr. Smith requested the Board approve receipt of the \$20,000 and increase their budget for FY 2016-17. **MOTION** made by Commissioner Zack Koonce, seconded by Commissioner Sondra Ipock-Riggs and unanimously carried **THAT** the receipt of the \$20,000 supplementary funding be **APPROVED** and the Health Department Budget be increased for FY 2016-17. A copy of the Funding Agreement Addendum is marked **EXHIBIT E** and is hereby incorporated and made a part of the minutes.

7. BOARD OF HEALTH RESOLUTION ON CONSOLIDATION

Mr. Wesley Smith, Health Director, introduced Mr. Robert Jolly, Chair to the JCHD Board who then presented the Board a resolution that was passed by the Jones County Board of Health in opposition to the concept of Consolidation. On November 17, 2016, the Jones County Board of Health received an update from Jack Jones, Interim DSS Director, on options under consideration by the Board of Commissioners to implement a consolidated human services agency pursuant to NCGS 153A-77. At the end of the presentation, and after considerable discussion, the Board of Health voted in favor of adopting a resolution opposing the consolidation of a local health and human service agency in Jones County. Mr. Jolly requested the Board to allow the Jones County Health Department to operate the way they are currently operating. A copy of the Board of Health Resolution on Consolidation is marked **EXHIBIT F** and is hereby incorporated and made a part of the minutes.

8. MONTHLY DSS UPDATE-JACK JONES

Mr. Jack Jones, Interim DSS Director, presented the Board with the Monthly DSS Report. A copy of the report are marked **EXHIBIT G** and is hereby incorporated and made a part of the minutes.

9. BOARD OF DSS RESOLUTION ON CONSOLIDATION

Mr. Jack Jones, Interim DSS Director, presented the Board with a Resolution passed by the Jones County Board of DSS in opposition of the concept of Consolidation. A copy of the DSS Resolution on Consolidation is marked **EXHIBIT H** and is hereby incorporated and made a part of the minutes.

10. RESOLUTION/ACTION ON HEALTH/DSS HUMAN SERVICES CONSOLIDATION,

MOTION made by Commissioner Sondra Ipock-Riggs, seconded by Commissioner Zack Koonce and unanimously carried **THAT** the Jones County Health Department and the Jones County DSS will maintain their current, non-consolidated, traditional model of governance.

11. FEMA RESOLUTION OF APPLICANT AGENT

Mr. Franky Howard presented the Board a resolution to designate Brenda Reece, Finance Officer and Franky Howard, County Manager as Applicant Agents for the Jones County FEMA Application. **MOTION** made by Commissioner Sondra Ipock-Riggs, seconded by Commissioner Joseph Wiggins and unanimously carried **THAT** Resolution be **APPROVED** as presented. A copy of the Resolution is marked **EXHIBIT I** and is hereby incorporated and made a part of the minutes.

12. EMPLOYEE APPRECIATION

Mr. Franky Howard announced to the Board that the Employee Appreciation is set for March 9, 2017 from 11:30 am-1:30 pm.

13. WATER PROJECT WORKSHOP

Mr. Franky Howard announced to the Board that there would be a workshop on February 13, 2016 at 6:30 pm to discuss the status of the water project and how they may work with the Town of Pollocksville.

14. BUDGET AMENDMENTS 28-32

Mr. Franky Howard presented the Board with Budget Amendments to keep the County in line with expenditures. **MOTION** made by Commissioner Mike Haddock, seconded by Commissioner Zack Koonce and unanimously carried **THAT** the budget amendments 28-32 be **APPROVED** as presented. A copy of the Budget Amendments are marked **EXHIBIT J** and is hereby incorporated and made a part of the minutes.

15. WHITE OAK RIVER ROAD CONCERNS

Commissioner Sondra Ipock-Riggs wanted to address the continued concerns with the conditions of White Oak River Road. Commissioner Sondra Ipock-Riggs requested Mr. Randy Holland speak to the Board about these conditions. Mr. Holland presented the Board with pictures and a diagram taken of White Oak River Road. Mr. Holland stated his concerns are the width of the road, no speed limit signs posted, the safety of the kids on the school buses that have to travel on the road, the buses that pass and swipe mirrors and hit bumpers when passing and the log trucks speeding that will run you off the road. Mr. Holland would like to know what the Board could do to pass this information along and would like to move forward to see something happen. The Board requested that Mr. Holland provide the information to Mr. Franky Howard, County Manager and also suggested for Mr. Holland to call the DOT and Harry Brown. A copy of the diagram and pictures are marked **EXHIBIT K** and is hereby incorporated and made a part of the minutes.

COUNTY MANAGER'S REPORT

No Report

COMMISSIONER'S REPORTS

Commissioner Zack Koonce asked about the recording system and phone system that was to be set up in the board room.

Commissioner Joseph Wiggins requested an update on the FSA.

PUBLIC COMMENT

Mr. Kevin Aycock requested the Board move swiftly in producing an ordinance concerning the solar farm.

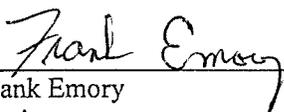
Mr. Tom Pike came before the Board about his concerns with the solar farm on Harriett Lane. Mr. Pike explained to the Board that he has lived on Harriett Lane for 16 years and they needed someone to advocate for them. Mr. Pike explained that he was not against having the solar farm but it needed to be done the right way and there needed to be something done about the maintenance on the roads.

MOTION made by Commissioner Sondra Ipock-Riggs, seconded by Commissioner Joseph Wiggins, and unanimously carried **THAT** the meeting be recessed until 10:00 a.m.

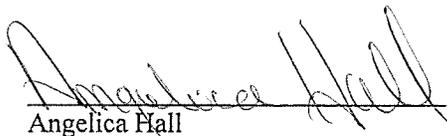
MOTION made by Commissioner Sondra Ipock-Riggs, seconded by Commissioner Mike Haddock, and unanimously carried **THAT** the meeting be resumed.

Mr. Ed Barrow and Michelle Harper with Barrow, Parris & Davenport, P.A. presented the Audit Report for 2015-2016. Mr. Barrow stated financials are in better shape than they have been in for years.

MOTION made by Commissioner Sondra Ipock-Riggs, seconded by Commissioner Zack Koonce, and unanimously carried **THAT** the meeting be **ADJOURN** at 10:30 a.m.



Frank Emory
Chairman



Angelica Hall
Clerk to the Board



AGENDA
CRAVEN COUNTY BOARD OF COMMISSIONERS
REGULAR SESSION
MONDAY, NOVEMBER 21, 2016
8:30 A.M.

CALL TO ORDER

ROLL CALL

INVOCATION

PLEDGE OF ALLEGIANCE

APPROVE AGENDA

1. CONSENT AGENDA
 - A. Minutes
 - B. Tax Releases and Refunds
 - C. Resolution Recognizing the Service of Marlene Copeland
 - D. Subdivision for Approval

2. CRAVEN COMMUNITY COLLEGE UPDATE ON FIRST STREET PROJECT:
Dr. Ray Staats, President

DEPARTMENTAL MATTERS

3. EMERGENCY SERVICES – REFINANCE ENGINE, PURCHASE NEW TRUCK AND STORAGE BUILDING: Roger Wetherington, No. 9 Township VFD Treasurer
4. SOLID WASTE – RENEWAL OF SOLID WASTE FRANCHISE AGREEMENT: Rusty Cotton, Solid Waste Director and Gene Hodges, Assistant County Manager
5. HEALTH – NEW FEE RECOMMENDATIONS: Greg Hodges, Environmental Health Supervisor
6. PLANNING – SOLAR ENERGY FACILITIES ORDINANCE: Don Baumgardner, Planning Director
7. ADMINISTRATION – FARMLAND LEASE PROPOSAL: Gene Hodges, Assistant County Manager

RG112116

APPROVED

Commissioner Mark moved to continue discussions with Republic, but prepare to go out for bid, seconded by Commissioner McCabe and unanimously carried.

DEPARTMENTAL MATTERS: HEALTH – NEW FEE RECOMMENDATIONS

Greg Hodges, Environmental Health Supervisor, presented a proposed new fee request for an Engineered Option Permit (EOP). This permit developed from a bill that became a Temporary Rule on July 1, 2016 and will become a Permanent Rule January 1, 2017. (N.C.G.S. 130A-336.1 Alternative Process for Wastewater System Approvals)

Commissioner Jones moved to approve the following fees, as recommended, seconded by Commissioner Mark and unanimously carried.

Date of Request: November 14, 2016

New Fee Recommended Effective Date: July 1, 2016

Line Item & Section: 101-3101-357-55-00

Description of Service: Engineered Option Permit (EOP)

Justification:

The local health departments may charge a fee for the EOP that is up to 30% of the cumulative total of the fees the department has established for an IP, CA, and OP. The exact wording in the law is as follows:

G.S. 130A-336.1(n) "Fees. – The local health department may assess a fee for the engineered option permit of up to thirty percent (30%) of the cumulative total of the fees the department has established to obtain an improvement permit, an authorization to construct, and an operations permit for wastewater systems under its jurisdiction. The fee shall only be used by the department in support of its work pursuant to this section to conduct site inspections; support the department's staff participation at post-construction conference meetings; and archive the engineered permit with the county register of deeds or other recordation of the wastewater system as required."

IP = Improvements Permit (First permit required in order be able to install a septic system) CA = Construction Authorization (Second permit issued by Health Department that gives authorization to install a septic system and also start construction on the home) OP = Final permit issued by Health Department stating that everything has been installed properly

Current Fee: None Proposed Fee: \$82.50 = 4 Bedroom septic system or less
(IP = \$150, CA = \$125, \$150 + \$125 = \$275
* 0.3 = \$82.50)

Current Fee: None Proposed Fee: \$180 = > 4 bedroom septic system or
a place of business/public assembly/commercial property (IP = \$300, CA = \$300, 300 +
\$300 = \$600 * 0.3 = \$180)

**DEPARTMENTAL MATTERS: PLANNING – SOLAR ENERGY FACILITIES
ORDINANCE**

On November 7, 2016, the Board of Commissioners conducted a public hearing to hear public comments regarding the proposed Solar Energy Facilities Ordinance and tabled the vote on the ordinance until this meeting.

Planning Director, Don Baumgardner, stated that there were no changes to the ordinance since the last meeting. Commissioner Jones stated that people who contacted him previously were concerned about the bond requirement, but have since had their concerns addressed.

RG112116

APPROVED

Commissioner Mark moved to approve the Solar Energy Facilities Ordinance, as follows, seconded by Commissioner Tyson and unanimously carried in a roll call vote.

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.

RG112116

APPROVED

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.

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APPROVED

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.

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APPROVED

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.

RG112116

APPROVED

- 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. 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.
- (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.

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- 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.

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APPROVED

- (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 21st day of November, 2016.

DEPARTMENTAL MATTERS: ADMINISTRATION – FARMLAND LEASE PROPOSAL

Assistant County Manager, Gene Hodges, reported that Craven County owns approximately 55 acres of land (down from 150 acres three years ago) that is leased as farmland for crop production. This acreage is comprised of undeveloped land in the Industrial Park next to the Cooperative Extension Building and acreage to the right of the entrance at the Judicial Center. In 2013, this lease was put out for bids and a 3-year lease was awarded to Mitchell Farms in Cove City at a rate of \$85/acre. This year a solicitation for proposals via an ad in the *Sun Journal*, posting the request on the County's website, and posting the request at Agricultural Extension did not produce any proposals. Working with Mike Carroll with Cooperative Extension, contact was made with three individuals that had separately expressed an interest in leasing the farmland. After speaking with all three individuals, Timmy Cox with TRC Farms, Cove City, NC made an offer to lease the County's farmland for \$50/acre.

Commissioner Jones moved to direct staff to move forward with advertising the public notice of intent to enter into a farmland lease agreement and place on the December 5, 2016 agenda for approval, seconded by Commissioner McCabe and unanimously carried.

DEPARTMENTAL MATTERS: RECREATION – GRANT

Recreation Director, Eddie Games, requested authorization to proceed with a grant application for NC Connect Bond funds in the amount of \$140,000. A 20% match of the total project cost, \$175,000, is required and will be provided in the amount of \$35,000 by the Bate Foundation. No County funding is required. The project will include the addition of paved parking areas, a picnic shelter and other improvements for enhanced accessibility, such as widened dugouts for the Special Needs Baseball League. Commissioner Sampson moved to approve authorization to proceed with the grant application, seconded by Commissioner McCabe and unanimously carried.

PAMLICO COUNTY, NORTH CAROLINA
ORDINANCE REGULATING THE CONSTRUCTION, OPERATION
AND MAINTENANCE OF SOLAR ENERGY FACILITIES

SECTION I
STATEMENT OF CONSISTENCY

The proposed Ordinance is found to be consistent with Pamlico 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
TITLE AND PURPOSE

A. Title.

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

B. 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 Pamlico 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 Pamlico County who have made substantial financial investments in homes and businesses in Pamlico County.

SECTION III
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 10 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" 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 and those facilities that contain an Improved Area less than or equal to 10 acres in the aggregate.

**SECTION IV
PROHIBITION**

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 Pamlico County a Solar Energy Facility which the site plan has not been approved by the Pamlico County Planning Board. Modifications to an existing Solar Energy Facility that increases the area by more than 20% of the original footprint or changes the solar panel type shall be subject to this Ordinance.

**SECTION V
LOCATION**

The following provisions shall apply to the location of all Solar Energy Facilities and Improvement Areas:

A. Improved areas shall not be located in a federally designated Special Flood Hazard Area.

B. All site plans for Solar Energy Facilities located in areas covered by the most recent AICUZ report or subsequent reports must be sent to the North Carolina Department of Military and Veterans Affairs and the North Carolina Commanders' Council for comment within 21 days from the date the site plans are sent.

Deleted: MCAS Cherry Point base commander

Deleted: or designated official for comment

Deleted: 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 any contiguous property line 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 either have:
- (1) a minimum landscape buffer of 25 feet containing evergreen trees or bushes planted no more than 8 feet apart and at least four feet tall at time of planting. The buffer shall obtain a height of 10 feet within 3 growing seasons. The trees or bushes may be trimmed but no lower than a height of 10 feet; or
 - (2) an Opaque Fence with a continuous height of 10 feet on each side necessary to hide the Solar Energy Facility from plain view.

Deleted: a primary residential, commercial, or institutional structure upon property

ARTICLE VI

ENCLOSURE FENCING AND SECURITY

Solar energy facilities shall be fenced completely by a continuous barrier extending from the surface of the ground to a uniform height of not less than 6 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. The perimeter fence shall be designed to restrict unauthorized access.

ARTICLE VII

SUPPLEMENTAL REGULATIONS

- A. The manufacturer's 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. An affidavit or evidence 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 Pamlico 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 vegetation, 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 landscaping shall be maintained by the facility operator not to exceed 12 inches in height.

ARTICLE VIII
SITE PLAN REQUIRED

- A. Owners or operators of Solar Energy Facilities established after the effective date of this Ordinance shall present 3 copies of a site plan, which conform to the standards of this Ordinance to the Planning Board. 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. No new Solar Energy Facility shall be operated until the site plan has been approved by the Planning Board; provided, however, that if the Planning Board 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. Planning Board may recommend to the Board of Commissioners that a variance be granted from these regulations, and the Board of Commissioner may grant such a variance, when, in each Board's opinion, undue hardship may result from strict compliance. In recommending or granting any variance, both Boards shall make the findings required below, taking into account the nature of the proposed subdivision, the existing use of land in the vicinity, the number of persons to reside or work in the vicinity of the Solar Energy Facility, and the probable effect of the Solar Energy Facility upon traffic conditions in the vicinity. No variance shall be granted unless both Boards find:
1. That there are special topographical or environmental circumstances or conditions affecting said property such that the strict application of the provisions of this ordinance would deprive the applicant of the reasonable use of his land; and
 2. That the granting of the variance will not be detrimental to the purpose of this ordinance, public health, safety and welfare or injurious to other property in the territory in which said property is situated.
- In recommending or granting variances, the relevant Board may require such conditions as will secure, insofar as practicable, the objectives or requirements varied. Any variance thus recommended is required to be entered in writing in the minutes of the appropriate Board and the reasoning upon which departure was justified set forth.
- D. Prior to final inspection, proof must be submitted that a permit has been issued in accordance with applicable provisions of the General Statutes by the State of North Carolina.
- E. Appeals of all matters under this Ordinance shall be to the Board of Commissioners.

ARTICLE IX
ABANDONMENT AND DECOMMISSIONING PLAN

A. Abandonment

1. A Solar Energy Facility 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 Solar Energy Facility provides substantial evidence (updated every 6 months after 12 months of no energy production) to the Chief Building Inspector 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 Solar Energy Facility.
2. Upon determination of abandonment, the Chief Building Inspector shall notify the party (or parties) responsible they must remove the Solar Energy Facility and restore the site to its condition prior to development of the Solar Energy Facility within 360 days' of notice by the Chief Building Inspector or his designee.
3. If the responsible party (or parties) fails to comply, the Chief Building Inspector or his designee may remove the Solar Energy Facility, 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 Solar Energy Facility and restore the site to a non-hazardous pre-development condition.

B. Decommissioning

1. 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:
 - a. Defined conditions upon which decommissioning will be initiated (i.e. end of land lease, no power production for 12 months, abandonment etc.)
 - b. Removal of all non-utility owned equipment, conduit, structures, fencing, roads, solar panels and foundations.
 - c. Restoration of property to condition prior to development of the Solar Energy Facility.
 - d. The timeframe for completion of decommissioning activities.
 - e. Description of any agreement (e.g. lease) with landowner regarding decommissioning.
 - f. The party currently responsible for decommissioning.
 - g. Plans for updating this decommissioning plan.
 - h. 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 Chief Building Inspector 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 Planning Board. Failure to comply with any requirement of this paragraph 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.

SECTION X
AVIATION NOTIFICATION

- A. For consideration of potential impacts to Cherry Point MCAS and Seymour Johnson AFB flying operations, notification of intent to construct a Solar Energy Facility 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 Solar Energy Facility (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 5 nautical miles from an airport listed in the National Plan of Integrated Airport Systems, notification of intent to construct a Solar Energy Facility 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 the Solar Energy Facility (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 5 nautical miles from an airport not listed in the National Plan of Integrated Airport Systems, except military airports, notification of intent to construct a Solar Energy Facility shall be sent to the airport manager or designated official. Notification shall include location of Solar Energy Facility (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.

- D. After receiving notification of intent to construct a Solar Energy Facility as described in this Ordinance; if requested, the proponent of the Solar Energy Facility 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 below:
1. Airport operations at an airport in the National Plan of Integrated Airport Systems (NPIAS) within 5 nautical miles of the center of a proposed Solar Energy Facility: 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.
 2. Airport operations at airport *not* in the NPIAS, except military airports, within 5 nautical miles of the center of proposed Solar Energy Facility: provide required SGHAT analysis information to the management of the airport for non-military airports.

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.

- E. Proposed Solar Energy Facilities 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.
1. After receiving notification of intent to construct a Solar Energy Facility as described in this section (to include all SGHAT PV parameters), the Cherry Point MCAS Base Commander or designated official will notify the designated Pamlico County official if the SGHAT needs to be utilized by the Solar Energy Facility proponent or not.
 2. If the SGHAT does not need to be utilized, the Cherry Point MCAS Commander or designated official will respond to the designated Pamlico County official.
 3. If the SGHAT does need to be utilized, the Solar Energy Facility 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 Pamlico County official.

- F. Any applicable Solar Energy Facility 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 in accordance with the same provisions of this Ordinance as the original report.

SECTION XI

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 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 30 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 the abatement costs assessed pursuant to this Ordinance.
- 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

SECTION XII

ENFORCEMENT

- A. The enforcement officer shall be the Chief Building Inspector or his designee. The enforcement officer shall review site plans submitted under this Ordinance and make appropriate recommendations to the Planning Board. The enforcement officer shall also visit the facilities regulated by this Ordinance as needed in the Chief Building Inspector'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 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.

Adopted and effective this ____ day of _____, 2016.

PAMLICO COUNTY

(County Seal)

PAT PRESCOTT, Chair

Attest:

COURTNEY NORFLEET, Clerk

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**CURRITUCK COUNTY
NORTH CAROLINA**

January 3, 2017
Minutes – Regular Meeting of the Board of Commissioners

WORK SESSION

1. 5:00 PM Letendre Text Amendment Discussion

The Board of Commissioners attended a work session at 5 PM in the Board Meeting Room of the Historic Courthouse to receive information and background on a proposed text amendment. The Letendre's are requesting the text amendment because elements of their project under construction on the 4-wheel drive beach were determined to not fit the definition of single-family in the county's Unified Development Ordinance (UDO).

Mr. Woody reviewed a timeline starting with the initial letter of determination in April, 2013, which said the project consisted of three separate structures and did not meet the UDO definition of single family. Building connections were made and the structure was accepted in November 2013 as a single unit. Legal challenges filed by a neighboring property owner ultimately resulted in a June 2016 North Carolina Court of Appeals decision stating the structure does not meet the definition of single-family.

Mr. McRee reviewed the court of appeals decision and opinion, explaining the court determined the project consisted of multiple buildings with no principal structure and no accessory structures, and therefore does not meet the county's definition. Mr. McRee said the remedy would be a modification of the text in the UDO.

Mr. Woody and Mr. McRee answered Board questions regarding accessory structures and presented information regarding the existing Coastal Area Management Act (CAMA) permit for the property. Setbacks and gazebo construction were discussed.

6:00 PM CALL TO ORDER

The Currituck County Board of Commissioners met at 6 PM in the Board Meeting Room of the Historic Currituck Courthouse, 153 Courthouse Road, Currituck, North Carolina, for its regular meeting.

Attendee Name	Title	Status	Arrived
Bobby Hanig	Chairman	Present	
Mike D. Hall	Vice Chairman	Present	
Paul M. Beaumont	Commissioner	Present	
Mary "Kitty" Etheridge	Commissioner	Present	
Marion Gilbert	Commissioner	Present	
Mike H. Payment	Commissioner	Present	
Bob White	Commissioner	Present	

Chairman Hanig called the meeting to order.

Ken Griggs of Powells Point represented the Griggs family and an owner of a portion of the property that sold to the water park, which left Barnhill looking for another property. He spoke in support of the rezoning, saying as good stewards over 27 years he believes Barnhill will be just as good at the other site and would hate to see them leave the county.

Mr. Woodson said value was addressed and they assessed other land within heavy-industrial zoned parks but could not make it work. He believes they chose the best possible site.

Chairman Hanig closed the public hearing.

Commissioner Payment said he had concerns with the location and possible spot zoning and moved to deny PB 16-22 because it is not consistent with the Land Use Plan: Industrial uses should not be located in areas that would diminish the desirability of existing and planned non-industrial developments; industrial development shall be located on land that is physically suitable and has unique advantages for the industry; new industry development shall be encouraged to locate in existing and/or planned industrial parks; the important economic study that we did with the development of Lower Currituck and the major highway corridors with our intent to address the landscaping and the looks of the corridor. It is not reasonable and not in the public interest because it's established a new industrial site adjoining Caratoke Highway instead of locating in a planned industrial park; it does have hot mix asphalt plant that will generate odors, noise and negative impact; and it's not compatible with our existing use of surrounding with the land subject to this application with the single-family dwellings.

The motion was seconded by Commissioner Gilbert and passed unanimously.

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Mike H. Payment, Commissioner
SECONDER:	Marion Gilbert, Commissioner
AYES:	Bobby Hanig, Chairman, Mike D. Hall, Vice Chairman, Paul M. Beaumont, Commissioner, Mary "Kitty" Etheridge, Commissioner, Marion Gilbert, Commissioner, Mike H. Payment, Commissioner, Bob White, Commissioner

NEW BUSINESS

A. An Ordinance of the Currituck County Board of Commissioners Imposing a Moratorium on the Acceptance, Processing or Consideration of Applications for Solar Arrays Pursuant to N.C. Gen. Stat. Section 153A-340(h)

Mr. McRee reviewed the Ordinance with the Board which would impose a moratorium on Solar Arrays within the county. He reviewed the proposed findings before the Board.

Commissioner Etheridge disclosed to the Board that Sun Energy has been trying to purchase 9.5 acres of family land on East Ridge Road and they sent a floral arrangement upon the passing of her sister. She said her decision would not be influenced.

A public hearing is required:

Owen Etheridge, Moyock, questioned proper advertising. He said agriculture is struggling and landowners have to do something to generate revenue. He said solar farms provide a positive tax flow for the county without demanding services. He said he has property that Sun Energy is looking at. Mr. Etheridge said the Board does not have a valid, legal reason to implement a moratorium.

Steve Fentress of Grandy Road said he has researched solar farms for a year and a half, as they are dangerous, pay very little taxes, and the only reason they exist is because of subsidies. He favors the moratorium and encouraged the Board to pass it.

Chairman Hanig closed the public hearing.

Mr. Woody answered questions, saying currently solar arrays are only allowed in conditional zoning districts. Mr. McRee said going forward the Board should be cognizant of the land use policy which discourages development of solar farms. Commissioner Payment believes we need to discuss where we want the county to be with regard to solar farms. Commissioner Hall suggested errors may have been made, and we need to do better going forward.

Commissioner Beaumont said he is sensitive to property rights, but not at the expense of our neighbors and agreed with Commissioner Hall's comments.

Commissioner Beaumont moved to approve the moratorium on solar development in the county for sixty days. The motion was seconded by Commissioner Gilbert and passed unanimously.

AN ORDINANCE OF THE CURRITUCK COUNTY BOARD OF COMMISSIONERS IMPOSING A MORATORIUM ON THE ACCEPTANCE, PROCESSING OR CONSIDERATION OF APPLICATIONS FOR SOLAR ARRAYS PURSUANT TO N.C. GEN. STAT. SECTION 153A-340(h)

The Board of Commissioners for the County of Currituck, North Carolina, at its regularly scheduled January 3, 2017 meeting, after due advertisement as by law required, conducted a public hearing and heard from the interested public and county officials for the purpose of gathering information and taking appropriate action within the confines of applicable law regarding imposition of a moratorium on the acceptance, processing or consideration of applications for solar arrays. From the same, the Board of Commissioners makes the following findings of fact, conclusions and legislative determination:

I. STATEMENT OF THE PROBLEM NECESSITATING A MORATORIUM; THE COURSES OF ACTION ALTERNATIVE TO A MORATORIUM CONSIDERED AND THEIR INADEQUACY ~ NCGS 153A-340(h)(1)

- A. Pursuant to Section 4.1.2 Use Table of the Currituck County Unified Development Ordinance solar arrays are permitted when conditionally zoned in the AG (Agricultural) zoning district which is contrary to Policy ID9 of the 2006 Currituck County Land Use Plan providing that Currituck County "shall not support the exploration or development of ENERGY PRODUCING FACILITIES within its jurisdiction including, but not limited to, oil and natural gas wells, and associated staging, transportation, refinement, processing or on-shore services or support facilities."
- B. There exists in the county two solar arrays, one approximately 2,000 acres in size and located adjacent to residential uses of land, that has resulted in numerous complaints to the county of incompatible activity on the solar array site with use of adjacent property for residential purposes. Additionally, there is pending in the Currituck County Superior Court the appeal from denial of a use

permit for solar array on property most recently used as a golf course and surrounded by property developed and used for residential purposes.

- C. In a February 10, 2016 report to the North Carolina General Assembly the North Carolina Department of Environmental Quality expressed concern for the loss of agricultural land and jobs in the state from conversion of agriculturally used property to use for solar arrays and the loss of wildlife habitat due to large areas encompassed by solar arrays that are fenced and affect food availability for wildlife. The North Carolina Utilities Commission Public Staff also reported to the North Carolina General Assembly on February 10, 2016 that as of January 31, 2016 Currituck County was ranked fifth among the top ten counties in the number of pending North Carolina Utilities Commission certificate applications.
- D. County residents have reported adverse effects of solar array construction, activity and operation including aesthetic impacts and potential impacts on residential and other property values. Absent the adoption of this ordinance incompatible solar array projects may be established that could adversely impact the quality of life for county residents.
- E. It is anticipated that the county may receive a number of applications to construct new solar arrays in the near future that may be incompatible with residential and other land uses and the county's 2006 Land Use Plan requiring a period of time to develop amendment to the Currituck County Unified Development Ordinance to properly reflect land development patterns as set forth in that plan.
- F. In addition, after further consideration it is not certain or apparent that the use of land for solar arrays to the extent developed in the county and that which is anticipated is in the best interest of the county.
- G. Modification regarding the use land for solar arrays will require amendment of the Unified Development Ordinance which process will be compromised and futile if additional solar array approval is sought prior to the time required to address the concerns set forth herein.

II. STATEMENT OF DEVELOPMENT APPROVAL SUBJECT TO THE MORATORIUM AND HOW SUCH MORATORIUM WILL ADDRESS THE EXISTING PROBLEMS ~ NCGS 153A-340(h)(2)

Imposition of a moratorium on the acceptance, processing or consideration of solar array applications will prevent the approval of solar arrays as an acceptable use of land in the county.

III. DATE FOR TERMINATION AND THE REASONABLE NECESSITY FOR ITS LENGTH TO ADDRESS THE PROBLEMS GIVING RISE TO THE IMPOSITION OF A MORATORIUM ~ NCGS 153A-340(h)(3)

Regulation to prohibit the use of land for solar arrays will require amendment of the Unified Development Ordinance. Therefore, time is required to review existing ordinances, draft proposed amendments and process any proposed amendment through relevant county boards or agencies. It is anticipated that a minimum of 60 days will be required to complete that process.

IV. STATEMENT OF ACTIONS AND SCHEDULE FOR THOSE ACTIONS PROPOSED TO BE TAKEN DURING THE EXISTENCE OF A MORATORIUM REASONABLY NECESSARY TO ADDRESS THE PROBLEMS AND CONDITIONS LEADING TO THE IMPOSITION OF THE MORATORIUM ~ NCGS 153A-340(h)(4)

During the existence of this moratorium the appropriate Currituck County staff shall:

- A. Review the Currituck County Unified Development Ordinance and 2006 Land Use Plan to determine amendment to the Unified Development Ordinance that is advisable to meet and preserve the stated goals established by the Currituck County 2006 Land Use Plan; and

B. Process any land use ordinance amendments through the Currituck County Planning Board so that a public hearing may be held on any amendments prior to the expiration of this ordinance.

V. IMPOSITION OF MORATORIUM

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COMMISSIONERS FOR THE COUNTY OF CURRITUCK that after careful, deliberate and studied contemplation of the above does hereby implement and impose, effective from the date and time of the adoption of this ordinance, to and including the end of March 4, 2017, a moratorium prohibiting the acceptance, processing or consideration by any county employee, or appointed or elected board any application for use of land within the county for a solar array.

ADOPTED the 3rd day of January, 2017 at _____ o' clock ____m.

Bobby Hanig, Chairman
Board of Commissioners

ATTEST:

Leeann Walton, Clerk to the Board

Table with 2 columns: Action (RESULT, MOVER, SECONDER, AYES) and Description (APPROVED [UNANIMOUS], Paul M. Beaumont, Marion Gilbert, Bobby Hanig, etc.)

B. An Ordinance of the Currituck County Board of Commissioners Amending Section 2-65 of the Currituck County, North Carolina Code of Ordinances Providing for the Location of Public Comments on the Agenda and Time Allotted for Public Comments.

Mr. McRee reviewed the proposed ordinance with the Board of Commissioners. The ordinance would move the public comment period toward the beginning of the agenda and reduce the time allotted for speakers to three minutes.

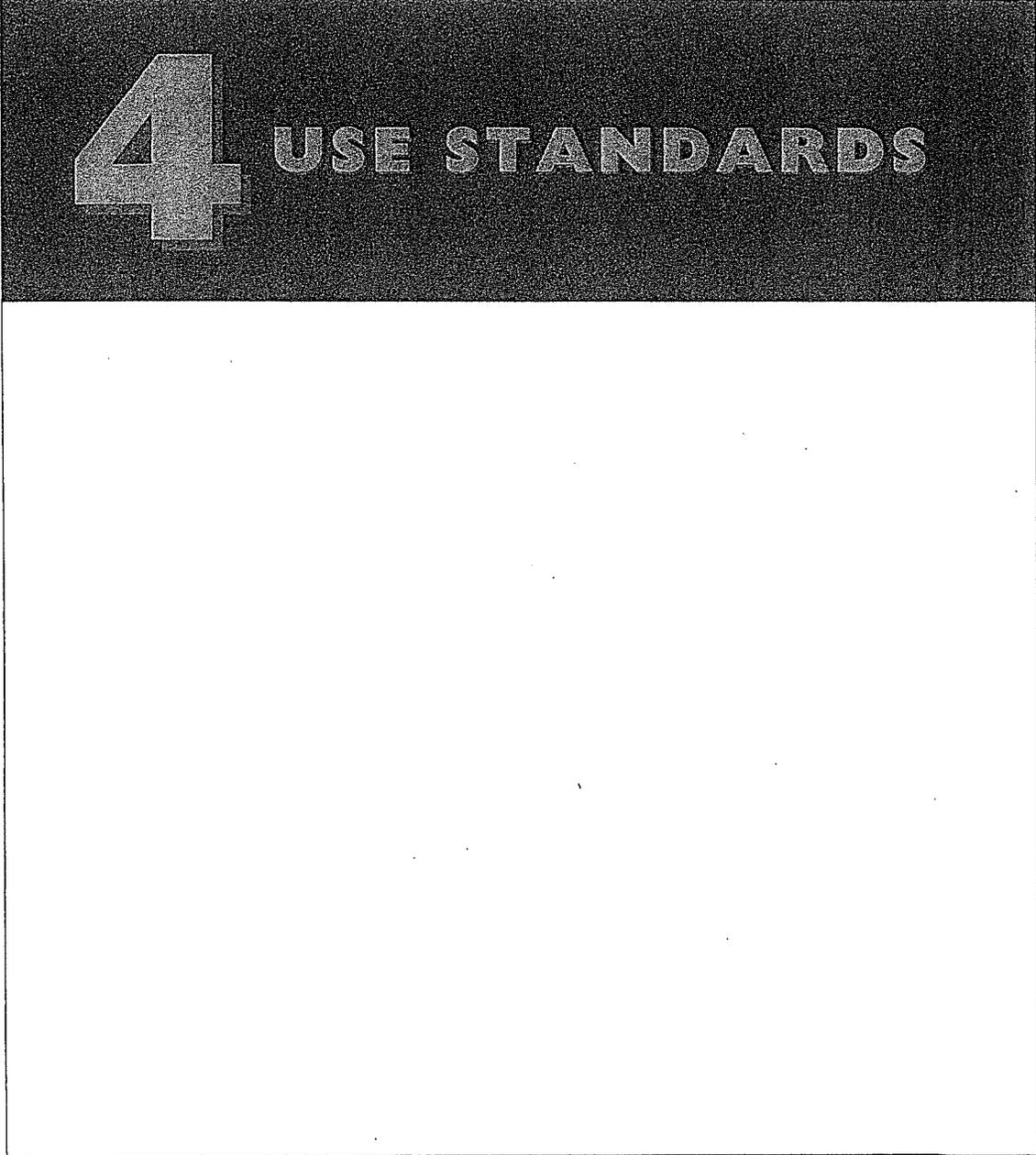
Commissioner Hall moved to approve. Commissioner Etheridge seconded and the motion passed unanimously.

SECTION 2-65 OF THE CURRITUCK COUNTY, NORTH CAROLINA CODE OF ORDINANCES PROVIDING FOR THE LOCATION OF PUBLIC COMMENTS ON THE AGENDA AND TIME ALLOTTED FOR PUBLIC COMMENTS

WHEREAS, pursuant to N.C. Gen. Stat. §153A-71 a board of commissioners may adopt its own rules of procedure in keeping with the size and nature of the board and in the spirit of generally accepted principles of parliamentary procedure.

NOW, THEREFORE, BE IT ORDAINED by the Board of Commissioners for the County of Currituck, North Carolina as follows:

PART I. Sec. 2-65 of the Code of Ordinances, Currituck County, North Carolina is amended to read as follows



4 USE STANDARDS

Chapter 4: Use Standards

SECTION 4.2: USE-SPECIFIC STANDARDS

Subsection 4.2.3: Institutional Uses

the security training facility; provided that all state, county and relevant agency permits, approvals and licenses are obtained in connection with the construction and operation of such structure.

- (ii) Sleeping and dining accommodations to persons not utilizing or otherwise associated with the security training facility shall not be permitted.

- (e) **Miscellaneous Standards**

- (i) The site or area used as a security training facility shall be enclosed by a six foot fence or otherwise restricted by natural physical features (i.e. swamps, bodies of water, canals, and large expanses of densely vegetated areas, etc.) so that access to the site is controlled to insure the safety of patrons, spectators and the public at large. Warning signs shall be posted along access points.
- (ii) The operators of a security training facility shall provide proof of coverage by adequate accident and liability insurance companies. A minimum coverage of \$2,000,000 shall be established.
- (iii) Any activity not specifically mentioned within the foregoing shall be prohibited.

G. Transportation Facilities**(I) Helicopter Landing Facilities**

A helicopter landing facility shall comply with the following standards:

- (a) The helicopter landing facility shall provide adequate land area for safe take-offs and landings in accordance with standards of the Federal Aviation Administration (FAA).
- (b) Where located within 500 feet of a single-family residential zoning district, or existing single-family residential use, a helicopter landing facility shall provide a Type D buffer along the property line to ensure the facility does not adversely impact surrounding uses.

H. Utilities**(I) Solar Array**

- (a) Solar arrays shall be configured to avoid glare and heat transference to adjacent lands.
- (b) Appropriate ground cover/grass is required and shall be maintained as not to create a fire hazard.
- (c) The solar panels, equipment, and associated security fencing shall be located at least 300 feet from any perimeter property line abutting a residential dwelling, residential zoning district, religious institution, public school, state licensed day care center, public playground, public swimming pool, or public park. The solar panels, equipment, and associated security fence shall be screened from those uses or zoning districts by a Type D buffer. The buffer may be reduced to a Type C

Chapter 4: Use Standards

SECTION 4.2: USE-SPECIFIC STANDARDS

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when abutting a right-of-way, use, or zoning district not listed above and the setback may be reduced to 100 feet in these instances.

- (d) The total height of the solar energy system, including any mounts, shall not exceed 15 feet above the ground when orientated at maximum tilt.
- (e) The solar energy system owner shall have 12 months to complete decommissioning of the facility if no electricity is generated for a continuous 12 month period.
- (f) Operations, maintenance, and decommissioning plans are required.
- (g) Ground water monitoring wells shall be installed prior to construction of the solar energy system and testing data shall be submitted annually to the Planning and Community Development Department until decommissioning occurs. Monitoring wells shall be located near the center of the site and along each exterior property line at approximately the lowest ground elevation point of each property line. Testing data shall be provided to the county indicating compliance with EPA National Primary Drinking Water Standards prior to construction and annually until decommissioning occurs.
 - (i) Should the initial ground water testing indicate that the site is not in compliance with the EPA National Primary Drinking Water Standards subsequent annual reports shall indicate no increase in noncompliance with those standards.
- (h) Prior to the issuance of a building permit, the developer shall post a performance guarantee in the form of cash deposit with the county to ensure decommissioning funds are available in the amount equal to 115 percent of the estimated decommissioning costs minus salvageable value. Estimates for decommissioning the site and salvageable value shall be prepared and certified by a registered engineer or North Carolina licensed general contractor and submitted prior to building permit approval and verified by a registered engineer or North Carolina licensed general contractor and resubmitted every two years thereafter until decommissioning occurs.

(2) Telecommunication Towers**(a) Purpose**

This section is intended to establish general standards for the siting of telecommunications towers and antennas that will:

- (i) Protect residential areas and land uses from potential adverse impacts of towers and antennas;
- (ii) Encourage the location of towers in nonresidential areas;
- (iii) Minimize the total number of new towers throughout the county;
- (iv) Strongly encourage the joint use of new and existing tower sites as a primary option rather than construction of additional single-use towers;



NC SUSTAINABLE
ENERGY ASSOCIATION



NC CLEAN ENERGY
TECHNOLOGY CENTER
Formerly the NC Solar Center

Template Solar Energy Development Ordinance for North Carolina

Executive Summary

North Carolina is rapidly becoming a leader in solar energy development not only in the southeast, but also in the US. Before the template, there was statewide discussion about how to regulate and permit solar energy systems, and no clear guide to creating one that does not overly burden industry or irresponsibly manage land use. Most local governments in NC, both at the municipal and county levels, provide some regulation on land use within their jurisdiction, yet most have yet to institute regulation for solar development. This template ordinance provides consensus input on a best practice model for how solar development can be regulated.

Template Solar Ordinance Meets a Growing Need

The rapid growth in solar development in NC makes this a very opportune time for development of the template ordinance, particularly because there is significant experience across the state with solar projects of all sizes, yet the industry is still at the early stages of its ongoing growth.

Template Approach Affords Flexibility

It is important to understand that the solar ordinance is a template rather than an enforceable rule or one-size-fits-all law. It is designed to be adapted and then adopted by jurisdictions across the state and to serve as the basis for local development ordinances in their respective communities. In this way the template solar ordinance provides valuable guidance while still allowing flexibility that local governments may want to help them best address local interests.

Broad Stakeholder Working Group Enhances Template's Value

The North Carolina Solar Center (NCSC) and the North Carolina Sustainable Energy Association (NCSEA) managed the development of the template ordinance and the organization of the drafting working group. The working group consisted of representatives of the solar industry, local NC planners, State Farm Bureau, NC Department of Agriculture, NC Department of Environment and Natural Resources (DENR), NC Association of County Commissioners, NC League of Municipalities, military, University of North Carolina School of Government, NC Conservation Network, Duke Energy Progress, North Carolina State University Forestry, Federal Aviation Administration (FAA), and many others. The initial draft was developed by NCSC and NCSEA in May 2013 based on a study of current NC solar ordinances and available state model ordinances. Throughout the summer and fall the working group, often in the form of smaller topic-specific focus groups, worked to improve and update the existing drafts. Additionally NCSC and NCSEA hosted five public forums across the state on the development of the template ordinance. At these forums NCSC and NCSEA convened a group of experts to inform interested stakeholders in the area about solar development and its regulation. The final three forums walked through the draft template and received valuable public feedback to assist with its development.

Template Ordinance Overview and Important Features

The ordinance covers photovoltaic as well as solar hot water projects, and classifies projects into one of three levels.

- Level 1 System:
 - Roof-mounted, building integrated, mounted over a parking lot, or ground-mounted and no more than half the footprint of the primary structure on the lot
 - A permitted use provided it meets applicable height, setback, aviation notification, and related district standards
- Level 2 System:
 - Ground-mounted system with a footprint of no more than ½ an acre in residential districts, no more than 10 acres in commercial/business districts or of any size in industrial districts
 - Subject to additional solar development standards (administrative approval)
- Level 3 System:
 - Systems that do not meet the requirements of Level 1 or 2 systems. Most solar farms are Level 3 systems.
 - Subject to the same solar development standards as Level 2
 - Require a public permit hearing (conditional/special use permit)

The template ordinance addresses some of the most common considerations that arise in the permitting of solar energy facilities. Some of the important topics covered in the ordinance include:

- Parcel Line Setbacks
- Height Limitations
- Aviation Notification (requires airport or FAA notification if project is within 5 nautical miles of an airport)
- Visibility (requirements regarding visual buffering, public signage, and lighting)
- Decommissioning (requires a decommissioning plan for the project)

There are other topics and resources that may be important to communities and other solar facility stakeholders but which were not deemed appropriate to include in the body of the template ordinance itself. Examples of those topics include wildlife habitat mapping and land lease considerations. These and other topics are nevertheless included in the form of appendices to the template ordinance document.

Implementation and Support

The template is designed to be used by jurisdictions across the state as a starting point for developing or updating their specific solar energy development regulations. However, there are natural limitations on the amount of information that can be included in the ordinance, even within multiple appendices. In order to facilitate local governments' access to the template ordinance and its contributors, the ordinance includes contact information for 30 individuals involved in the development of the template and who possess knowledge concerning various aspects of the ordinance. These organizations and individuals have agreed to share their contact information and serve as resources for fielding questions about the ordinance.

The Template Solar Energy Development Ordinance for North Carolina is available here:

[DSIRE website](#)

[NCSC website](#)

[NCSEA website](#)

Historical Document and information related to the template ordinance are available here:

[NCSC website](#)

[NCSEA website](#)

Introduction

Over the last few years, the state of North Carolina has experienced a massive increase in solar energy development. This can be attributed to many factors, including dramatic reduction in the price of solar modules, a state investment tax credit, the state's renewable energy portfolio standard (REPS), and the long-term standard offer contracts offered by utilities for projects below five megawatts (MW) in capacity. According to SNL Financial's latest industry data, the state has an installed capacity of 245 MW as of June 3, 2013.¹ This positions North Carolina as fifth nationally in cumulative installed capacity.² Thus, the North Carolina Sustainable Energy Association (NCSEA) and the North Carolina Solar Center organized this collaborative effort to construct a template ordinance. This ordinance facilitates the adoption of local regulation backed by industry, government, and citizen input.

Constructing solar energy projects requires numerous considerations and entails a thorough process of siting, permitting, and construction. These projects represent valuable assets in the community – creating local construction jobs, workforce training, economic development, increased property tax base, and ongoing educational opportunities. The permitting process generates discussion in communities with respect to the size and location of projects. Larger systems are often sited on farmland, forestland, or other open spaces, which can impact multiple residents. Responsible development of solar resources in North Carolina requires careful and consistent regulation in order to preserve important existing resources while facilitating the growth of this valuable new industry.

North Carolina's land use planning and regulation is handled by local governments. Cities, towns, and counties may delineate zoning districts within their jurisdiction and regulate various types of development within those local zoning districts. As of 2012, 87% of the state's 550 cities and 79% of the state's 100 counties have adopted zoning ordinances.³ Of these, only 24 cities and 18 counties have incorporated solar development ordinances into their codes; each on a case-by-case basis. This inconsistent approach to solar development regulation has created a patchwork of disparate and often undefined approaches, potentially creating unnecessary barriers to investment and development.

This discontinuity of policy prompted NCSEA and the NC Solar Center to lead in the drafting of a template solar ordinance that will not only provide guidance on effective language for responsible regulation of solar development, but also educate the public about this technology and its application. The wider public input process included five forums located throughout the state and a six-week period of open comments on nine key development issue areas using the Institute for Emerging Issues "IEI Commons" online tool. The drafting process included four months of working group meetings and several rounds of revisions. The drafting Working Group consisted of key stakeholders from planning, local government, agriculture, forestry, economic development, environment, wildlife, utilities, solar industry, and other specialties. Consensus on each aspect of this template ordinance was the goal throughout the drafting process.

The template ordinance set forth in this document attempts to organize and harmonize the language for regulating solar at the county and city level while incorporating some best practices. It divides solar energy systems into three different levels. Level 1 addresses all rooftop, parking lot, small ground mount associated with a building, and building-integrated solar systems. Level 2 applies to all mid-sized ground mounted systems and requires the systems meet development standards set by the ordinance before approval. The applicant must submit the required documents to the Zoning Administrator who reviews them and may then

¹ www.snl.com/InteractiveX/Article.aspx?cid=A-17930699-11303

² Solar Energy Industries Association and GTM Research. (2011 & 2012). U.S. Solar Market Insight Report 2011 & 2012. n Review

³ David Owens and Dayne Battem, "2012 Zoning Survey Report: Zoning Adoption, Administration, and Provisions for Design Standards and Alternative Energy Facilities," *Planning and Zoning Law Bulletin: UNC School of Government* no. 20 (July 2012), 1

approve the application as meeting the development standards. Level 3 systems are generally larger scale ground-mounted solar systems, often referred to as solar farms. Level 3 systems must obtain a special/conditional use permit and conform to the development standards in this solar development ordinance. The ordinance suggests development limitations based upon trends in North Carolina in order to maximize legitimacy and relevancy of the requirements.

This template is not law, rather a carefully crafted guideline for cities and counties to consider when adopting ordinances specific to solar energy development in their jurisdiction. The authors of this template emphasize that the standards must be tailored to fit the existing local land development ordinances and suggest that ordinances treat solar similarly to other uses with similar attributes and land/community impacts. The zoning districts included in this template ordinance are generic districts which will need to be replaced with the existing zoning districts of the jurisdiction. The template ordinance may also be applied in non-zoned jurisdictions upon the modification and approval of the authorizing agency. Furthermore, the adoption of an ordinance will not supersede any existing federal, state, or local rules pertaining to the development of the project. There are many important aspects of solar development that are out of the jurisdiction of the city or county yet should be considered by the property owner, such as doing a title search to find out if there are any use restrictions of the parcel, such as would exist with an enhanced farm district or some easements. Additional guidance for landowners outside of the scope of this ordinance is provided in Appendix A. There are several other appendices that provide related information but that are not part of the template ordinance regulations, such as the appendix on Sustainable Development (Appendix B) with information for planners and policy makers on additional options related to solar to consider in other development ordinances.

Stakeholders Available for Contact

The following selected members of the template ordinance working group have agreed to make themselves available for questions regarding the ordinance or issues related to solar development.

<p>NC Clean Energy Technology Center (NCCETC) (formerly the NC Solar Center) Tommy Cleveland (919) 515-9432 Tommy_Cleveland@ncsu.edu</p>	<p>NC Sustainable Energy Association (NCSEA) Maggie Clark (336) 402-6246 Maggie@energync.org</p>
<p>Duke Energy Bruce Barkley (919) 546-2814 Bruce.Barkley@duke-energy.com</p>	<p>Duke University Nicholas Institute Larry Shirley (919) 613-8745 Larry.Shirley@duke.edu</p>
<p>Federal Aviation Administration (FAA) Dana Perkins at Atlanta ADO in Working Group Aaron Braswell at Memphis ADO is current contact (901) 322-8192 Aaron.Braswell@faa.gov</p>	<p>Mathis Consulting Ben Edwards (828) 351-9631 ben@mathiscounseling.com</p>
<p>NC Association of County Commissioners Casandra Skinner 919-715-7665 Casandra.Skinner@ncacc.org</p>	<p>NC Conservation Network Nadia Luhr (919) 857-4699 ext.107 nadia@ncconservationnetwork.org</p>
<p>NC Department of Agriculture – Ag. Development & Farmland Preservation Dewitt Hardee (919) 707-3069 Dewitt.Hardee@ncagr.gov</p>	<p>NC Department of Agriculture – Agribusiness Development Ron Fish (919) 707-3119 Ron.Fish@ncagr.gov</p>
<p>NC Depart. of Commerce – Div. of Community Assistance - Community Planning, Central Region Oliver Bass (919) 571-4900 obass@nccommerce.com</p>	<p>NC DENR – Division of Energy, Mineral, & Land Resources - State Energy Program Bob Leker (919) 733-1907 bleker@nccommerce.com</p>
<p>NC DENR – Division of Water Quality (DWQ) Bill Diuguid (919) 807-6369 Bill.Diuguid@ncdenr.gov</p>	<p>NC DENR – Military Affairs and Strategic Planning Chris Russo (919) 707-3128 Chris.Russo@ncdenr.gov</p>
<p>NC Department of Revenue (Tax) Michael Brown (919) 814-1142 Michael.Brown@dornrc.com</p>	<p>NC Farm Bureau Paul Sherman (919) 719-7292 Paul.Sherman@ncfb.org</p>
<p>NC League of Municipalities Kim Hibbard (919) 715-3936 khibbard@nclm.org</p>	<p>NC State University Forestry Department Mark Megalos (919) 513-1202 mamegalo@ncsu.edu</p>

<p>NC Wildlife Resources Commission Kacy Cook (910) 638-4887 Kacy.Cook@ncwildlife.org</p>	<p>Planner – Catawba County Susan Ballbach (828) 465-8381 sballbach@catawbacountync.gov</p>
<p>Planner – Cleveland County Chris Martin 704-484-4975 Chris.Martin@clevelandcounty.com</p>	<p>Planner – Granville County Dervin Spell (919) 603-1333 Dervin.Spell@granvillecounty.org</p>
<p>Planner – Guilford County Les Eger (336) 641-3635 leger@co.guilford.nc.us</p>	<p>Planner – Warren County Ken Krulik (252) 257-7027 ext.30 kkrulik@co.warren.nc.us</p>
<p>Solar Industry - Carolina Solar Energy Richard Harkrader (919) 682-6822 rharkrader@carolinasolarenergy.com</p>	<p>Solar Industry - Parker Poe Adams & Bernstein, LLP Katherine Ross (919) 835-4671 katherineross@parkerpoe.com</p>
<p>Solar Industry - PCG Solar/Green Guys Mike Whitson (704) 497-0367 mike@pcgsolar.com</p>	<p>Solar Industry - O₂Energies, Inc. Logan Stephens (336) 708-5161 logan@o2energies.com</p>
<p>Solar Industry - Spilman Thomas & Battle, PLLC Nathan Atkinson (363) 725-4496 natkinson@spilmanlaw.com</p>	<p>Solar Industry - Southern Energy Management Bob Kingery (919) 836-0330 ext 101 bkingery@southern-energy.com</p>
<p>Solar Industry - Strata Solar Lance Williams (919) 960-6015 ext 306 lwilliams@stratasolar.com</p>	<p>Solar Industry - QF Solutions Donna Robichaud (513) 659-1178 drobichaud@qf-solutions-llc.com</p>
<p>UNC School of Government Adam Lovelady (919) 962-6712 adamlovelady@sog.unc.edu</p>	<p>NCSEA/Duke University Graduate Student Michael Fucci (302) 584-4152 fucci@energync.org</p>

Local government planning support resources:

- **NC Department of Commerce – Division of Community Assistance – Office of Community Planning:** To request services please contact the office nearest you. Contact information is available at www.nccommerce.com/cd/community-planning/regional-office-services
- **Solar Outreach Partnership (SolarOPs) – a US Department of Energy funded project:** Designed to help accelerate solar energy adoption on the local level by providing best practices, resources, and technical assistance to local governments. www.solaroutreach.org

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Template Solar Energy Development Ordinance

1. Purpose

The purpose of this ordinance is to facilitate the construction, installation, and operation of Solar Energy Systems (SESs) in the County/City of _____ in a manner that promotes economic development and ensures the protection of health, safety, and welfare while also avoiding adverse impacts to important areas such as agricultural lands, endangered species habitats, conservation lands, and other sensitive lands⁴. It is the intent of this ordinance to encourage the development of SESs that reduce reliance on foreign and out-of-state energy resources, bolster local economic development and job creation, support the diversification of the state's energy portfolio, strengthen energy and grid security, reduce greenhouse gas emissions, reduce local air and water pollution, and aid North Carolina in meeting its Renewable Portfolio Standard. This ordinance is not intended to abridge safety, health or environmental requirements contained in other applicable codes, standards, or ordinances. The provisions of this ordinance shall not be deemed to nullify any provisions of local, state or federal law.

2. Definitions

Solar Energy System (SES) - the components and subsystems required to convert solar energy into electric or thermal energy suitable for use. The area of the system includes all the land inside the perimeter of the system, which extends to any fencing. The term applies, but is not limited to, solar photovoltaic (PV) systems, solar thermal systems, and solar hot water systems. A system fits into one of three system types: Level 1 SES, Level 2 SES, and Level 3 SES.

Level 1 Solar Energy System - Level 1 SESs include the following:

- i.* Roof-mounted on any code-compliant structure.
- ii.* Ground-mounted on an area of up to 50% of the footprint of the primary structure on the parcel but no more than 1 acre.
- iii.* Covering permanent parking lot and other hardscape areas.
- iv.* Building integrated solar (i.e., shingle, hanging solar, canopy, etc.).

Level 2 Solar Energy System - Level 2 SESs are ground-mounted systems not included in Level 1 that meet the area restriction listed below:

- v.* Agricultural/Residential: SES \leq 1/2 acres
- vi.* Residential Low Density: SES \leq 1/2 acre
- vii.* Residential Medium Density: SES \leq 1/2 acre
- viii.* Residential High Density: SES \leq 1/2 acre
- ix.* General Commercial/Business: SES \leq 10 acres
- x.* Light Industrial: SES of any size
- xi.* Heavy Industrial: SES of any size
- xii.* Office-Institutional: SES \leq 10 acres

Level 3 Solar Energy System – Level 3 SESs are systems that do not satisfy the parameters for a Level 1 or Level 2 Solar Energy System.

⁴ See Appendix C for information on the NC resources

3. Applicability

- a. This ordinance applies to the construction of any new SES within the jurisdiction of the County/City.
- b. An SES established prior to the effective date of this ordinance shall remain exempt:
 - i. Exception: Modifications to an existing SES that increases the SES area by more than 5% of the original footprint or changes the solar panel type (e.g. photovoltaic to solar thermal) shall be subjected to this ordinance.
- c. Maintenance and repair are not subject to this ordinance.
- d. This ordinance does not supersede regulations from local, state, or federal agencies. Some important examples of such regulations include, but are not limited to:
 - i. **Building/Electrical Permits Required**
Nothing in this ordinance modifies already established building standards required to construct a SES.
 - ii. **Onsite Wastewater System Avoidance**
Nothing in this ordinance modifies already established Department of Health and Human Services requirements. A SES shall not be constructed over onsite waste water systems (e.g. septic systems) unless approved by the Department of Health and Human Services.
 - iii. **Stormwater Permit Required⁵**
Nothing in this ordinance modifies the requirements or exempts any SES of complying with the various stormwater jurisdictions⁶ and regulations established by the Department of Environment and Natural Resources. North Carolina statute requires the acquisition of stormwater permits for construction projects that impact stormwater runoff.
 - iv. **Historic Districts**
Nothing in this ordinance modifies already established State Historic Preservation Office requirements. May require additional permitting (certificates of appropriateness) to install solar in Historic Districts⁷

4. Permits Required

The type of permit required for an SES is displayed in Table 1: Permit Requirements.

⁵ See Appendix D: Water Infiltration and Soil Conservation for information on their relationship with ground-mounted solar energy systems

⁶ <http://portal.ncdenr.org/web/wq/ws/su/sw-permitting-map>

⁷ www.hpo.ncdcr.gov (see also: www.nrel.gov/docs/fy11osti/51297.pdf)

Table 1: Permit Requirements

Types of Permits Required: P= Permitted Use; D= Development Standards ⁸ ; SUP= Special Use Permit or Conditional Use Permit (see Appendix E)								
Zoning District	Agricultural/ Residential	Residential Low Density	Residential Med. Density	Residential High Density	Commercial/ Business	Light Industrial	Heavy Industrial	Office/ Institutional
Solar Energy Facilities								
Roof-mounted, parking lot cover, or building integrated (Level 1)	P	P	P	P	P	P	P	P
Ground-mounted:								
up to 50% of the footprint of the primary structure (Level 1)	P	P	P	P	P	P	P	P
≤1/2 acre (Level 2)	D	D	D	D	D	D	D	D
≤10 acres (Level 2 or 3)	SUP	SUP	SUP	SUP	D	D	D	D
>10 acres (Level 2 or 3)	SUP	SUP	SUP	SUP	SUP	D	D	SUP

5. Parcel Line Setbacks

The following table provides the Parcel Line setback to ground mounted SES equipment, excluding any security fencing, poles, and wires necessary to connect to facilities of the electric utility.

Table 2: Parcel Line Setbacks

Zoning District	Level 1	Level 2	Level 3		
			Front	Side	Rear
Agricultural/Residential	Per Zoning District****	Per Zoning District*,**	30'*	15'*	25'*
Residential, low density			50'*	50'*	50'*
Residential Medium Density			Per Zoning District*		
Residential High Density			30'*	15'*	25'*
Commercial/Business			30'*	15'*	25'*
Light Industrial			30'*	15'*	25'*
Heavy Industrial			30'*	15'*	25'*
Office/Institutional			30'*	15'*	25'*
* 100' setback for SES equipment, excluding any security fencing, to any residential dwelling unit. If the SES is on a working farm where the primary residential structure of the farm is on an adjacent lot then this 100' setback will not apply to this primary residential structure.					
** Ground-mounted SES must comply with district front yard limitations and setbacks, or otherwise not impair sight distance for safe access to or from the property or other properties in the vicinity					
*** Level 1 SESs are not subject to screening requirements typically applied to accessory utility systems (HVAC, dumpsters, etc.).					

⁸ Referred to as "Limited Use" in some jurisdictions

6. Height Limitations

The height of systems will be measured from the highest natural grade below each solar panel.

Table 3: Height Limitations*

Zoning Districts	Level 1 ⁹	Level 2	Level 3
Agricultural/Residential	Roof-mounted: Per zoning district Ground-mounted: 20'	20'	20'
Residential, low density		20'	20'
Residential Medium Density		20'	20'
Residential High Density		20'	20'
Commercial/Business		20'	20'
Light Industrial		20'	20'
Heavy Industrial		20'	20'
Office/Institutional		20'	20'
* This excludes utility poles and any antennas constructed for the project.			

7. Aviation Notification (see Appendix F for additional information)

The requirements below apply only to Level 1, 2, & 3 systems over half (½) an acre in size:

- a. A map analysis showing a radius of five (5) nautical miles from the center of the SES with any airport operations within this area highlighted shall be submitted with permit application.
- b. For consideration of potential impacts to low altitude military flight paths, notification of intent to construct the SES shall be sent to the NC Commanders Council¹⁰ at least 30 days before the CUP/SUP hearing for Level 3 SESs and at least 45 days before starting construction for applicable Level 1 & Level 2 SESs. Notification shall include location of SES (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.
- c. The latest version of the Solar Glare Hazard Analysis Tool (SGHAT)¹¹ shall be used per its user's manual to evaluate the solar glare aviation hazard. 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 before the CUP/SUP hearing for Level 3 SESs and at least 45 days before starting construction for Level 1 & Level 2 SESs. Proof of delivery of notification and date of delivery shall be submitted with permit application.
 - i. Airport operations at airport in the National Plan of Integrated Airport Systems (NPIAS)¹² within 5 nautical miles of the center of SES: provide required information to the Federal Aviation Administration's (FAA) Airport District Office (ADO) with oversight of North Carolina¹³

⁹ An alternative for roof mounted systems would be to exempt roof mounted systems from building height restrictions.

¹⁰ Mail: Commanding General; Attn: Community Plans and Liaison (NC Commanders Council); Marine Corps Installations East (MCI-EAST); PSC Box 20005; Camp Lejeune, NC 28542

Email: Subject: NC Commanders' Council Notification of Solar Development Project in "Town or County Name"
Address: Gray CIV Alexander K [alexander.gray@mcw.usmc.mil]

¹¹ <http://sandia.gov/glare>

¹² http://www.faa.gov/airports/planning_capacity/npias/reports/

¹³ as of October 2013 this is the Memphis ADO

- ii. Airport operations at airport not in the NPIAS, including military airports, within 5 nautical miles of the center of SES: provide required information to the NC Commanders Council for military airports and to the management of the airport for non-military airports
Any applicable SES 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 7.b.i and 7.b.ii above for accurate records of the as-built system.

8. Level 1 Solar Energy System Requirements

Level 1 SESs are a permitted use provided they meet the applicable height, setback, aviation notification, and related district standards.

9. Levels 2 & 3 Solar Energy System Requirements

These requirements are in addition to height, setback, aviation notification, and applicable district standards.

a. Site Plan

- i. A site plan¹⁴ shall be submitted to the Zoning Administrator demonstrating compliance with:
 1. Setback and height limitations established in Tables 2 and 3,
 2. Applicable zoning district requirements such as lot coverage,
 3. Applicable solar requirements per this ordinance.

b. Visibility

- i. SESs shall be constructed with buffering as required by the applicable zoning district or development standards (see Appendix J for solar visual buffering example standards).
- ii. Public signage (i.e. advertising, educational, etc.) as permitted by local signage ordinance, including appropriate or required security and safety signage.
- iii. If lighting is provided at site, lighting shall be shielded and downcast such that the light does not spill onto the adjacent parcel or the night sky. Motion sensor control is preferred.

c. Decommissioning (see Appendix G for a sample decommissioning plan and Appendix H for example abandonment clause and information on decommissioning)

- i. A decommissioning plan signed by the party responsible for decommissioning and the landowner (if different) addressing the following shall be submitted with permit application.
 1. Defined conditions upon which decommissioning will be initiated (i.e. end of land lease, no power production for 12 months, etc.)
 2. Removal of all non-utility owned equipment, conduit, structures, fencing, roads, and foundations
 3. Restoration of property to condition prior to development of the SES.
 4. Timeframe for completion of decommissioning activities, not to exceed one year.
 5. Description and copy of any lease or any other agreement with landowner regarding decommissioning.
 6. Name and address of person or party responsible for decommissioning..
 7. Plans and schedule for updating this decommissioning plan.
- ii. Before final electrical inspection, provide evidence that the decommissioning plan was recorded with the Register of Deeds.

¹⁴ Applicants may choose to provide a sketch plan to the Planning Administrator ahead of a site plan, as sketch plans do not require much investment and are an opportunity for the Planning Administrator to point out design changes ahead of more expensive site planning.

APPENDIX A: Landowner Guidance

There are many aspects of solar energy system development that impact the land, the landowner, the community, and the solar owner that are not regulated by the local government, or other regulatory bodies. Below is a list of issues developed in early 2013 in consultation with staff at the State Energy Office, the NC Solar Center, and the NC Attorney General's office to help identify *some* issues landowners should investigate when considering a lease offered for land used for a solar farm. Please be advised that the list is not meant to be a comprehensive list of all issues. It is recommended that landowners complete item #1 - get a land-lease lawyer.

1. It is highly recommended that you retain a lawyer with land lease experience to help you evaluate a lease. You can reach the NC Bar Association at 1-800-662-7660 and they can give you a list of lawyers in your area.
2. An option or feasibility period may be proposed by a developer while they are investigating whether a parcel of land is appropriate for a project – before they offer a long term lease. This is a due diligence period a developer will use to examine if the right conditions exist for a solar farm and possibly to secure agreements for the sale of power from the project.
3. Make sure conservation easement conditions or agricultural designation for tax purposes are consistent with the new lease. Taking land out of agricultural designation may result in additional taxes owed. The contract should state who is responsible for increased taxes due to the Solar Energy System development.
4. Evaluate any potential conflicts that the solar lease may have w/ any existing mortgage terms.
5. Evaluate any potential conflicts that the solar lease may have w/ any existing land use agreements, such as easements or an enhanced farm district.(A title search may be used to identify potential conflicts)
6. Make sure there is compensation for timber removal (if appropriate).
7. Make sure all conditions of a lease or options in advance of a lease are received in writing.
8. Have detailed decommissioning (removal) and restoration terms for the solar equipment at the end of lease so the land can be used for other purposes.
9. The developer should be responsible for managing storm water on the site. The installation of the arrays will impact storm water on the site and may require changes to storm water management or increase maintenance of storm water system (i.e. erosion control and keeping drainage ditches/pipes free flowing).
10. Make sure the lease identifies all work to be done and exact locations for equipment, also make sure there is proper notification of landowner in advance of any work to be done.
11. Take time to review lease documents before signing them.
12. It may be useful to check w/ neighbors to assess compensation rates being offered for land leases in your area.

Another resource that individuals as well as local governments may wish to consult is a document that the Solar Foundation prepared with funding from the U.S. Department of Energy as part of the US Department of Energy SunShot Program. It discusses a number of background requirements for solar farms as well as major elements of lease documents. You can find the document at the following link
http://thesolarfoundation.org/sites/thesolarfoundation.org/files/TSF_Leasing%20Fact%20Sheet.pdf

APPENDIX B: Sustainable Energy Options and Resources

This appendix is provided to supply planners and policy makers with inspiration and information about concepts and policies that in one way or another relate to solar energy, but do not appear within the scope of a solar development ordinance. None of the policies in this appendix are included in the template solar ordinance.

Project Permit – Solar Permitting map, database, and ratings, by Vote Solar

A project of the Vote Solar Initiative, Project Permit is an interactive website that scores municipal solar permitting practices nationwide. It is designed to help permitting staff, solar advocates, and municipal leaders understand how their city or town compares to permitting best practices. Project Permit includes tools and resources to help more municipalities achieve permitting best practices. Project Permit is funded by Solar 3.0, a DOE Sunshot Initiative grant recipient.

<http://projectpermit.org/>

Model Inspection Checklist for Rooftop PV Systems, from Interstate Renewable Energy Council (IREC), September 2013

For municipalities, an inspection checklist can serve a variety of important functions. First, it can serve as a supplementary educational tool for new or experienced inspectors to ensure they are aware of the host of code requirements that must be verified on-site during the inspection. It can also increase the consistency of inspections, by both a single inspector, as well as different inspectors working for the jurisdiction. Consistent inspections ensure high-quality, safe installations and also reduce conflict with installers, who may complain when they perceive that inspectors provide different results. The municipality can also use an inspection checklist as a tool for highlighting particular issues that seem to be repeatedly problematic for installers. For example, a checklist could contain a section for “common mistakes” which could highlight particular issues for both installers and inspectors to verify. The Model Inspection Checklist for Rooftop PV Systems was developed after reviewing existing checklists that have been created by leading jurisdictions across the United States. IREC incorporated the best components of each of these checklists and then worked with Don Hughes, Senior Electrical Inspector with Santa Clara County, California, to identify the relevant code requirements and add the citations. Finally, this document was peer-reviewed by qualified inspectors and building code officials from across the country, and by UL representatives.

www.irecusa.org/wp-content/uploads/2013/09/Model-Inspection-Checklist.pdf

Expedited Permit Process, from Solar American Board for Codes and Standards (Solar ABCs)

This report presents an Expedited Permit Process for PV Systems. The permit process in this report was created to meet the needs of the growing, small-scale photovoltaic (PV) market in the U.S. and is applicable nationwide. It takes advantage of the many common characteristics inherent in most of the small-scale PV systems installed today to streamline both the application and award of permits. The term “expedited permit process” refers to an organized permitting process by which a majority of small PV systems can be permitted (structural & electric) quickly and easily. It is not intended to apply to all types of PV systems. The primary need and use for this process is for systems of less than 15kW maximum power output. The expedited permit process is intended to simplify the structural and electrical review of a small PV system project and minimize the need for detailed engineering studies and unnecessary delays.

www.solarabcs.org/about/publications/reports/expedited-permit/

Solar Powering Your Community: A Guide for Local Governments, from U.S. Department of Energy

The U.S. Department of Energy developed this comprehensive resource to assist local governments and stakeholders in building sustainable local solar markets. This second edition of the guide was updated to include new market developments and innovations for advancing local solar markets that have emerged since the first edition was released in 2009. This updated edition also contains the most recent lessons and successes from the original 25 Solar America Cities and other communities promoting solar energy. The guide introduces a range of policy and program options that have been successfully field tested in cities and counties around the country.

This guide can help stimulate ideas or provide a framework for a comprehensive solar plan for a community. DOE recognizes that there is no one path to solar market development. This guide therefore introduces a range of policy and program options that can help a community build a local solar infrastructure. Communities can tailor their approach to fit their particular needs and market barriers.

www4.eere.energy.gov/solar/sunshot/resource_center/resources/solar_powering_your_community_guide_local_governments

NC Solar Access Law:

North Carolina has a Solar Access Law, which among other things, states that Cities and counties in North Carolina generally may not adopt ordinances prohibiting the installation of "a solar collector that gathers solar radiation as a substitute for traditional energy for water heating, active space heating and cooling, passive heating, or generating electricity for residential property. For more information visit:

www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=NC08R

Renewable Energy Ready Homes

Local governments can encourage construction of more capacity for rooftop solar installations on industrial, commercial and residential rooftops. The American Planning Association recommends that for this purpose local governments require the installation of solar 'stub-ins' on rooftops of appropriate new construction and building renovation. Stub-ins and their installation are very affordable and can significantly reduce the cost of installing a solar system in the future.

Energy Star has Renewable Energy Ready Homes specifications:

www.energystar.gov/index.cfm?c=rerh.rerh_index

Design for Solar Access

New developments can be designed to maximize solar access for each property, greatly increasing the ability of the buildings in the development to make use of solar energy.

Some resources:

- o Site Design strategies for Solar Access in model Sustainable Community Development Code: www.law.du.edu/documents/rmlui/sustainable-development/SolarAccess.pdf and www.law.du.edu/images/uploads/rmlui/rmlui-sustainable-siteDesignStrategiesSolarAccess.pdf
- o Solar Ready Development: <http://www.solarsimplified.org/zoning/solar-zoning-toolbox/solar-ready-zoning>
- o APA Planning and Zoning for Solar Energy information packet: www.planning.org/pas/infopackets/open/pdf/30part1.pdf

Wildlife Friendly Power Lines

The U.S. Fish & Wildlife Service provides guidelines on how to minimize the impacts of distribution and transmission lines to wildlife at www.fws.gov/birds/documents/powerlines.pdf.

APPENDIX C: NC Resource Mapping and Information

The **Biodiversity and Wildlife Habitat Assessment** map can be obtained from the **N.C. Conservation Planning Tool** at www.conservationtool.nc.gov and displays the location of high priority habitats and natural resources. Also included in the N.C. Conservation Planning tool are maps of Open Space and Conservation Lands, Agricultural Lands, and Forestry Lands.

- The NC Wildlife Resources Commission recommends that Solar Energy System developers address how they will minimize impacts as much as is practical to forests and sensitive lands mapped in the Biodiversity and Wildlife Habitat Assessment.

Maps of Managed Areas (lands managed at least partially for wildlife habitat) and Smoke Awareness Areas (areas adjacent to lands managed with prescribed burning) are available from the **Green Growth Toolbox** website at www.ncwildlife.org/greengrowth (see below).

- The NC Wildlife Resources Commission recommends that Solar Energy System developers address how they will minimize impacts as much as is practical to forests and sensitive lands mapped in Managed Areas and impacts to the ability to conduct prescribed burning on adjacent lands. The NC Wildlife Resources Commission also recommends that sites should not be located immediately adjacent to Managed Areas.

NC OneMap (www.nconemap.org/) is a public service providing comprehensive discovery and access to North Carolina's geospatial data resources. NC OneMap, the State's Clearinghouse for geospatial information, relies on data sharing and partnerships. Information available is extensive and includes wetlands, soil types, streams, and airports.

NC DENR Watershed Plan Map: <http://portal.ncdenr.org/web/wq/ps/bpu/watershed-plan-map>

NC Green Growth Toolbox: Wildlife & Natural Resource Stewardship in Planning, from North Carolina Wildlife Resources Commission

The NC Green Growth Toolbox is a guide to provide North Carolina's counties, towns, and cities with tools for growth that conserves wildlife and natural resources. The Toolbox includes a Green Growth Handbook, Wildlife Action Plan, Conservation Data, Habitat Conservation Recommendations, Training Workshops, and more.

www.ncwildlife.org/Conserving/Programs/GreenGrowthToolbox.aspx

APPENDIX D: Water Infiltration and Soil Conservation at SES

The prevailing interpretation of ground-mounted solar energy systems is that the solar arrays do *not* count towards the impervious allowance. In other words, the solar arrays are pervious. The State definition of built-upon area states built-upon area does not include a wooden slatted deck or pervious or partially pervious paving material to the extent that the paving material absorbs water or allows water to infiltrate through the paving material.¹⁵ Therefore, if the solar panels can be constructed in such a manner as to promote the effective infiltration of rainfall then they could be considered pervious, similar to a slatted deck or pervious pavement. Other structures such as transformers, buildings, entrance roads, etc. would still be considered impervious. The following criteria could be used at a minimum in establishing a solar panel as pervious cover:

1. Panels must be positioned to allow water to run off their surfaces.
2. Soil with adequate vegetative cover must be maintained under and around the panels.
3. The area around the panels must be adequate to ensure proper vegetative growth under and between the panels.

It is suggested that the solar farm designer/developer design the ground cover as pervious to the maximum extent practicable, so that the stormwater infiltrates or is cleaned by sheetflow across the solar farm before exiting the property or reaching the waters of the State.

Information on soil conservation:

- North Carolina Division of Water Quality Best Management Practices (BMP) Design Manual (<http://portal.ncdenr.org/web/lr/bmp-manual>) details how to design various stormwater BMPs effectively.
- North Carolina Association of Soil & Water Conservation Districts (<http://ncaswcd.org/>)
- A sample (soil) conservation plan: http://www.dec.ny.gov/docs/water_pdf/appendixf1.pdf

¹⁵ State's model Phase II post-construction ordinance, Section 6: Definitions, Built-upon area (BUA)
<http://portal.ncdenr.org/web/lr/ms4-resources>

APPENDIX E: Conditional Use Permits and Special Use Permits

Special Use Permits (aka Conditional Use Permits) require a quasi-judicial hearing where the application must be found to meet several general standards and any special conditions required by the board. In general, decisions of a quasi-judicial body require findings of facts to reach conclusions of law that justify the decision. Decisions of a quasi-judicial body are often legally enforceable under the laws of a jurisdiction; they can be challenged in a court of law which is the final decisive authority

Most NC jurisdiction use the following four general standards: 1) Does not materially endanger the public health or safety; 2) Meets all required conditions and specifications; 3) Would not substantially injure the value of adjoining property or be a public necessity, and 4) Will be in harmony with the area in which it is located and be in general conformity with the comprehensive plan. More information on SUP/CUP in NC is available from the UNC School of Government: http://www.sog.unc.edu/sites/www.sog.unc.edu/files/SS_22_v4b.pdf

APPENDIX F: Airports

Experience and research has shown that there is a possibility for today's solar energy systems to cause a glare hazard for pilots and/or air traffic controllers. The Department of Energy's Sandia National Laboratories recently developed a 3-D modeling based online hazard assessment tool to determine if a solar project is likely to create a Solar Glare Aviation Hazard. The tool is free and recommended by the Federal Aviation Association (FAA). <https://share.sandia.gov/phlux>. Contact the FAA's local Airport District Office (ADO) for help with the tool or to get input data for tool variables that must come from the airport.

A new FAA interim policy¹⁶ (published 10-23-2013) for on-airport solar development requires the use of this glare assessment tool and defines the below criteria to assess acceptable risk of glare.

The proposed solar energy system meets the following standards:

1. No potential for glint or glare in the existing or planned Airport Traffic Control Tower (ATCT) cab, and
2. No potential for glare or "low potential for after-image" (shown in green in [reports]) along the final approach path for any existing landing threshold or future landing thresholds (including any planned interim phases of the landing thresholds) as shown on the current FAA-approved Airport Layout Plan (ALP)¹⁷. The final approach path is defined as two (2) miles from fifty (50) feet above the landing threshold using a standard three (3) degree glidepath.

The following are recommended steps required to complete the aviation notification requirement in the template solar ordinance for NC for SESs near an airport.

- 1) OFF AIRPORT solar project-
 - a) Determine if the site is so close to an airport that it falls under FAA authority to require a filing with the Federal Aviation Administration (FAA) in accordance with CFR Title 14 Part 77.9 & follow instructions. If a filing is required steps b-f are not required, otherwise continue with the step below. (<https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm>)
 - b) Use internet/software mapping tool (such Google Earth or Google Map) to identify airports within 5 nautical miles of the center of the proposed solar project site.
 - c) If search results indicate no airport within 5 nautical miles of the project site, append research results to the permit application.
 - d) If search results indicate airport(s) within 5 nautical miles of the project site, go to http://www.faa.gov/airports/planning_capacity/npias/ to determine if it is in the National Plan of Integrated Airport Systems (NPIAS), i.e. an FAA "obligated" airport. If you are unable to determine if the airport is in the NPIAS or require assistance, contact the FAA's local ADO.
 - i) Notification of airports in the NPIAS should be sent to the local ADO.
 - ii) Notification of military airports should be sent to the NC Commander's Council via mail or email
 - iii) Notification of all other airports should be sent to the management of the airport¹⁸
 - e) Run the latest version of the SGAHT according to the user manual. Unless otherwise directed in the user's manual, use the tool to assess for glare hazards at¹⁹:
 - i) the Airport Traffic Control Tower (ATCT) cab, and

¹⁶ www.gpo.gov/fdsys/pkg/FR-2013-10-23/pdf/2013-24729.pdf

¹⁷ FAA airport GIS maps and eALPs at <https://airports-gis.faa.gov/public/>

¹⁸ NC airports in NC contact information at www.faa.gov:

www.faa.gov/airports/airport_safety/airportdata_5010/menu/contacts.cfm?Region=ASO&District=&State=NC&County=&City=&Use=&Certification=

¹⁹ Sources of NC airport data: Unofficial Airport information available under *Maps and Diagram* at

<http://flightaware.com/resources/airport/browse/NC> and official GIS maps at <https://airports-gis.faa.gov/public/>

- ii) the final approach path for any existing landing threshold or future landing thresholds (including any planned interim phases of the landing thresholds) as shown on the current FAA-approved Airport Layout Plan (ALP). The final approach path is defined as two (2) miles from fifty (50) feet above the landing threshold using a standard three (3) degree glidepath.
- f) Review and send the results summary as well as the results of the glare analysis tool for each flight path and the ATCT.

On-airport solar projects at FAA obligated airports must follow FAA requirements. The following are recommended steps to facilitate meeting the FAA requirements.

2) ON AIRPORT Solar Projects

- a) Contact the ADO to discuss big picture concept (type of system, siting, size, environmental requirements, FAA Form 7460, etc.). This way FAA can give the proponent a general "roadmap" for the way forward (General FAA areas of concern, introduce the SGHAT Tool, if an on-airport project: give a feel for which areas ON AIRPORT can be considered for siting (per FAA safety & design standards); lease requirements on obligated airports, etc. Also, the ADO can facilitate contact between the solar proponent, the sponsor (& NCDOA if project location is on or near a State Block airport. In this case the ADO will be available to support NCDOA as requested.
- b) If after preliminary discussion, the solar proponent is still interested, collaborate with the FAA (or NCDOA) until conceptual agreement by all parties with the FAA's lease requirements.
- c) Develop National Environmental Policy Act (NEPA) documentation to support siting alternatives & run the SGHAT Tool for all site alternatives carried forward for analysis.
- d) Submit 7460 with Proposed Lease, NEPA analysis & SGHAT Tool Results attached to FAA ADO Review & acceptance via Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) filing.

Limited information on low altitude flight paths in North Carolina.

Information about military airports and low altitude flight paths may be found in a 2012 report on military presence and land compatibility: 2012 NC Military Land Compatibility Report
http://portal.ncdenr.org/c/document_library/get_file?p_l_id=1169848&folderId=8979146&name=DLFE-57386.pdf. Local planning departments may have or be able to request maps of local low altitude flight paths.

APPENDIX G: Example Decommissioning Plan

This is a simple example decommissioning plan:

Decommission Plan for Big Bright Solar Farm, located at
123 Edge-of-Town Rd.
Piedmont-ville, NC 21234

September 10, 2013

Prepared and Submitted by Solar Developer ABC, the owner of Big Bright Solar Farm

As required by the Town/County of _____, Solar Developer ABC presents this decommissioning plan for Big Bright Solar Farm (the "Facility").

Decommissioning will occur as a result of any of the following conditions:

- 1. The land lease ends
- 2. The system does not produce power for 12 months
- 3. The system is damaged and will not be repaired or replaced

The owner of the Facility, as provided for in its lease with the landowner, will do the following as a minimum to decommission the project.

- 1. Remove all non-utility owned equipment, conduits, structures, fencing, and foundations to a depth of at least three feet below grade.
- 2. Remove all graveled areas and access roads unless the owner of the leased real estate requests in writing for it to stay in place.
- 3. Restore the land to a condition reasonably similar to its condition before SES development, including replacement of top soil removed or eroded.
- 4. Revegetate any cleared areas with warm season grasses that are native to the region (~~Mountains, Piedmont, Sandhills or Coastal Plain~~ regions), unless requested in writing by the owner of the real estate to not revegetate due to plans for agricultural planting.

All said removal and decommissioning shall occur within 12 months of the facility ceasing to produce power for sale.

The owner of the Facility, currently Solar Developer ABC, is responsible for this decommissioning. Nothing in this plan relieves any obligation that the real estate property owner may have to remove the facility as outlined in the Special Use Permit in the event the operator of the farm does not fulfill this obligation.

The owner of the Facility will provide Town/County planning department and the Register of Deeds with an updated signed decommissioning plan within 30 days of change in the Facility Owner.

This plan may be modified from time to time and a copy of any modified plans will be provided to the planning staff and filed with the Register of Deeds by the party responsible for decommissioning.

SES Owner Signature: _____ Date: _____

Landowner (if different from SES Owner) Signature: _____ Date: _____

APPENDIX H: Abandonment & Decommissioning

This sample abandonment clause is provided for any jurisdiction who would like to consider including a clause on abandonment in their solar ordinance.

Abandonment

A SES 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 SES provides substantial evidence (updated every 6 months after 12 months of no energy production) to the Zoning Administrator 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 SES ²⁰

1. Upon determination of abandonment, the Zoning Administrator shall notify the party (or parties) responsible they must remove the SES and restore the site to its condition prior to development of the SES within three hundred and sixty (360) days of notice by the Zoning Administrator.
2. If the responsible party (or parties) fails to comply, the Zoning Administrator may remove the SES, 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 SES and restore the site to a non-hazardous condition.

Some resources regarding decommissioning of SES

- First Solar (leading manufacturer of Cadmium Telluride PV modules) has a pre-funded recycling program for all of their modules: www.firstsolar.com/Sustainability/Environmental/Recycling-Service
- PV Cycle (www.pvcycle.org/) European PV recycling program. A good source for an example of a large scale PV module recycling program and for information on PV recycling.
- Solar Energy Industries Association (SEIA) information on PV recycling: www.seia.org/policy/environment/pv-recycling
- NC DENR information on electronics recycling in NC
- Silicon Valley Toxics Coalition (SVTC) Solar Scorecard: www.solarscorecard.com
- Green Guys, company in NC offering recycling services to the solar industry
greenguys@pcgsolar.com

Current US PV Module Recycling Regulation:

End-of-life disposal of solar products in the US is governed by the Federal Resource Conservation and Recovery Act (RCRA), and state policies that govern waste. To be governed by RCRA, panels must be classified as hazardous waste. To be classified as hazardous, panels must fail to pass the Toxicity Characteristics Leach Procedure test (TCLP test). Most panels pass the TCLP test, and thus are classified as non-hazardous and are not regulated.

²⁰ Anywhere reference is made to restoring the parcel to condition prior to development of the SES (including removal of gravel, roads, and fencing), less restoration is acceptable when it is requested in writing by the parcel owner.

APPENDIX I: Solar PV and Fire Safety

Information on firefighter safety and emergency response needs

- Solar Energy Industries Association (SEIA) information on fire safety and solar: www.seia.org/policy/health-safety/fire-safety-solar
- Underwriters Laboratory (UL) information and studies on fire safety and solar: www.ul.com/global/eng/pages/offers/industries/buildingmaterials/fire/fireservice/pvsystems/
- California Office of the State Fire Marshal information for firefighters on solar PV: www.gosolarcalifornia.ca.gov/solar_basics/fire_safety.php
- The Solar America Board for Codes and Standards (Solar ABCs) reports and information on fire and flammability for the solar PV industry and code officials: www.solarabcs.org/current-issues/fire.html
- Detailed Fire Protection Plan for solar farm in San Diego County, CA: www.sdcounty.ca.gov/pds/regulatory/docs/3300-11-029_CEOA_REVIEW_120503/3300-11-029-FPP.pdf
- Online training on Solar for the fire and rescue community, provided by the North Carolina Office of State Fire Marshal: www.ncdoi.com/OSFM/RPD/pt/Student_Review.aspx
- The 2012 version of the International Fire Code added requirements regarding roof-mounted and ground-mounted PV systems, including:
 - Marking: required on interior and exterior of direct-current (DC) conduit, enclosures, etc.
 - Locations of DC conductors: requirements regarding the location and pathway of DC wiring on and under a roof
 - Access and pathways: Module location restrictions designed to allow safe walkways and access for roof venting
 - Ground-mounted photovoltaic arrays: States that the access and pathway rules do not apply to ground-mounted systems, but they are required to provide a clear, brush-free area of 10 feet around the array.

This is section 605.11: Solar photovoltaic power systems in the International Fire Code, the exact language is available here:

http://publicecodes.cyberregs.com/icod/ifc/2012/icod_ifc_2012_6_par132.htm

APPENDIX J: Visual Buffering: Example NC Requirements

Visual buffering and screening is not specific to solar and has applicability to many other forms of development. However, solar has been subject to various screening/buffering standards of varying specificity throughout the state. The following are examples of buffering requirements in two jurisdictions (Brunswick and Guilford Counties) in the state at the time of publication of this template solar ordinance. In both cases there is a simple solar specific buffering requirement that refers to existing generic buffering specifications/requirements. Significant portions of the applicable county buffering specifications are included in this appendix to facilitate understanding the solar buffering requirement in each example.

Brunswick County

(UDO- Section 5.3.4.P)

Solar Farm (Rev. 01-Nov-10)

A Solar Farm developed as a principal use shall be permitted in accordance with Section 5.2., subject to the following:

...

3) Visibility

- (a) Solar farms with panels located at least 150 feet from an adjacent public street right-of-way, residentially-zoned property, or residential use shall not require screening.
- (b) Solar farms with panels located less than 150 feet from an adjacent public street right-of-way must meet the requirements of Section 7.2.8.B. Street Buffers and Section 7.2.9. Project Boundary Buffers.

(Section 7.2.8.B. Street Buffers and Section 7.2.9. Project Boundary Buffers.)

7.2.8. Street Buffers

Street buffers shall be required and existing vegetation should be used to satisfy these planting requirements where possible (see Section 7.1.5, Existing Vegetation). No vegetation or fence shall interfere with a required clear sight triangle at a driveway or intersection (See Section 6.2.4). Berms constructed in accordance with Section 7.2.10.B, Berms with Vegetation, are encouraged as a component of any street buffer and the Planning Director may allow up to 25% reduction in the required buffer depth with a berm.

....

B. Collector or Thoroughfare Street Buffers

All development located along either a collector or thoroughfare street shall be required to provide one of the following buffers along the entire street frontage.

1. One canopy tree per 100 linear feet of property frontage, located within a twenty-foot landscape buffer; OR
2. Two understory trees per 100 linear feet of property frontage, located within a twenty-foot landscape buffer; OR
3. Under utility lines only, two understory trees per 100 linear feet of property frontage, located within a 20-foot landscape buffer. No trees under utility lines shall have a natural height over 25 feet.

7.2.9. Project Boundary Buffers

Commentary: Project Boundary Buffers ensure a landscaped transition between different types of uses and/or zoning districts. At first glance, the following method may seem complicated. In reality, this is a fairly easy approach to implement. A few simple steps will provide the total amount of plants that are required to be in a buffer as well as the buffer depth.

A. Required Project Boundary Buffer Table

1. Description

- i. The buffer standards in the table below address the opacity of the buffer that is required on the property boundary between zoning districts, and in some instances within a zoning district.
- ii. An opacity of 0.2 screens 20% of an object, and an opacity of 1.0 would fully screen the adjoining development during summer months after five years of growth.

2. Measurements: Project boundary buffers shall be measured along a perpendicular line from the lot line.

3. How to Read the Buffer Table

- i. The required opacity of project boundary buffers is represented in the Table below by two numbers (for example, .2/.6).
- ii. The second number represents the total required buffer opacity between any two properties.
- iii. Where the proposed project adjoins vacant property, the first number represents the applicant's required buffer opacity.
- iv. Where the adjoining property is already developed with no buffer, the proposed project is responsible for providing the total required opacity (the second number).
- v. Where the adjoining property is already developed with a partial buffer, the proposed project is responsible for providing the remaining opacity required.
- vi. A zero means no project boundary buffer is required.

ZONING DISTRICT of SUBJECT PROPERTY	ZONING DISTRICT of ADJOINING PROPERTY					
	Rural Low Density Residential	R-7500, R-6000, and SBR-6000	MR-3200 and N-C	C-I	C-LD and RU-I	I-G
Rural Residential	0/0 ²	.2/.2	.4/.6	.2/.8	.2/.8	.2/1.0
R-7500, R-6000, and SBR-6000	.2/.2	0/0 ²	.2/.4	.2/.6	.2/.6	.2/1.0
MR-3200 and N-C	.4/.6	.2/.4	0/0 ²	.2/.6	.2/.6	.2/1.0
C-I	.6/.8	.4/.6	.4/.6	0/0	.2/.4	.2/1.0
C-LD and RU-I	.6/.8	.4/.6	.4/.6	.2/.4	0/0 ²	.2/1.0
I-G	.8/1.0	.8/1.0	.6/1.0	.6/1.0	.4/.6	0/0

¹ Non-residential uses locating next to vacant property shall be required to provide a 0.2 buffer.
² When locating a non-residential use in a Rural Residential, R-7500, R-6000, SBR-6000, MR-3200, NC, C-LD, or RU-I Zoning District next to an existing residential developed property, a 0.4 buffer shall be required. Non-residential uses locating next to other non-residential uses are not required to provide a buffer.

4. Buffer Alternatives

The table below shows the required buffer depth (average) and plantings required for a project boundary buffer to satisfy the required opacity. Existing vegetation should be used to satisfy these planting requirements where possible (see Section 7.1.5, Existing Vegetation).

MINIMUM REQUIRED PROJECT BOUNDARY BUFFER Buffer Depth and Plants Required Per 100 Linear Feet				
Required Opacity[1]	Alternative 1 Plantings	Alternative 2 Plantings	Alternative 3 Plantings + 6-Foot (Height) Fence[2]	Alternative 4 Plantings + 6-Foot (Height) Wall[3]
0.2	10 feet 1 canopy 1 understory 7 shrubs	10 feet 1 canopy 2 understory 3 shrubs	Not available	Not available
0.4	20 feet 2 canopy 4 understory 25 shrubs	20 feet 2 canopy 6 understory 9 shrubs	Not available	Not available
0.6	30 feet 3 canopy 6 understory 34 shrubs	30 feet 3 canopy 8 understory 13 shrubs	20 feet width 0 canopy 3 understory 3 shrubs	15 feet width 0 canopy 3 understory 3 shrubs
0.8	50 feet 5 canopy 7 understory 43 shrubs	50 feet 4 canopy 10 understory 17 shrubs	35 feet width 0 canopy 5 understory 7 shrubs	25 feet width 0 canopy 5 understory 7 shrubs
1.0	80 feet 5 canopy 8 understory 49 shrubs	80 feet 4 canopy 11 understory 19 shrubs	60 feet width 0 canopy 5 understory 7 shrubs	40 feet width 0 canopy 5 understory 7 shrubs
<p>Note: [1] Required Opacity x 100 = % Required Opacity (e.g., .2 times 100 = 20% Required Opacity). [2] When Alternative 3 is selected, the fence type must be 100% opaque and comprised of either wooden or vinyl material. [3] When Alternative 4 is selected, the wall must be designed in conformance with Section 6.8.5, Walls, and Section 7.2.10, Walls, Berms, and Fences within Buffers.</p>				

Commentary: Suppose you are required to install a buffer with opacity of 0.6 and you elect to use Alternative 1. Your buffer would have to be 30 feet deep (on average) and you would have to plant 3 canopy trees, 6 understory trees, and 34 shrubs for every 100 feet of buffer length.

For full requirements: www.brunswickcountync.gov/Portals/0/BC/files/Planning/UDO_Final.pdf

Guilford County

6.4-84 - Solar Collectors (Principal)

(D) *Screening:* Solar collectors and associated outside storage shall be completely screened with a vegetative buffer from view from all streets and adjacent residential uses. Required screening shall be at a type B Planting Yard Rate, except understory-trees may be substituted for canopy tree requirements.”

6-3.2. - Planting Yards.

(B) *Planting Area Descriptions:*

(4) Type B Planting Yard: A medium density screen intended to partially block visual contact between uses and create spatial separation. See Figure 6-G.

Planting Yard Rates						
Yard Type	Minimum Width (ft.)	Min. Avg. Width (ft.)	Maximum Width (ft.)	Canopy Tree Rate	Understory Tree Rate	Shrub Rate
Street Yard	8	8	25	2/100 lf; ^{sup} sup;	NA ^c	17/100 lf
Type A Yard	40 ^a	50 ^a	75	4/100 lf/oc	10/100 lf/oc	33/100 lf/oc
Type B Yard	25 ^a	30 ^a	50	3/100 lf	5/100 lf	25/100 lf
Type C Yard	15 ^a	20 ^a	40	2/100 lf; ^{sup} sup;	3/100 lf	17/100 lf
Type D Yard	5	5	10	-	2/100 lf	18/100 lf

Notes:

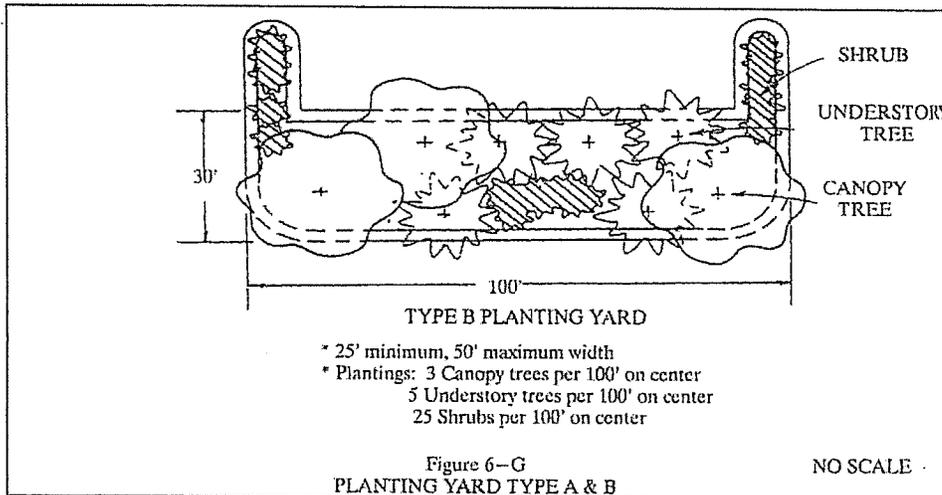
If: linear fee oc: on center

^a Walls, a minimum of five (5) feet in height, constructed of masonry, stone, or pressure treated lumber or an opaque fence, a minimum of five (5) feet in height, may be used to reduce the widths of the planting yards by ten (10) feet.

^{sup}sup; In streetyards, Type C and Type D planting yards, and parking lots understory trees may be substituted for canopy trees at the rate of two (2) understory trees for each required canopy tree.

^c One (1) understory tree may be substituted for each required canopy tree if the Technical Review Committee determines that there would be a major conflict with overhead utility lines.

NOTE: On Lots of Record less than fifty-five thousand (55,000) square feet in area, no development shall be required to place required landscaping on greater than fifteen (15) percent of the site.



6-3.7. - Provisions for Preservation of Existing Trees.

(A) *General:* Any existing tree or group of trees which stands within or near a required planting area and meets or exceeds the standards of this Ordinance may be used to satisfy the tree requirements of the planting area. The protection of tree stands, rather than individual trees, is strongly encouraged.

For Full requirements go to Guilford Co. at www.municode.com/Library

These are two representative buffering requirements for solar found within North Carolina. As is evident, there are variances in descriptiveness and the level of intensity for each jurisdiction. This template ordinance does not favor these over any other alternatives. Appropriate requirements should be discussed and agreed upon by each jurisdiction.

APPENDIX K: Construction Waste Management Plan (CWMP)

Solar energy is generally considered an environmentally beneficial industry; however, its initial construction can produce large quantities of cardboard, wood, scrap metal, scrap wire, and clearing and grading wastes. Often the waste produced is sent to local landfills or burned on site. For level 2 and 3 SESs, these additional waste streams can place a burden on existing waste management and landfill resources at a local municipal and county level. A large percentage of this waste can be diverted from landfills to private recycling businesses with net costs approximating landfill disposal. According to a report published in 2010 by the North Carolina Department of Environment and Natural Resources (NCDENR) Division of Environmental Assistance and Outreach and the Recycling Business Assistance Center, the recycling industry in North Carolina consisted of over 630 private sector recycling businesses employing over 15,200 people and has been growing at 4.8% since 2008 (See Resources for link). In addition, NCDENR has launched a web based NC Recycling Markets Directory (see Resources below) to help identify local recyclers. As a result, developing a CWMP and finding a private recycling entity for construction waste(s) is arguably easier than ever before. Counties/municipalities that choose to adopt CWMP requirements can not only avoid straining their existing landfill and waste management resources, but can also help contribute to the growth of their local recycling industries. Similar ordinances requiring CWMPs for new construction have been ratified in California as well as Cook County, Illinois and King County, Washington (See below for further information)

CWMP Examples

- CALGREEN CWMP
 - www.hcd.ca.gov/codes/calgreen/CW-1.pdf
- Sandia National Laboratories CWMP Template
 - www.sandia.gov/engstds/ConstSpecs/Div_01/01505C_CWM_Waste_Mgt_Plan_Template-archived.pdf
- King County, Washington
 - <http://your.kingcounty.gov/solidwaste/greenbuilding/specifications-plans.asp>

Successful Construction Waste Management Ordinances

- State of California's California Building Standard Code
 - www.documents.dgs.ca.gov/bsc/CALGreen/2010_CA_Green_Bldg.pdf
- Cook County, Illinois - Ordinance requiring management of construction and demolition waste consistent with Cook County's existing Solid Waste Management Plan.
 - <http://blog.cookcountyil.gov/sustainability/wp-content/uploads/2012/07/Substitute-Demolition-Debris-Diversion-Ordinance-July-23.pdf>

Level 3 SES Anticipated Waste - 20 MW SES in Halifax County

- Project goal to recycle 80% of all construction and demolition waste. Contact greenguys@pcgsolar.com for more information.
 - 140,000 lbs - cardboard waste
 - 32,000 lbs - scrap wire waste
 - 3,500 - wooden slatted pallets
 - 16 acres - Clearing and grading waste

Resources

- NC Recycling Market Directory
 - www.p2pays.org/dmrm/start.aspx
- California Department of Housing and Community Development- Construction Waste Management Forms
 - www.hcd.ca.gov/calgreen.html
- Green Guys - Waste Management and Site Services greenguys@pcgsolar.com
- Employment Trends in NC Recycling Industry - 2010
 - www.container-recycling.org/assets/pdfs/jobs/EmploymentTrendsInNC.pdf

General Template for Rules and Regulations

1. A developer of a Solar Plant in North Carolina shall be required to develop a Waste Stream Management Plan (WSMP) for the construction waste and debris at the site of the said Solar Energy System.
2. A developer of a Solar Plant in North Carolina shall be required to file the WSMP with the department of _____ in the County/Town/City wherein the Solar Energy System shall be erected and operated.
3. A WSMP shall only be acceptable if it contains a proper and adequate plan for the recycling of _____ (____%) percent of all of the waste, including but not limited to cardboard, wood, scrap metal, scrap wire, and clearing and grading wastes, from the construction site.
4. A developer shall be required to file with the department of _____ in the County/Town/City wherein the Solar Energy System shall be erected a Construction and Demolition Debris Summary Report (CDSR) within fifteen (15) days of the end of the construction of the solar plant.

General Template for Enforcement

1. Developer's failure to meet or exceed the provisions of the developer's CWMP shall constitute a violation of this Ordinance.
2. Developer shall have fifteen (15) days in which to cure this violation and make property notice to the County/Town/City.
3. Developer's failure to cure and notify the County/Town/City within the said fifteen-day (15) period shall result in a fine of _____ (\$ insert dollar amount here) dollars to be paid by Developer within thirty (30) days of the issuance of said fine or a lien will be placed on the property upon which the solar energy system has been constructed.

APPENDIX L: Template Solar Ordinance Working Group Participants

Argand Energy, Rob Lease
Black and Veatch, Paul Brucke
Buncombe County Planning Department, Josh O'Conner
Carolina Solar Energy, Richard Harkrader
Catawba County Planning Department, Susan Ballach
Cleveland County Planning Department, Chris Martin
DENR- Division of Water Quality, Bill Diuguid
Dominion Power, Michael Thompson
Duke Energy Progress, Bruce Barkley
Federal Aviation Association, Peter Hughes
Federal Aviation Association, Dana Perkins
Governor's office military affairs, John Nicholson
Granville County Planning Department, Dervin Spell
Guilford County Planning Department, Les Eger
HelioSage LLC, Kyle West
Institute for Emerging Issues, Diane Cherry
Keyes, Fox, Weidman, Laurel Passera
Mathis Consulting, Ben Edwards
National Renewable Energy Corporation (Narenc), Dennis Richter
NC Association of County Commissioners, Kevin Leonard
NC Association of County Commissioners, Johanna Reese
NC Association of County Commissioners, Casandra Skinner
NC Chapter of American Planning Association, Ben Hitchings
NC Chapter of the Association of Consulting Foresters, Greg Conner
NC Commerce Dept. - Community Planning, Betsy Kane
NC Commerce Dept. - Community Planning, Oliver Bass
NC Conservation Network, Nadia Luhr
NC DENR - Military Affairs and Strategic Planning, Chris Russo
NC Dept. of Agriculture - Agribusiness Development, Ron Fish
NC Dept. of Agriculture - Environmental / ADFP Programs, Dewitt Hardee
NC Dept. of Environment & Natural Resources (DENR), Trina Ozer
NC Dept. of Environment & Natural Resources (DENR), Natalie Birdwell
NC Dept. of Environment & Natural Resources (DENR), Layla Cummings
NC Farm Bureau, Paul Sherman
NC Forestry Association, Bob Schaefer
NC League of Municipalities, Kim Hibbard
NC Regional Councils, Betty Huskins
NC Sierra Club, Dustin Chicurel-Bayard
NC State University Cooperative Extension, Mary Lou Addor
NC Wildlife Resources Commission, Kacy Cook
NCSU Forestry, Mark Megalos
Nicholas Institute for Environmental Policy Solutions, Larry Shirley
North Carolina Solar Center, Tommy Cleveland
North Carolina Sustainable Energy Association, Miriam Makhyoun
North Carolina Sustainable Energy Association, Michael Fucci
O2 Energies, Logan Stephens
Parker Poe, Katherine Ross
PCG Solar, Mike Whitson
PCG Solar, John Galloway
PCG Solar, William Lee
Progress Energy, Kendal Bowman
Public Staff - North Carolina Utilities Commission, Jay Lucas
QF Solutions, Donna Robichaud
SEPI Engineering and Construction, Jerry Beckman
Smith Moore Leatherwood LLP, Beth Trahos
Southern Alliance for Clean Energy, Charlie Coggeshall
Southern Energy Management, Bob Kingery
Southern Energy Management, Will Etheridge
Spilman Thomas & Battle, PLLC, Nathan Atkinson
State Energy Program, Bob Leker
Strata Solar, Lance Williams
UNC School of Government, Adam Lovelady
USMC, Michael Evers
USMC, MCIEAST, Paul Friday
Warren County Planning Department, Ken Krulik
Waxhaw Planning Department, Lisa McCarter

APPENDIX M: Document Revision History

Date	Version	Revision Author	Revision Details
5/22/2014	Version 1.1	Tommy Cleveland, NCSC	Updated NCSEA contact to be Maggie Clark, moved Michael Fucci down in contact lists and added affiliation as Duke Grad Student.
11/24/2014	Version 1.2	Tommy Cleveland, NCCETC	Replaced NCSC logo with NCCETC logo, updated the Center's name in contact list
01/26/2016	Version 1.3	Tommy Cleveland, NCCETC	Edits for clarity in Appendix F: Airports, Off Airport recommended steps
01/26/2016	Version 1.3	Tommy Cleveland, NCCETC	Clarifying improvements to Section 9.C: Decommissioning. Subsections 4,5,6, and 7



Craven County Center

300 Industrial Dr New Bern, NC 28562

Considerations for Transferring Agricultural Land to Solar Panel Energy Production

— Written By Mike Carroll

The decision to transfer land use from agricultural production to solar panel electrical production requires a thorough examination of immediate and long-term potential risks and benefits. Currently, the transition from agricultural to solar panel energy production is a complex process. Payments made by contractors are much greater than revenue received from farmland rental. The transfer of land from agricultural use may also result in additional tax liability, general liability issues, potential future environmental mitigation, and even the inability to transfer the land.

This article will briefly address: 1) General Economic & Resource Considerations; 2) General Land Use Considerations; 3) Comparison of Commercial vs Agricultural Land Environmental Concerns; 4) Wildlife Impacts; 5) Safety; 6) Drainage, Stormwater & Soil Quality Considerations; 7) Vegetative Buffer Zones; 8) Evaluation of the Contract; 9) Farmland Preservation Programs; and, 10) Future Considerations.

GENERAL ECONOMIC & RESOURCE CONSIDERATIONS

Within Craven County, NC, agricultural farm sales since 2007 (field crop and livestock production) have been declining annually depending upon price of commodities and yield. According to an economic study supporting this industry added over \$312 million to the local economy. However, the number of acres of farmland in the past 15 years has exceeded a twenty square mile area. This directly affects farmers and the local economy.

In contrast, landowner income may be significantly higher from solar farm income compared to agricultural income. The transition of farmland to commercial property increases tax revenue for the county. Too, solar farm construction and may remain for maintenance, depending upon contractual agreements. Assumed until full term of contract (usually 15-20 years), income and taxes generated could add value to the land.

In addition to personal and governmental revenue, one must also consider one of the goals for solar energy production to lessen the reliance upon energy sources that are considered a negative impact in limited quantity. However, energy production from solar farms is not equal for all locations. Tax incentives that make this technology feasible may not exist in the future. Lastly, technology changes during the transition. Past solar and wind farm production has experienced this situation and many sites have been abandoned.

Also consider that the goal of those developing solar farms is to make a profit. Farmland with a value of \$2,500-\$4,000 per acre. Yet companies are willing to pay upward to \$800-\$1000/ac per year for a higher payment to the landowner than the company would make should they simply decide to farm the land. The question as to why a company would choose to pay a much higher rate to a landowner rather than farm the land for profit. Logically, this decision does not appear to be the most profitable choice for the developer. Profit to consider when transitioning farmland to solar farms.

Perhaps the most troubling issue involving solar farm establishment is to consider the possibility of the first few years. If this occurs, what risks or financial obligation will the landowner face if the solar farm is decommissioned with ease and low cost? Will the farm be limited in use due to environmental, regulatory, or other factors? These types of consideration must be examined prior to converting land from agricultural use to solar farm use.

TAX IMPLICATIONS

Under the current North Carolina tax system, agricultural land is eligible to be taxed based upon its Use Value (PUV), defers commercial tax rates on agricultural lands as long as the use of the land is agricultural. Farmland by taxing the land at a lower rate rather than commercial/development value. However, if the land is converted to non-agricultural uses, three years of taxes are due, with interest, based upon the commercial value. The landowner must be prepared to pay these taxes and interest should land be transferred from agricultural use to non-agricultural use.

Conversely, if the landowner wishes to maintain the land in the PUV system, then agricultural production can be maintained simultaneously. While this is permitted, to be done successfully requires establishment of a pasture production that is compatible with solar farm use. Typically, development of a pasture production requires a pasture production to be established. However, this also adds additional management and costs. As such, depending upon the landowner's personal desires, this may or may not be a consideration. (Click [HERE](#) to read an

Additional tax implications, tax credits, estimated commercial values and information is available

COMPARISON OF COMMERCIAL AND AGRICULTURAL ENVIRONMENTAL CONSIDERATIONS

Land classification may impact land use. Many current farms are lands that were considered agricultural when this activity was allowed. As land currently in agricultural use, it is protected as a "previously agricultural" and is allowed to continue farming the land. Under current regulations, PC farmland will be protected for commercial use. However, future conversion from a solar farm established on PC farmland to other uses is subject to various agencies and environmental regulations. In worst case scenario, solar farms established on PC farmland may be subject to other uses without wetland mitigation. PC farmlands, may, however, be eligible to convert back to agricultural upon soil hydrology.

Conversion of PC farmlands may also impact farm program participation for the current tenant farmer. If a farmer converts to solar energy production, then the remaining portion of the farm still in agricultural production may not be eligible for 2014 Farm Bill. Currently, a farmer tending any farm or portion of farm that is not in compliance with federal farm support programs for all lands tended and may face fines and penalties. This could result in thousands of dollars loss to the farmer, depending upon the size of the farming operation and the agencies involved. USDA Farm Service Agency, the USDA Natural Resource and Conservation Service, and the EPA make these wetland and compliance determination. All landowners are encouraged to examine the implications of conversion of land from agricultural production to avoid potential liability and regulatory actions.

In addition to potential wetland ramifications, some farms may be near rivers or streams with Neuse Rules and associated legislation established a 50-foot vegetative buffer requirement along river (Blue line streams). If land currently utilized as agricultural production lies within this buffer, conversion to solar agricultural production. However, if removed from agricultural production, no alternative land use is available.

Another scenario, and admittedly perhaps the worst case scenario, involves abandonment of the land. If a farmer abandons the land, decrease land value, abandonment also subjects the land to provisions of the Clean Water Act. If the land also has a wetland hydrology, reclaiming the land may be difficult, if not impossible. In North Carolina, land use would be regulated by the EPA, the Corps of Engineers and the Coastal Area Management Program.

These examples are provided to emphasize the need to examine environmental rules and regulations for solar farm. Generally speaking, farmlands that are not classified as PC or do not have portions of the farm that are protected fall under many regulations restricting land use. For these farmlands, simply consider that the regulations may become less restrictive, but more restrictive.

GENERAL LAND MAINTENANCE

Often, with the inclusion of a land rental agreement, a farmer actively maintains ditch banks by grading roads or paths; mows near wooded areas; or, provides other general farm maintenance. As a landowner. If no equipment is owned to perform these tasks, equipment will need to be purchased. These tasks may be contracted.

Farmland maintenance will especially be critical shortly after development or for land that has a history of erosion or flooding concerns. Removal from agricultural land use does not exempt the landowner from maintenance that might otherwise impact water flow or degrade soil or water quality.

Many soils within Craven County, NC are either very coarse sand or soils that drain poorly. Both types of soils are either shifting, sinking or eroding near the base of equipment. Slight shifts in solar panels will affect the panels to function properly or even may cause a fire hazard (See Fire Safety). Thus, replacement of solar panels, especially between the time after completion of the construction and establishment of a permanent solar farm.

Flooding is another issue that should be examined. Storm events within this area historically have shown the flood plains are available for review at <http://www.ncfloodmaps.com/>. However, a change in land use and increased impervious surface modifies this map data. Thus, some variance is likely due to development and water management (or lack thereof).

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One should also consider that Eastern NC is at risk for frequent tropical storm systems. Tree farmland, the farmer tending the land normally assumes the responsibilities and cost of cleanup. Financial assistance for cleaning up the debris. Commercial property may or may not qualify for the landowner to clean up debris.

WEED, SHRUB & TREE MAINTENANCE

Left alone without cultivation and management, farmlands will progress from a mixture of weed. Thus, weed, shrub and small tree maintenance must be considered. Either the landowner will do these tasks with a service provider. As a landowner, applying a non-restricted use herbicide applications to manage the lands. However, many of the shrubs and small trees are not easily. Thus a license to purchase and use a restricted use herbicide may be necessary. Currently, this exam provided by the North Carolina Department of Agriculture and Consumer Services (NCDA) will require attending four hours of training in a three-year time period and a small fee to maintain pertaining to licensing, visit the web site <http://www.ncagr.gov/SPCAP/pesticides/index.htm>.

If the landowner chooses, a commercial applicator may be contracted to provide vegetative removal to ensure that the person or company has the appropriate license(s). Within current legal structure, to have license permitting general weed control but one must be licensed in forestry to manage scenario, it may be necessary to contract with more than one person/company. *(Note: Farmers who they own or lease but are not permitted to apply on property of others. Such privilege is allowed*

WILDLIFE IMPACTS

Aim to evaluate the potential impact this project might have upon wildlife. Consider both consequences. Small shrubs or tree borders may protect the investment as well as provide an aesthetically pleasing plants will simply not tolerate the amplified light or heat if planted too close to the solar panel. Increase activity of small birds, insects and small mammals. However, this also increases the risk of bird's nest or wasp nest should be a routine maintenance to prevent potential fires or permanent damage. For additional resources for those wishing to consider wildlife conservation and wildlife development, visit <http://www.ncwildlife.org/Conserving/Programs/GreenGrowthToolbox.aspx>.

DRAINAGE, STORMWATER & SOLAR PANEL CONSIDERATIONS

Currently solar farms are considered pervious structures by the State of North Carolina if positioned on solar panels. Even so, large systems may require inclusion of drainage and/or stormwater plans. All systems must be maintained, regardless of size. Both of these may require modification in layout. Due to the variability based upon size, location and existing structures, it is not possible to provide guidance for stormwater management in this article. Planning should include discussion with appropriate planning departments (County or Metropolitan Planning Commission) as well as the local Soil & Water Conservation office.

In contrast to stormwater management, addressing soil management is a relatively simple process. Permanent ground cover. Many types of permitted grasses will qualify. Aim to provide proper ground cover. NCDA & CS Agronomic Division provides soil testing for plant nutrients and lime. Soil testing from April 1st through the end of November. (There is a \$4 charge per sample for submission forms, boxes and other assistance is available from any local NC Cooperative Extension office. Samples submitted (when appropriate), and instructions are also available at <http://www.ncagr.gov> some fertilizers may be corrosive to metals, plastics and glass used in the solar farms. Thus apply care to the panels or electrical conduits.

The goal of fertilization should be to provide adequate nutrients to establish the desired ground cover scenario, may result in sheet flow erosion as large quantities of water rush off of the solar panels. Frequent, yet less heavy rainfall events may create a dripline directly beneath the individual panel angle. If this occurs, restoring the eroded land and prevention of runoff into surrounding surface water. Landowner or contractor/developer, depending upon the designation made within the contract.

Lastly, most solar farms are indeed safe to operate. However, potentially toxic heavy metals are used in solar panels. Damaged units or time may release these contaminants into the environment. As such, care should be taken for potential contaminants. For additional information concerning potential contaminants, visit <https://www.epa.gov/chemical-research/ecological-soil-screening-level-metal-contaminants>.

PROXIMITY TO AIRPORT

Establishment of solar farms has been noted as a potential hazard for airports and air traffic control. Notification is not necessary for solar panels established more than 5 nautical miles from an airport. The Federal Aviation Administration (FAA) essentially has two objectives as follows:

1. No potential for glint or glare in the existing or planned Airport Traffic Control Tower.
2. No potential for glare or "low potential for after-image" along the final approach path or future landing thresholds (including any planned interim phases of the landing threshold) in the FAA-approved Airport Layout Plan (ALP). The final approach path is defined as a path above the landing threshold using a standard three (3) degree glide path.

In most cases, solar farms do not emit frequencies that are not in compliance with the FAA Commission's impact flight paths. However, it is advisable to discuss potential solar farm issues with the Airport Director (ADO) for civilian airports or the NC Commander's Council for military facilities if this might be applicable.

Steps below can assist in evaluation of proper procedure should one question whether the solar farm will impact air traffic. Tools and steps that will assist in these evaluations are listed below.

1. Google Earth – Use this mapping tool (or similar program) to determine if the proposed facility is in proximity to an airport as well as to gather the GIS coordinates and elevation of the field site.
2. Go to the FAA website, <https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp> and enter the coordinates. The results will be noted at this site.
3. Visit the website, <https://www.sghat.com/> to determine if glare or after-images might be a concern.
4. Take printed copies of the above data to the local airport for discussion.

FIRE SAFETY

Fire codes will apply to this structure, just as with any other commercial property. Thus, fire safety regulations prior to establishment. Having thus said, most solar farms can be established with fire safety by marking all direct-current conduits, conductors, enclosures, etc., as well as leaving a clear area (10 feet) around the array is sufficient.

Another consideration for fire safety will be to discuss fire plans and facility layout with the local fire department (city). These panels should always be considered as having maximum voltage and a potential electrical shock. Fires on site may place fire-fighters and others at risk of electrical shock. Determine a salvage treatment, if any, in case of a fire should be discussed with all contracting parties.

VEGETATIVE BUFFER ZONES

Specific regulations or ordinances do not currently exist within the State of North Carolina. However, municipal or county ordinances may have these requirements. Even if no regulation exists, there are some reasonable functions that a vegetative buffer zone will serve. As an example, a vegetative buffer zone can protect against wind-blown objects from entering the area where panels are established, may provide shade for vehicles if the area is located on a major highway, or may provide some deflection of potential runoff from neighboring neighborhoods or a major highway. Thus, not only will the vegetative border be pleasing, it may also benefit the Maintenance and Wildlife Sections.

EVALUATION OF THE CONTRACT

Care should be taken to examine all aspects of the contract. Typically, such contracts are reviewed by the landowner. As such, the contract outlines responsibilities and rights of the two parties but may greatly limit the landowner's rights. One must remember, the agreement to protect himself from as much liability as possible and to make a profit.

It is not the intent of this article to outline all considerations of a contract. However, a few of the considerations are listed below. It is *highly recommended* to consult legal counsel prior to signing the contract.

Potential contractual considerations include:

- Can the contract or any agreement/obligation of the contract be sold, transferred or assigned terms? The ability to sell a contractual obligation may mean that the company or individual tomorrow. Too, if allowed, the company/contractor to which the agreement is transferred agree to all original terms. In some cases, transfer of the agreement may be to a company to provide adequate financial backing or proper authority to meet original obligations. included in the contract that the specific conditions, terms, liability and risks associated with
- Easement, right of ways, permission to enter the farmland at will and/or right to work carefully. Leases allow a landowner to provide a tenant exclusive rights for a specific time easement provides the owner the right to continue using his/her land but transfers an interest to a third party. They are often recorded with the deed. As such, they are not easily terminated
- Does the contract allow the developer/contractor access to the land at any time? Some claim any time during the term of the contract. Specifically outline who has access to property. Failure to do so may allow the contractor, developer, sub lessee or others access at any time
- Does the contract require the landowner to protect the developer/contractor's interest? If so liability insurance or other matters. Avoid such clauses and terms and specify exactly what general, unclear clause that might increase the landowner's risks. Make sure these items are
- Who is liable for injury of a person during establishment, operation or maintenance of the may become entangled in legal disputes over worker injury. Make sure to protect yourself outlining such liability and responsibilities.
- Who is responsible for disputes with sub-contractors, sub lessee or others? As a landowner responsibility from those of the contractors/developers. Otherwise, legal action for which you
- Do both parties have the right to terminate the agreement without cause? If not, then what do not generate power equally. In some cases, poor performance may result in an inactive the right to terminate the agreement? These issues need to be clearly defined in the contract
- If there is a dispute or legal matter, what state determines the applicable laws. Some can be handled by arbitration in the state of the contracting company's origin or operation. Insist on local state laws and that disputes be settled within the state that the solar farm is located.
- Consider having the contract publicly recorded. Many contractors not only do not write specifically have wording preventing disclosure of terms, operation or any business matter "memorandum" is executed. Many states do not regard these memorandums as binding enforceable as publicly recorded contracts.
- Make sure that any changes to the contract or agreements is in writing and that the party has authority to make changes to the contract. In some cases, a third-party administrative company. These individuals or companies may or may not have authority to accept changes to a contract
- Many lending institutions, for various liability and risk concerns, will not allow solar farm the farm is not fully paid, check with the lending institution. Otherwise, full payment of the farm be placed into a solar farm.
- Evaluate the liability of injury to workers, visitors to the site, potential environmental damage consequences. Liability insurance costs and needs for commercial property may greatly differ. As such, make sure the contract clearly specifies who owns the equipment and liability of damage
- Avoid clauses or phrases that are vague such as allowing entry of the developer, contractor that are necessary, helpful, appropriate or convenient in connection with, incidental to, or Such statements give the contractor/developer or others open-ended rights and even the right. Specifically outline all activities and responsibilities for all parties and specifically state that

Additional information on contract considerations is found at <https://nccleantech.ncsu.edu/wp-content/uploads/2016/08/Contract-Considerations-Issues.pdf>

FARMLAND PRESERVATION PROGRAM

Craven County, NC, as many counties within North Carolina has farmland preservation programs: District (VAD) or Enhanced Agricultural District. (EVAD). These programs identify farmland committed to agricultural production and conservation practices to protect natural resources. If allowed.

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The Craven County Agricultural Advisory Board administers these programs. If farmlands enrol agricultural production and placed into solar farms, a letter addressed to this board requesting removal of the Conservation Agreement with the Register of Deeds). Once the Agricultural process should take between 30-90 days.

Farmland enrolled in an EVAD are more secure and binding. These lands have been enrolled as for a minimum of 10 years from the date of enrollment and the land is automatically renewed. There are penalties for early removal. However, once the original term has expired, the process is identical to the VAD.

Contact and additional information for the Craven County Agricultural Advisory Board is available at <http://www.cravencountync.gov/boards/volunteer/vad.cfm>.

DECOMMISSIONING

Currently no ordinance or provision provides for mandatory decommissioning in North Carolina. If warranted should the contracting company choose not to utilize the site, the site becomes derelict, equipment ages, or equipment becomes too inefficient to provide profit. At some point, whether or not equipment will need to be removed.

One of the primary obstacles currently faced by solar farms is that many of the products used are those that cannot be disposed within a landfill. Many of the products will need to be recycled. Some are at a small charge. However, the current concern is that there are not enough decommissioned materials. Thus, it may be difficult and costly to decommission the site.

Guidelines for decommissioning as listed within the publication, *Template Solar Energy Agreement for North Carolina* include:

Consider decommissioning under if any of the following conditions:

1. The land lease ends
2. The system does not produce power for 12 months
3. The system is damaged and will not be repaired or replaced

The owner/contractor of the solar farm, as provided for in its lease with the landowner, shall be responsible for decommissioning the project.

1. Remove all non-utility owned equipment, conduits, structures, fencing, and foundations below grade.
2. Remove all graveled areas and access roads unless the owner of the leased real estate agrees to keep them in place.
3. Restore the land to a condition reasonably similar to its condition before development was removed or eroded.
4. Revegetate any cleared areas with warm season grasses that are native to the region. The owner of the real estate to not revegetate due to plans for agricultural planting.
5. Provide soil (and water if near a stream) sample reports from a private lab showing no presence of heavy metals and contaminants and is suitable for agricultural production or desired use.

All removal and decommissioning shall occur within 12 months of the facility ceasing operation. The owner/contractor of the solar farm should be responsible for this decommissioning. The owner should provide the Town/County planning departments, Register of Deeds and landowner with a copy of the decommissioning plan within 30 days of change in the facility owner.

FUTURE CONSIDERATIONS

Within Craven County, NC there are currently no outlines, provisions or ordinances specifically addressing solar farm decommissioning. However, one should consider some guidelines that prevent future complications.

- Currently, development evaluates water quantity and quality impacts based upon the structure. More are supporting efforts to evaluate water impacts on a watershed scale. Thus, long-term considerations include soil erosion, stream protection (if near a stream) and water quality.

- Across the state, evaluations are occurring to provide some insight into the potential impact of solar farm construction on farmland, food and shelter from farmlands will have an impact upon the environment. Positive or negative is yet to be determined.
- What will the solar farm do to neighboring land values? Law suits alleging decline in construction of businesses or farms (swine operations, as example) are numerous. Current but no law currently addresses the specific glare, frequencies or unfavorable view of a function.

SUMMARY

Each landowner will need to determine whether or not the transition of agricultural land to solar revenue on a per acre basis does not necessarily mean greater profit. Higher expenses, future negative profits. Secondly, many of the solar farm projects are established with financial tax alternative energy sources and initial depreciation values anticipated. While these add immediate society and government. Too, they can disappear as quickly as initiated. Lastly, serious consideration should be evaluated. Solar farms providing 15-20 years of alternative energy, revenue to the landowner beneficial. In contrast, abandoned solar farm production, excessive cost of decommission or loss of landowner and area.

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RESOURCES & REFERENCES

Template Solar Energy Development Ordinance for North Carolina

<https://nccleantech.ncsu.edu/wp-content/uploads/NC-Template-Solar-Ordinance.pdf>

NC Clean Energy Technology Center – <https://nccleantech.ncsu.edu/about-ncsc/>

Solar Energy Tax Information – <https://www.ces.ncsu.edu/spotlight/solar-energy-property-tax-res>

Property Taxes and Solar PV Systems: Policies, Practices, and Issues – <https://nccleantech.ncsu.edu/wp-content/uploads/2013/04/Property-Taxes-and-Solar-PV-Systems-2013.pdf>

Cost of Solar Energy: Article with comments from John Morrison, chief operating officer of Strata Solar in Chapel Hill. <https://www.carolinajournal.com/news-article/n-c-state-prof-casts-shadows-on-solar-meeting/>

General Solar Energy Information and Data – <http://www.thesolarfoundation.org/>

NCSU Issues for Landowners – <http://content.ces.ncsu.edu/threshold-issues-for-landowner-solar/>

One article with comments from John Morrison, chief operating officer of Strata Solar in Chapel Hill. <https://www.carolinajournal.com/news-article/n-c-state-prof-casts-shadows-on-solar-meeting/>

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UPDATED ON DEC 5, 2018

This page can also be accessed from:
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More on:
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Aquaculture

Commercial Horticulture, Nursery & Turf

Community

Field Crops

Forest Resources

Soil, Water & Air



NEWS: CJ EXCLUSIVES

N.C. State Prof Casts Shadows On Solar Meeting

*Eckerlin tells Energy Policy Council public misled about solar
energy benefits*

Dan Way
in CJ Exclusives

September 18, 2014
12:00AM

RALEIGH— John Morrison, chief operating officer of Strata Solar in Chapel Hill, on Wednesday was lauding the brisk growth of sun-powered electricity in North Carolina in comments to the North Carolina Energy Policy Council. His company has built solar farm and solar array projects across North Carolina with a total value, including labor and material, of \$1 billion.

“The market is just going gangbusters,” Morrison said. Strata Solar’s investors “are asking us for more projects than we can build.”

But N.C. State University professor Herbert Eckerlin says the sunny stories of solar energy's economic benefits are wildly exaggerated, while the higher costs and technological challenges are deliberately downplayed.

"Due to solar power, the cost of electricity is going to increase for industry and residential" customers, hindering job creation, said Eckerlin, who described himself to the council as "a strong proponent of solar and renewable energy."

Eckerlin, a former official with Dominion Power in Virginia, designed and built the NCSU Solar House on the N.C. State campus, founded the North Carolina Solar Center, and is a member and former treasurer of the North Carolina Sustainable Energy Association, the statewide marketing arm of the renewable industry.

"We're creating millionaires — the investors who benefit from the tax breaks" offered by the state and federal governments, Eckerlin told the council. The way the deals are structured, he said, citing a U.S. Department of Agriculture publication, "creates a scenario where very little or no developer cash is needed" to get rich.

"What you're doing is supporting a government-created industry and putting it on the backs of the taxpayers, because the subsidies make it good for the investors with tax breaks, but somebody's got to make up for it," Eckerlin said.

"A solar developer has very little skin in the game. It's awfully important for the people of North Carolina, for the industry of North Carolina, for the taxpayers to understand that," Eckerlin said. "I'm not saying the technology is not good and shouldn't be done,

but exactly how we pay for it is important.”

Morrison countered that “all sources of energy have incentives,” so it’s important not to focus on the incentives any one sector of the energy industry receives.

“What would the price of alternative energy have to be if you had no tax credit?” council member Frank Gorham asked.

It would be “hard to calculate that exactly,” Morrison said.

Further, he said, an RTI/La Capra economic analysis determined that every \$1 spent on state tax credits for solar energy generates \$1.87 in return on investment.

There is a “really important economic opportunity” for landowners to lease property to site solar farms, and the supply chain grows, he said. As an example he cited a fence company that works on solar farms went from four to more than 40 employees, and is now the fourth-largest fencing company in North Carolina.

But Eckerlin said landowners only receive “a pittance” for use of their land.

And in a review of the RTI/La Capra study, Beacon Hill researchers concluded the results “are mismeasured and spurious. Orthodox cost-benefit analysis will not find anything like what the report’s authors estimate,” the reviewers said.

North Carolina’s Renewable Energy Portfolio Standards require utilities to use ever-increasing volumes of renewable energy, reaching 12.5 percent of the electric mix by 2021. But the Beacon Hill analysis concluded most of the savings observed to date stem

from mandated energy-efficiency programs in government buildings and building code requirements rather than the use of green energy itself.

The North Carolina Sustainable Energy Association attempted to quantify the impact of nine clean energy sectors on the economies of North Carolina and neighboring states by determining the number of clean energy jobs created and the gross clean energy revenue generated.

Eckerlin said his review concluded the ratios of that data were \$194,000 in revenue per clean energy job created in North Carolina, \$268,000 in Georgia, and \$81,000 in Virginia.

“The numbers to me make no sense at all, and cannot be taken seriously,” he said, variously calling them “delusion,” “bogus,” and “absurd.”

Yet that is the sort of data that is given to legislators and the public, “and they’re in no position to make judgments on this,” so they generally accept it at face value, Eckerlin said.

An independent party that has no vested interest in the outcome should conduct such surveys, he said.

“The thing that’s most disturbing to me is the misinformation that’s out there in the media,” Eckerlin said. “I don’t know if the media is in the tank, or they just are uninformed.”

He bristled at media reports suggesting a 500-megawatt solar farm could replace a nuclear power plant. The largest solar farm is only 377mw, and nuclear plants can be up to 5,000 mw.

“When [reports] talk about a solar farm powering 1,250 homes, and not a mention of intermittency in educating the public, we’ve got a problem,” Eckerlin said. Intermittency means that solar power requires specific conditions — namely, full exposure to sun — for panels to collect energy. This energy can be interrupted during cloudy days and rainy weather. Because solar power is not reliable, it requires backup systems, and utilities are forced into that role, Eckerlin said.

Ratepayers, industrial/commercial customers, and taxpayers all pay more for the higher system and operating costs associated with the redundancy of dual power systems, he said.

“I don’t know where the electric utilities are, and they’re not speaking to me” about that issue, and many others, Eckerlin said. “But when the cloud comes over and they have to respond to the drop in solar energy, that’s got to be a problem.”

Gary Freeman, director of renewable energy compliance and origination for Duke Energy, told the council that the utility is seeking to solve issues with integrating and operating the rising number of solar facilities on the Duke system. Solar power generation peaks too early in summer and too late in winter to meet peak customer demand, he said.

However, he said, Duke “supports a portfolio of cost-effective solar resources [that] will play an even more important part” in its electric generation fleet in the future.

Morrison believes solar power could be interconnected on the grid “in a very cost-effective way” just as nuclear power was linked up 50 years ago. He said that would require regulatory changes, and

revisions to current financial mechanisms that are a disincentive to both utilities and solar providers.

Eckerlin said the council should consider several recommendations, including committing more research funding to solving the problem of intermittent solar power and spending less on solar farm incentives.

“Write new legislation on the solar farm process that makes it public information for all to see and understand. I struggle to get information. People have to tell me things in confidence,” Eckerlin said. “That’s crazy, but that’s the way it is. Duke doesn’t talk about it, John Morrison can’t talk about it.”

New legislation also is needed to shift the costs of solar projects from taxpayers to solar developers, he said. And an educational program should be launched to inform legislators, industrial leaders, the media, and the general public on the potential and limitations of clean energy technology.

Dan E. Way (@danway_carolina) is an associate editor of Carolina Journal.

categories: **Business and Regulations, Environment, State Government**

tags: **eckerlin, way**

DUKE ENERGY

North Carolina committee pushes for re-evaluation of solar policies

Rhiannon Fionn | December 8, 2016

On Wednesday, a high-level North Carolina advisory committee unanimously voted to formally request that the General Assembly re-evaluate state energy policy.

The request by the state's Energy Policy Council includes text written by Duke Energy which calls for a "broad" re-evaluation, especially when it comes to solar energy.

The meeting focused predominantly on the effect solar generation has on Duke Energy's overall energy mix during peak load times, specifically as it relates to the requirement to purchase third-party generation under the federal Public Utility Regulatory Policies Act (PURPA).

"They have to purchase it," said Jenny Kelvington (<https://deq.nc.gov/about/leadership/energy-director>), the Executive Director for Energy in the N.C. Department of Environmental Quality's Energy Group, adding that 60 percent of the nation's PURPA projects are in North Carolina.

During the council's discussion, councilman John Brodman, a retired Deputy Assistant Secretary for International Energy Policy in the U.S. Department of Energy, suggested that the council lobby the DOE to update PURPA, which was signed into law by President Jimmy Carter in 1978.

Solar impacting nuclear generation

In November, Duke Energy Progress, a subsidiary of Duke Energy, filed the company's avoided cost rates (<http://www.iepa.com/avoid.asp>) – the amount paid to customers who generate their own electricity – with the N.C. Utilities Commission. In that document, Kelvington said, "They identified some of the issues they're starting to see on their system."

Duke Energy illustrated the issue they've noticed in that filing with a graph that serves as a snapshot of energy production on Jan. 31, 2016.

While it was cold that night, "It was a bright sunny day, so you saw a lot of solar generation," Kelvington said. The high temperature that day was in the 60s, meaning low electricity demand in a state that relies largely on electricity for heating.

Because of the requirement to purchase solar-generated energy, Kelvington explained, "Duke Energy generated more energy than they could use, so they had to dump that power" – selling it at a lower rate, and potentially a loss, to the larger grid.

On the graph, the line representing solar energy generation on Jan. 31 created what's known as a "banana curve." Kelvington pointed out that if something similar were to occur in 2018, according to Duke Energy's projections, that it could conceivably need to "quick cycle" nuclear generation which usually remains steady year-round as baseload generation.

Quick cycling would involve reducing the amount of energy being generated by a nuclear plant then increasing it soon afterward, something that is not usually, or easily, done.

Rob Caldwell, Sr. Vice President for Distributed Energy Resources at Duke Energy and a member of the Energy Policy Council, assured the rest of the council that the company constantly monitors its system "to make sure the demand is in balance."

Regarding the solar spike on Jan. 31, he said, "We're talking about a few hours here." He also said that the company has several options available during those times, including energy storage and "dumping" it.

EPC to ask General Assembly for study

Reading from a prepared document, Caldwell said, "I would move that the policy council recommend the General Assembly consider evaluating the energy issues broadly." Soon after, he said, "I don't necessarily agree with the recommendations" before the council.

Those recommendations include a comprehensive power grid reliability study to be funded by Duke Energy and Dominion Power that includes an assessment of third-party solar integration, a reevaluation of the 80 percent property tax exemption for "all new solar electric projects," a reevaluation of the state's Renewable Energy and Energy Efficiency Portfolio Standard (REPS) and a study to assess "the need for a solar energy facility permitting program to address, among other items, construction and end of life issues." (Items 1, 3, 5 and 6 [on this document](http://2wkwcrd7u7m2kz1mxtfvko18.wpengine.netdna-cdn.com/wp-content/uploads/sites/58/2016/12/NC-Energy-Policy-Council-Recc-for-Council-Dec-7-2016.pdf) (<http://2wkwcrd7u7m2kz1mxtfvko18.wpengine.netdna-cdn.com/wp-content/uploads/sites/58/2016/12/NC-Energy-Policy-Council-Recc-for-Council-Dec-7-2016.pdf>).

The council unanimously voted to rewrite its request for the General Assembly, including the statement read by Caldwell and the recommendations listed above. It is unclear if the request will be forwarded to the General Assembly for a vote during its Dec. 13 special session which has been called by Gov. Pat McCrory to work on Hurricane Matthew and wildfire relief issues.

Should the property tax exemption be taken away from the solar industry, that would leave only [federal tax incentives](http://www.seia.org/about/solar-energy/solar-faq/what-rebates-incentives-are-available-solar-energy) (<http://www.seia.org/about/solar-energy/solar-faq/what-rebates-incentives-are-available-solar-energy>) since the General Assembly allowed North Carolina's solar tax credit to expire at the end of 2015.

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North Carolina is ranked second

(<http://www.charlotteobserver.com/news/local/article101994067.html>) in the nation for solar energy capacity, behind California.

Governor-elect Roy Cooper (<http://southeastenergynews.com/2016/12/06/under-new-governor-whats-next-for-energy-in-north-carolina/>) favors the Renewable Energy and Energy Efficiency Portfolio Standard

(<http://www.ncuc.commerce.state.nc.us/reps/reps.htm>), which became law in 2007 and requires investor-owned utilities to meet 12.5 percent of their energy production needs with renewable energy.

The REPS initiative was the first of its kind in the Southeast. In contrast, neighboring South Carolina and Virginia have renewable energy goals instead of requirements.

In response to the Energy Policy Council's move, Sean Gallagher, vice president of state affairs for the Solar Energy Industries Associations (<http://www.seia.org/about/solar-energy/solar-faq/what-rebates-incentives-are-available-solar-energy>) said, "SEIA looks forward to educating the incoming governor's administration on the opportunities to promote solar in the Tar Heel state. As lawmaking ability resides with the N.C. General Assembly, not the Energy Policy Council, we will continue to work within the broad coalition of citizens and businesses that want greater access to solar energy."

Tony Solari, Director of Government Affairs for the N.C. Sustainable Energy Association, says his organization is also looking forward to working with Cooper. "NCSEA agrees that it is time to take a comprehensive look at energy policy in North Carolina," he says, "especially since it's been over 10 years since the last major legislation on energy policy was enacted."

He says NCSEA officials believe that, "Any such study should have a special emphasis on how our state maintains and furthers its leadership in the clean energy environment."

Duke Energy's future generation planning

Following the council's successful motion, Robert "Bobby" McMurry, Director of Integration Resource Planning for Duke Energy, then presented the company's 2016 resource and generation planning to the council, noting that uncertainty regarding the federal Clean Power Plan could change projections.

He explained that, thanks to solar energy production, peak load has moved from summertime to wintertime. "Our peak load winter day is what we're going to be planning for in capacity," he said, adding, "This is the first time ever that Duke has been planning for a winter peak load for building capacity."

While solar energy generation reduced the company's peak load in summer months, McMurry said, "Solar isn't really helping us meet our winter peak load. It helps us reduce our load in the winter, but when our peak need is 7 in the morning, it's really not helping that much."

North Carolina committee pushes for re-evaluation of solar policies | Southeast Energy N... Page 4 of 4

In the winter months it can still be dark at 7 a.m., so any solar energy generation for that day has yet to begin. That's also the time of day when energy usage tends to spike since people are waking up and getting ready for their days at work or school and businesses are beginning to open.

He also discussed the company's desire "to relicense our nuclear to go to 80 years," referring to the company's William States Lee III Nuclear Generating Station in Gaffney, S.C. McMurry said the company began looking for a combined construction and operating license (COL) in 2008.

Licenses for three of the company's other nuclear plants are set to expire within the next 20 years: 2030 for H. B. Robinson (Hartsville, S.C.), 2033 for Oconee (Seneca, S.C.) and 2035 for Brunswick (Southport, N.C.).

McMurry's projections indicate that Duke Energy's generating could need to expand as soon as 2022.

The Energy Policy Council meetings are usually livestreamed, but due to a venue change that was not possible. State audio-visual staff took video of the meeting and uploaded it later that day; you can watch [here](https://livestream.com/accounts/7720979/events/4064244/videos/143754617/player?width=960&height=540&enableInfo=true&defaultDrawer=feed&autoplay=true&mute=false) (<https://livestream.com/accounts/7720979/events/4064244/videos/143754617/player?width=960&height=540&enableInfo=true&defaultDrawer=feed&autoplay=true&mute=false>).



Energy Policy Council

TO: ENERGY POLICY COUNCIL MEMBERS
FROM: CLEAN ENERGY AND ENERGY EFFICIENCY SUBCOMMITTEE
DATE: NOVEMBER 30, 2016
RE: RECOMMENDATIONS FOR THE COUNCIL TO CONSIDER ON DECEMBER 7, 2016

In accordance with the Energy Policy Council Committee Recommendation Policy and General Statute §113B-5, the Clean Energy and Energy Efficiency subcommittee requests that the full Council recommend that:

1. An independent and comprehensive power grid reliability study be funded by Duke Energy Carolinas, Duke Energy Progress, and Dominion Power to:
 - assess the positive and negative aspects of non-dispatchable, intermittent third party solar energy;
 - determine how to integrate solar energy into power system; and
 - evaluate how to best pair solar energy with environmentally protective resources to ensure homes and businesses within the state continue to receive reliable, cost-competitive and environmentally clean electric power.
2. The full Council hear a presentation on net metering at a future meeting.
3. The 80 percent property tax exemption for solar electric systems be reevaluated based on the current installation costs for all new solar electric projects.
4. The full Council hear a presentation at a future meeting on the restrictions placed on energy efficiency and out-of-state renewable energy certificate (REC) purchases for compliance with the Renewable Energy and Energy Efficiency Portfolio Standard.
5. The full Council recommend that the General Assembly reevaluate the percentages contained in the North Carolina Renewable Energy and Energy Efficiency Portfolio Standard (REPS) in light of current information.
6. The General Assembly establish a study group to address the need for a solar energy facility permitting program to address, among other items, construction and end of life issues.

###



Energy Policy Council

North Carolina Energy Policy Council Agenda

Wednesday, December 7, 2016

Archdale Building, Ground Floor Hearing Room, 512 N Salisbury Street, Raleigh

- 10:00 a.m. **Call to Order and Opening Remarks:**
Donald van der Vaart, Acting Chair
- 10:05 a.m. **Council Business**
Consideration of the following recommendations:
- An independent and comprehensive power grid reliability study;
 - A relook at the property tax exemption for solar electric systems;
 - A relook at the mandate percentages in the Renewable Energy and Energy Efficiency Portfolio Standard (REPS);
 - A solar energy permitting program legislative study group; and
 - Presentations at the January EPC meeting on net metering and the restrictions placed on energy efficiency and out-of-state renewable energy certificate purchases for compliance with the REPS.
- 10:45 a.m. **Nuclear Energy and the Levelized Cost of Energy**
Margaret Harding, 4 Factor Consulting
- 11:15 a.m. **Duke Energy 2016 Integrated Resource Plan**
Robert McMurry, Director, Integrated Resource Planning, Duke Energy
- 11:55 a.m. **Closing Remarks**
Donald van der Vaart, Acting Chair

###

the *WHITE HOUSE* *PRESIDENT DONALD J. TRUMP*



Issues

America First Energy Plan

America First Foreign Policy

Bringing Back Jobs And Growth

Making Our Military Strong Again

Standing Up For Our Law Enforcement Community

Trade Deals That Work For All Americans

An America First Energy Plan

Energy is an essential part of American life and a staple of the world economy. The Trump Administration is committed to energy policies that lower costs for hardworking Americans and maximize the use of American resources, freeing us from dependence on foreign oil.

For too long, we've been held back by burdensome regulations on our energy industry. President Trump is committed to eliminating harmful and unnecessary policies such as the Climate Action Plan and the Waters of the U.S. rule. Lifting these restrictions will greatly help American workers, increasing wages by more than \$30 billion over the next 7 years.

Sound energy policy begins with the recognition that we have vast untapped domestic energy reserves right here in America. The Trump Administration will embrace the shale oil and gas revolution to bring jobs and prosperity to millions of Americans. We must take advantage of the estimated \$50 trillion in untapped shale, oil, and natural gas reserves, especially those on federal lands that the American people own. We will use the revenues from energy production to rebuild our roads, schools, bridges and public infrastructure. Less expensive energy will be a big boost to American agriculture, as well.

The Trump Administration is also committed to clean coal technology, and to reviving America's coal industry, which has been hurting for too long.

In addition to being good for our economy, boosting domestic energy production is in America's national security interest. President Trump is committed to achieving energy independence from the OPEC cartel and any nations hostile to our interests. At the same time, we will work with our Gulf allies to develop a positive energy relationship as part of our anti-terrorism strategy.

Lastly, our need for energy must go hand-in-hand with responsible stewardship of the environment. Protecting clean air and clean water, conserving our natural habitats, and preserving our natural reserves and resources will remain a high priority. President Trump will refocus the EPA on its essential mission of protecting our air and water.

A brighter future depends on energy policies that stimulate our economy, ensure our security, and protect our health. Under the Trump Administration's energy policies, that future can become a reality.

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EXHIBIT B

Jones County Health Department Monthly Summary Report – December 2016		
CLINICAL SERVICES	CURRENT MONTH	YEAR-TO-DATE
Family Planning	9	81
Maternal Health (Pregnancy Tests; Pre-natal Vitamins)	3	13
BCCCP	2	12
Wisewoman	5	24
Immunizations	7	43
Seasonal Flu Shots - Adults	3	130
Seasonal Flu Shots - Children	4	24
STD Screenings/Treatments	6	54
Communicable Disease Cases/Investigations	11	64
TB Treatments (Latent) & Skin Tests	7	59
Child Health (Wellness)	1	36
Child Health (Sick Care)	1	8
Dental Varnishing	0	0
Lab Services	30	266
Blood Lead Investigations	0	6
Sickle Cell Case	0	1
WIC (Women, Infant & Children)		
Food Benefit Issuance	30	237
Initial Certification	4	29
Mid-Certification Assessment	8	48
Subsequent Certifications	14	86
Nutrition Education	4	51
Total Clients Participating During the Month	183	
CASE MANAGEMENT SERVICES		
Pregnancy Care Management (OBCM):		
Current Case Load	20	
Contacts Made	129	497
Contacts Attempted (No Contact)	26	62
Care Coordination for Children (CC4C):		
Current Case Load	14	
Contacts Made	13	1,163
Contacts Attempted (No Contact)	16	147
Community Alternatives Program (CAP/DA):		
Current Case Load	24	
Initial Assessment (New Admission)	0	1
Monthly Contacts (By Telephone)	15	109
Quarterly Contacts (Home Visit)	8	34
Annual Reassessment	1	11
ENVIRONMENTAL HEALTH		
Food and Lodging:		
F&L Inspections	11	49
F&L Visits	3	52
F&L Pre-Opening Visits	1	5

F&L Permits Issued	0	1
F&L Permits Suspended	0	0
F&L Suspensions Lifted	0	0
F&L Complaint Investigations	0	6
F&L Consults	0	16
On-Site Wastewater:		
Sites Visited/Evaluated	12	119
Improvement Permits Issued	3	18
Construction Authorizations	3	21
Other Authorizations	2	24
Migrant Housing Inspections	2	2
Sewage Complaints Investigated	2	4
Consultative Contacts	14	107
Operation Permits Issued	4	15
Private Wells:		
Well Site Evaluated	0	0
Grouting Inspections	0	0
Well Site Construction Visits	0	0
Well Construction Permits Issued	0	0
Well Certificate of Completion	0	0
Bacteriological Samples Collected	0	4
Other Sample Collected	0	4
Well Consultative Contacts	0	0
Rabies Control:		
Animal Bite Reports	1	7
Rabies Exposure (No bite)	0	0
VITAL RECORDS		
Death Certificates	8	39
Home Birth Certificates	0	0
CAR SEAT PROGRAM		
Car Seats Distributed by Health Department	2	10
Car Seats Distributed by Partner Agencies	0	1
HEALTH EDUCATION/PREPAREDNESS UPDATES		
<p>Tamara Jones was hired as our new Public Health Educator II, effective January 9, 2017. She has been the Health Educator for Pamlico County Health Department for the past 13 years. She is originally from Cove City, and resides in New Bern. Tamara will bring a wealth of public health education information to our health department. We are thrilled to have her join our staff!</p>		
OTHER UPDATES		
<p><u>Health Director:</u> Presented the following items to the BOCC: 1) Monthly Summary Report and Animal Bite/Exposure Report for October, 2) request for additional funds in amount of \$1,100 (Zika) and \$11,071 (Trillium SOC); conducted monthly staff and management team meetings; attended CCSAP Governing Board meeting; assisted with CCSAP Town Hall Forum; interviewed candidates for vacant Health Educator II and Nursing Supervisor I positions; attended NCALHD Business Meeting; met with representatives from Promise Place; conducted quarterly EPI team meeting; enjoyed the Christmas holidays!</p>		

EXHIBIT C

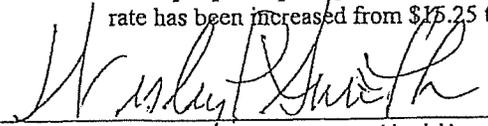
**Division of Public Health
Agreement Addendum
FY 16-17**

Page 1 of 2

<u>Jones County Health Department</u>	<u>Women's and Children's Health Section</u>
<u>Local Health Department Legal Name</u>	<u>Nutrition Services Branch</u>
	<u>DPH Section/Branch Name</u>
<u>403 WIC</u>	<u>Sheila J. Hirt, (919) 707-5793</u>
<u>Activity Number and Description</u>	<u>Sheila.Hirt@dhhs.nc.gov</u>
	<u>DPH Program Contact</u>
	<small>(name, telephone number with area code, and email)</small>
<u>06/01/2016 – 05/31/2017</u>	
<u>Service Period</u>	<u>DPH Program Signature</u> Date
	<small>(only required for a negotiable agreement addendum)</small>
<u>07/01/2016 – 06/30/2017</u>	
<u>Payment Period</u>	

- Original Agreement Addendum
- Agreement Addendum Revision # 1 (Please do not put the Budgetary Estimate revision # here.)

- I. **Background:**
No change.
- II. **Purpose:**
This Agreement Addendum Revision #1 provides additional funding to the Local Health Department as described in Section IV Performance Measures/Reporting Requirements below. This additional funding allows the Local Health Department to further enhance its ability to continue with the objective of the Special Supplemental Nutrition Program for Women, Infants and Children (WIC), which is to provide supplemental nutritious foods, nutrition education, and referrals to health care for low-income persons during critical periods of growth and development.
- III. **Scope of Work and Deliverables:**
No change.
- IV. **Performance Measures/Reporting Requirements:**
As of February 1, 2017, this Agreement Addendum Revision #1 adds Subparagraph 2 to Paragraph A. Performance Measures as follows:
 - 2. Budget additional annual funds among the four WIC activities to include the increased rate of \$0.50 per participant, per month, for the remainder of the Service Period. The current participant rate has been increased from \$15.25 to \$15.75 per participant per month.

 (use blue ink) 1/30/17
Health Director Signature Date

Local Health Department to complete: (If follow-up information is needed by DPH)	LHD program contact name: <u>CATHERINE SMITH RN</u>
	Phone number with area code: <u>252-448-9111 EXT 3016</u>
	Email address: <u>C.smith@jonescountync.gov</u>

V. Performance Monitoring and Quality Assurance:

No Change

VI. Funding Guidelines or Restrictions: (if applicable)

As of February 1, 2017, this Agreement Addendum Revision #1 adds Paragraph F as follows:

- F. Additional funds have been placed in the 'Client Services' category as detailed on Attachment B-1. If the Local Health Department chooses to further distribute funds among the four WIC activities, adhering to threshold requirements, it may do so by completing the Attachment B-1 "WIC Budget Page" and submitting it to the Nutrition Services Branch's State Office.

Federal Award Reporting Requirements for Pass-Through Agencies, 2 CFR § 200.331

FY17 Activity: 403 WIC

Supplement 6

Supplement reason: In AA+BE or AA+BE Rev -OR- -

CFDA #: 10.557 Federal awd date: 10/1/16 Is award R&D? no FAIN: 175NC705W1003 Total amount of fed awd: \$ 17,585,752

CFDA Special Supplemental Nutrition Program for Women, Infants, and Children
 Fed award project description: Women Infants & Children
 Fed awarding agency: USDA, Food and Nutrition Service
 Federal award indirect cost rate: n/a %

Subrecipient	Subrecipient DUNS	Fed funds for this Supplement	Total All fed funds for this Activity	Subrecipient	Subrecipient DUNS	Fed funds for this Supplement	Total All fed funds for this Activity
Alamance	965194483	\$8,234	\$761,645	Jackson	019728518	\$1,704	\$157,620
Albemarle	130537822	\$6,486	\$599,345	Johnston	097599104	\$8,322	\$769,785
Alexander	030495105	\$1,434	\$132,645	Jones	095116935	\$454	\$41,995
Anson	847163029	\$1,664	\$153,768	Lee	067439703	\$3,802	\$351,685
Appalachian	780131541	\$3,232	\$298,960	Lenoir	042789748	\$3,740	\$345,950
Beaufort	091567776	\$3,306	\$305,805	Lincoln	086869336	\$3,586	\$331,705
Bladen	084171628	\$2,180	\$201,650	Macon	070626825	\$2,234	\$206,645
Brunswick	091571349	\$4,652	\$429,761	Madison	831052873	\$1,138	\$105,265
Buncombe	879203560	\$9,300	\$860,250	MTW	087204173	\$2,652	\$245,066
Burke	883321205	\$4,836	\$447,330	Mecklenburg	074498353	\$45,314	\$4,267,855
Cabarrus	143408289	\$8,742	\$808,635	Montgomery	025384603	\$2,214	\$204,795
Caldwell	948113402	\$3,722	\$344,285	Moore	050988146	\$3,706	\$342,805
Carteret	058735804	\$2,610	\$241,090	Nash	050425677	\$5,894	\$545,195
Caswell	077846053	\$1,118	\$103,415	New Hanover	040029563	\$7,158	\$662,115
Catawba	083677138	\$8,570	\$795,225	Northampton	097594477	\$1,288	\$119,140
Chatham	131356607	=	=	Onslow	172663270	\$15,786	\$1,460,205
Cherokee	130705072	\$1,464	\$135,420	Orange	139209659	=	=
Clay	145058231	\$548	\$49,470	Pamlico	097600456	\$696	\$64,380
Cleveland	879924850	\$5,700	\$527,250	Pender	100955413	\$2,746	\$254,005
Columbus	040040016	\$4,050	\$374,625	Person	091563718	\$2,006	\$185,555
Craven	091564294	\$6,486	\$599,955	Pitt	080889694	\$9,134	\$844,895
Cumberland	123914376	\$26,942	\$2,492,135	Randolph	027873132	\$7,926	\$733,155
Dare	082358631	\$1,584	\$146,398	Richmond	070621339	\$3,318	\$306,915
Davidson	077839744	\$7,776	\$719,280	Robeson	082367871	\$9,492	\$878,010
Davie	076526651	\$1,844	\$170,570	Rockingham	077847143	\$4,376	\$404,780
Duplin	095124798	\$4,990	\$461,575	Rowan	074494014	\$5,994	\$554,445
Durham	088564075	=	=	RPM	782359004	\$7,152	\$661,560
Edgecombe	093125375	\$4,066	\$376,105	Sampson	825573975	\$4,026	\$372,405
Forsyth	105316439	\$20,798	\$1,923,815	Scotland	091564146	\$3,486	\$322,455
Franklin	084168632	\$2,812	\$260,110	Stanly	131060829	\$3,112	\$287,860
Gaston	071062186	\$9,550	\$883,375	Stokes	085442705	\$1,812	\$167,610
Graham	020952383	\$636	\$57,763	Surry	077821858	\$3,946	\$365,005
Granville-Vance	063347626	\$5,124	\$473,970	Swain	146437553	\$740	\$68,206
Greene	091564591	\$1,508	\$139,490	Toe River	113345201	\$2,862	\$264,735
Guilford	071563613	\$25,846	\$2,390,755	Transylvania	030494215	\$1,334	\$123,395
Halifax	014305957	\$3,426	\$316,082	Union	079051637	\$7,672	\$709,660
Harnett	091565986	\$5,990	\$553,862	Wake	019625961	\$34,974	\$3,235,095
Haywood	070620232	\$2,934	\$271,395	Warren	030239953	\$1,198	\$110,815
Henderson	085021470	\$4,726	\$437,155	Wayne	040036170	\$8,304	\$768,120
Hertford	627320971	\$1,708	\$157,990	Wilkes	067439950	\$3,542	\$327,635
Hoke	091563643	\$3,778	\$349,465	Wilson	075585695	\$5,516	\$510,230
Hyde	832526243	\$264	\$24,420	Yadkin	089910624	\$2,070	\$191,475
Iredell	074504507	\$7,318	\$676,915				

REC'D JAN 27 2017

DPS - 16/17

For Fiscal Year: 16/17

Budgetary Estimate Number: 10

Activity 403	AA	13A2 5403 GG	13A2 5403 GH	13A2 5404 GG	13A2 5404 GG	13A2 5404 GH	13A2 5405 GG	13A2 5405 GH	13A2 5409 GG	13A2 5409 GH	13A2 5416 GG	13A2 5416 GH	Proposed Total	Now Total
Service Period		06/01-09/30	10/01-05/31	06/01-09/30	07/01-09/30	10/01-05/31	06/01-09/30	10/01-05/31	06/01-09/30	10/01-05/31	06/01-09/30	10/01-05/31		
Payment Period		07/01-12/31	11/01-05/30	07/01-11/30	08/01-11/30	11/01-05/30	07/01-11/30	11/01-05/30	07/01-12/31	11/01-05/30	07/01-10/30	11/01-05/30		
01 Alamance	1	0	8,234	0	0	0	0	0	0	0	0	0	8,234	761,645
01 Albemarle	2	0	6,486	0	0	0	0	0	0	0	0	0	6,486	599,345
02 Alexander	1	0	1,434	0	0	0	0	0	0	0	0	0	1,434	132,645
04 Anson	2	0	1,654	0	0	0	0	0	0	0	0	0	1,654	153,708
02 Appalachian	1	0	3,232	0	0	0	0	0	0	0	0	0	3,232	298,060
07 Beaufort	1	0	3,306	0	0	0	0	0	0	0	0	0	3,306	305,805
09 Bladen	1	0	2,180	0	0	0	0	0	0	0	0	0	2,180	201,650
10 Brunswick	2	0	4,652	0	0	0	0	0	0	0	0	0	4,652	429,761
11 Buncombe	1	0	9,300	0	0	0	0	0	0	0	0	0	9,300	880,250
12 Burke	1	0	4,836	0	0	0	0	0	0	0	0	0	4,836	447,330
13 Cabarrus	1	0	8,742	0	0	0	0	0	0	0	0	0	8,742	808,635
14 Caldwell	1	0	3,722	0	0	0	0	0	0	0	0	0	3,722	344,285
16 Carteret	2	0	2,610	0	0	0	0	0	0	0	0	0	2,610	241,090
17 Caswell	1	0	1,118	0	0	0	0	0	0	0	0	0	1,118	103,415
18 Catawba	2	0	8,570	0	0	0	0	0	0	0	0	0	8,570	795,225
18 Chatham			0	0	0	0	0	0	0	0	0	0	0	0
20 Cherokee	1	0	1,464	0	0	0	0	0	0	0	0	0	1,464	135,420
22 Clay	2	0	548	0	0	0	0	0	0	0	0	0	548	49,470
23 Cleveland	1	0	5,700	0	0	0	0	0	0	0	0	0	5,700	527,250
24 Columbus	1	0	4,050	0	0	0	0	0	0	0	0	0	4,050	374,625
25 Craven	1	0	6,486	0	0	0	0	0	0	0	0	0	6,486	599,955
26 Cumberland	1	0	26,942	0	0	0	0	0	0	0	0	0	26,942	2,492,135
28 Dare	2	0	1,584	0	0	0	0	0	0	0	0	0	1,584	146,388
29 Davidson	1	0	7,776	0	0	0	0	0	0	0	0	0	7,776	719,280
30 Davie	1	0	1,844	0	0	0	0	0	0	0	0	0	1,844	170,570
31 Duplin	1	0	4,990	0	0	0	0	0	0	0	0	0	4,990	461,575
32 Durham			0	0	0	0	0	0	0	0	0	0	0	0
33 Edgecombe	1	0	4,056	0	0	0	0	0	0	0	0	0	4,056	376,105
34 Forsyth	1	0	20,798	0	0	0	0	0	0	0	0	0	20,798	1,923,815
35 Franklin	1	0	2,812	0	0	0	0	0	0	0	0	0	2,812	260,110
36 Gaston	1	0	9,550	0	0	0	0	0	0	0	0	0	9,550	883,375
38 Graham	2	0	636	0	0	0	0	0	0	0	0	0	636	57,763
D3 Gran-Vanco	1	0	5,124	0	0	0	0	0	0	0	0	0	5,124	473,970
40 Greene	1	0	1,508	0	0	0	0	0	0	0	0	0	1,508	139,490
41 Guilford	1	0	25,846	0	0	0	0	0	0	0	0	0	25,846	2,390,755
42 Halifax	2	0	3,426	0	0	0	0	0	0	0	0	0	3,426	316,002
43 Harnett	2	0	5,990	0	0	0	0	0	0	0	0	0	5,990	553,862
44 Haywood	1	0	2,934	0	0	0	0	0	0	0	0	0	2,934	271,395
45 Henderson	1	0	4,728	0	0	0	0	0	0	0	0	0	4,728	437,155
46 Hertford	1	0	1,708	0	0	0	0	0	0	0	0	0	1,708	157,990
47 Hoke	1	0	3,778	0	0	0	0	0	0	0	0	0	3,778	349,465
48 Hyde	1	0	264	0	0	0	0	0	0	0	0	0	264	24,420
49 Iredell	1	0	7,318	0	0	0	0	0	0	0	0	0	7,318	676,915
50 Jackson	1	0	1,704	0	0	0	0	0	0	0	0	0	1,704	157,620
51 Johnston	1	0	8,322	0	0	0	0	0	0	0	0	0	8,322	769,785
52 Jones	1	0	454	0	0	0	0	0	0	0	0	0	454	41,995
53 Lee	1	0	3,802	0	0	0	0	0	0	0	0	0	3,802	351,685
54 Lenoir	1	0	3,740	0	0	0	0	0	0	0	0	0	3,740	345,950
55 Lincoln	1	0	3,586	0	0	0	0	0	0	0	0	0	3,586	331,705
56 Macon	1	0	2,234	0	0	0	0	0	0	0	0	0	2,234	206,645
57 Madison	1	0	1,138	0	0	0	0	0	0	0	0	0	1,138	105,265
D4 M-T-W	2	0	2,652	0	0	0	0	0	0	0	0	0	2,652	245,086
60 Mecklenburg	2	0	45,314	0	0	0	0	0	0	0	0	0	45,314	4,267,855
62 Montgomery	1	0	2,214	0	0	0	0	0	0	0	0	0	2,214	204,785
63 Moore	1	0	3,706	0	0	0	0	0	0	0	0	0	3,706	342,805
64 Nash	1	0	5,894	0	0	0	0	0	0	0	0	0	5,894	545,195
65 New Hanover	1	0	7,158	0	0	0	0	0	0	0	0	0	7,158	662,115
66 Northampton	1	0	1,288	0	0	0	0	0	0	0	0	0	1,288	119,140
67 Onslow	1	0	15,786	0	0	0	0	0	0	0	0	0	15,786	1,460,205
68 Orange			0	0	0	0	0	0	0	0	0	0	0	0
69 Pamlico	1	0	896	0	0	0	0	0	0	0	0	0	896	84,380
71 Pender	1	0	2,746	0	0	0	0	0	0	0	0	0	2,746	254,005
73 Person	1	0	2,006	0	0	0	0	0	0	0	0	0	2,006	185,555
74 Pitt	1	0	9,134	0	0	0	0	0	0	0	0	0	9,134	844,895
76 Randolph	1	0	7,926	0	0	0	0	0	0	0	0	0	7,926	733,155
77 Richmond	1	0	3,318	0	0	0	0	0	0	0	0	0	3,318	306,915
78 Robeson	1	0	9,492	0	0	0	0	0	0	0	0	0	9,492	878,010
79 Rockingham	1	0	4,376	0	0	0	0	0	0	0	0	0	4,376	404,780
80 Rowan	1	0	5,994	0	0	0	0	0	0	0	0	0	5,994	554,445
D5 R-P-M	1	0	7,152	0	0	0	0	0	0	0	0	0	7,152	661,560
82 Sampson	1	0	4,026	0	0	0	0	0	0	0	0	0	4,026	372,405
83 Scotland	1	0	3,486	0	0	0	0	0	0	0	0	0	3,486	322,455
84 Stanly	1	0	3,112	0	0	0	0	0	0	0	0	0	3,112	287,860

85 Stokes	* 1	0	1,812	0	0	0	0	0	0	0	0	0	0	0	0	1,812	167,610
86 Surry	* 1	0	3,946	0	0	0	0	0	0	0	0	0	0	0	0	3,946	365,005
87 Swain	* 2	0	740	0	0	0	0	0	0	0	0	0	0	0	0	740	68,206
88 Transylvania	* 1	0	2,862	0	0	0	0	0	0	0	0	0	0	0	0	2,862	264,735
90 Union	* 1	0	1,334	0	0	0	0	0	0	0	0	0	0	0	0	1,334	123,395
92 Wake	* 1	0	7,672	0	0	0	0	0	0	0	0	0	0	0	0	7,672	709,660
93 Warron	* 1	0	34,974	0	0	0	0	0	0	0	0	0	0	0	0	34,974	3,235,095
96 Wayne	* 1	0	1,198	0	0	0	0	0	0	0	0	0	0	0	0	1,198	110,815
97 Wilkes	* 1	0	8,304	0	0	0	0	0	0	0	0	0	0	0	0	8,304	768,120
98 Wilson	* 1	0	3,542	0	0	0	0	0	0	0	0	0	0	0	0	3,542	327,633
99 Yadkin	* 1	0	5,516	0	0	0	0	0	0	0	0	0	0	0	0	5,516	510,230
Totals		0	2,070	0	0	0	0	0	0	0	0	0	0	0	0	2,070	191,475
Totals		0	478,380	0	0	0	0	0	0	0	0	0	0	0	0	478,380	4,323,381

Sign and Date - DPH Program Administrator <i>[Signature]</i> 1-25-17	Sign and Date - DPH Section Chief <i>[Signature]</i> 1/25/17
Sign and Date - DPH Contracts Office <i>[Signature]</i> 1-27-17	Sign and Date - DPH Budget Officer <i>[Signature]</i> 1/27/17

[Signature] 1-27-17

North Carolina Department of Health and Human Services
Division of Public Health
DPH Budget Contract Unit
WIC PROGRAM

Attachment B-1

Agency Name: Jones County Health Department

_____ Original

Revision # _____

Revision applies to:

_____ SFY allocation (June - Sept.)

_____ FFY allocation (Oct.-May)

	Amount
5403 Client Services	<u>\$454</u>
5404 Nutrition Education (Minimum Amount \$)	_____
5405 General Administration (Maximum Amount \$)	_____
5409 Breastfeeding Promotion (Minimum Amount \$)	_____
Total	<u>\$454</u>

STATE USE ONLY	
FRC	FRC

Instructions for completing the original budget:

Using the funds listed under total above, allocate your funds among the four WIC activities. Note the minimum level of funds that must be budgeted for Nutrition Education and Breastfeeding Promotion, and the maximum amount of funds to be budgeted in General Administration. Your total for the four activities should match the total on the Budgetary Estimate. This form is to be signed and returned with the WIC Agreement Addenda to the Division's Contract Unit.

Instructions for completing budget revisions:

This form may be reproduced and used to submit budget revisions. When submitting budget revisions, show the amount of funds being increased/decreased in the amount column for the respective activity (ex. +1000 or -1000). Line through the total amount and put a zero. Indicate the Revision #. Budget revisions are due in the program office by May 1st for close-out of the state fiscal year and September 1st for close-out of the federal fiscal year. This form should be mailed to the WIC Operations Manager, 1914 Mail Service Center, Raleigh, NC 27699-1914.

Signature of Local Agency Director

Date

Signature of Local Finance Officer

Date

Signature of State WIC Operations Manager

Date

EXHIBIT D

INTERLOCAL AGREEMENT BETWEEN
JONES COUNTY
AND
ONslow COUNTY

THIS AGREEMENT (hereinafter referred to as "The Agreement"), entered in on ____ day of _____, 2017 between Jones County by and through the Jones County Health Department (hereinafter "JCHD") a public health department located in Trenton, North Carolina and Onslow County by and through the Onslow County Health Department (hereinafter "Contractor"), a public health department located in Jacksonville, North Carolina.

The intent of this agreement is to provide JCHD assistance in order for JCHD to achieve effective completion of the required capabilities of the CDC Public Health Preparedness Cooperative Agreement for JCHD. Expectations for the deliverables of the Agreement, the Preparedness Agreement Addendum 514 (AA 514), and the Ebola Preparedness and Response Agreement Addendum 613 (AA 613) may vary year to year as the federal program changes. Updates will be distributed by the NC Office of Public Health Preparedness and Response (PHP&R). "Preparedness Coordinator (PC)" refers to an individual identified in JCHD responsible for fulfilling the deliverables as required by the AA 514.

WITNESSETH

WHEREAS, JCHD provides local PPHR capabilities and is in need of temporary assistance in order to continue to provide PPHR capabilities; and,

WHEREAS, the next level of preparedness planning and response becomes more complex as counties move from capacity to capabilities. Achieving capabilities requires more processes, more planning and more partners in the face of shrinking funding. Preparedness is now a core function of public health which must continue to be refined. The natural business model is to utilize economies of scale and to leverage funding streams. The Department of Homeland Security is taking a regional approach to funding. Public health is now considering a regional approach by developing regional planning methods to target capabilities and performance measurements; and,

WHEREAS, Contractor has the resources and capabilities to assist JCHD with its PPHR needs, and is prepared to assist JCHD with regard to provision of local PPHR capabilities subject to the terms of this Agreement; and,

WHEREAS, JCHD and Contractor wish to enter into a contractual agreement for Contractor to provide JCHD with certain PPHR and capabilities resulting in higher quality services, and more efficient use of limited resources for delivery of PPHR capabilities; and,

NOW, THEREFORE, for and in consideration of the mutual covenants and agreements hereinafter set forth, said JCHD and Contractor do hereby agree as follows:

I. Responsibilities of JCHD PC (Preparedness Coordinator)

- a. Perform JCHD monthly GETS cards tests
- b. Perform JCHD Monthly Radio Checks, communication platforms checks and systems checks
- c. Complete call down drills
- d. Maintain a current Incident Command System and National Incident Management System
- e. Maintain respiratory protection training and document maintenance for JCHD
- f. Coordinate with Contractor annual update of JCHD PPHR Plans
- g. Coordinate with Contractor updating of the MCM ORR
- h. Attend the annual MCM ORR review meeting with Contractor
- i. Coordinate with Contractor semi-annual updates to the PPHR Rubric/Performance Activity database
- j. Coordinate preparedness-related accreditation benchmarks
- k. Maintain a system to receive reports of communicable diseases or other public health threats 24-7
- l. Update Jones County employees on SERV NC
- m. Update and maintain Jones County Special Needs Registry
- n. Coordinate trainings and exercises, and exercise After Action Reports with Contractor
- o. Update annually Jones POD and LRS site information
- p. Ensure all employees are up to date on NIMS Trainings
- q. Monitor Jones Monthly Expenditure Reports, submit EMR

II. Responsibilities of Contractor

- a. Update PPHR Rubric/Performance Activities database semi-annually
- b. Develop and maintain JCHD comprehensive public health emergency plans (All Hazards Plan)
- c. Assist with communication platforms and systems checks
- d. Prepare, in collaboration with JCHD PC, Medical Countermeasures and Operational Readiness Review (annual assessment of plans and activities)
- e. Present MCM ORR at annual review meeting
- f. Co-Conduct with JCHD PC required JCHD trainings
- g. Complete Training and Exercise Planning Workshop and a Multi-Year Training and Exercise Plan
- h. Plan, facilitate, coordinate, and help conduct exercises and after-action reporting for JCHD as required in AA514, including compiling After Action Reports and Corrective Action Plans using HSEEP guidance
- i. Maintain work plan and activities for JCHD
- j. Attend monthly PC Meetings and annual Preparedness Symposium
- k. Provide documentation for preparedness-related accreditation benchmarks
- l. For Ebola Readiness 15-16 AA: develop Concept of Operations Plan, Isolation and Quarantine Plan, Risk Communication Plan including EVD; participate in information sharing, trainings, and webinars;
- m. Collaborate with JCHD EPI Team on preparedness issues and action items
- n. Work with JC Health Director and JC Emergency Manager to re-establish regularly-scheduled LEPC Meetings

- o. Attend PIO meetings and trainings, as available and needed
- p. Serve as PIO for JCHD in PPHR-related events
- q. For JCHD events, release information to the media and community

III. TERM OF CONTRACT. The Term of this Contract for Services is from the date this Agreement is executed and for a period of six months thereafter, unless sooner terminated as provided herein.

IV. PAYMENT TO CONTRACTOR FOR SERVICES. Contractor shall receive from JCHD an amount of \$2,500.00 per month beginning on the date this Agreement is executed and continuing the first day of each month thereafter until this Agreement is terminated or otherwise expires.

V. PAYMENT TO CONTRACTOR FOR STIPEND AND COSTS. In addition to the payment called for in Paragraph IV above, Contractor shall receive from JCHD payment in the amount of \$318.00 which is considered to be a cell phone stipend. This payment shall be due on January 1, 2017 and shall be non-refundable. Contractor shall also be entitled to reimbursement for any costs incurred in the performance of its duties. Costs shall include postage, copies, mileage, and any other costs reasonably necessary for Contractor to incur in the performance of its duties.

VI. INDEPENDENT CONTRACTOR. JCHD and Contractor agree that Contractor is an independent contractor.

VII. GOVERNING LAW. This Contract shall be governed by and in accordance with the laws of the State of North Carolina. All actions relating in any way to this Contract shall be brought in the General Court of Justice in the County of Onslow and the State of North Carolina.

VIII. TERMINATION OF CONTRACT. This Contract may be terminated, without cause, by either party upon thirty (30) days written notice to the other party. This termination notice period shall begin upon receipt of the notice of termination. Such a termination does not bar Contractor from pursuing any payments called for herein that were not timely made by JCHD.

This Contract may be terminated, for cause, by the non-breaching party notifying the breaching party of a substantial failure to perform in accordance with the provisions of this Contract and if the failure is not corrected within ten (10) days of the receipt of the notification. Upon such termination, the parties shall be entitled to such additional rights and remedies as may be allowed by relevant law.

Termination of this Contract, either with or without cause, shall not form the basis of any claim for loss of anticipated profits by either party.

IX. NOTICES. All notices which may be required by this contract or any rule of law shall be effective when received by certified mail sent to the following addresses:

JONES COUNTY HEALTH DEPARTMENT
ATTN: Wesley Smith

Health Director
Jones County Health Department
418 HWY 58 N, Unit C
Trenton, NC 28585

ONSLow COUNTY HEALTH DEPARTMENT

ATTN: Angela Lee
Health Director
Onslow County Health Department
612 College Street
Jacksonville, NC 28540

X. Indemnification

Each party to this Agreement accepts responsibility for any and all claims, loss, liability, demands, damages or any other financial demands that may be alleged or realized due to each party's own negligence or the negligence of its respective agents or employees while in the performance of their duties or assignments pursuant to this Agreement to the extent permitted by law, except that JCHD does not agree to hold harmless Contractor for any claims which may have resulted from error or omission by Contractor and/or its agents or employees.

XI. Assignment

This agreement is for professional services. No party may assign, delegate or otherwise transfer any of its rights or obligations under this Agreement without the prior written consent of the other parties.

XII. Entire Agreement

This Agreement, including any attachments which are incorporated herein by reference or are affixed hereto, contains the entire agreement among the parties with regard to its subject matter. This Agreement merges all prior discussions among the parties and no party shall be bound by conditions, definitions, warranties, understandings, or representations concerning such subject matter except as provided in this Agreement or as may be specified later in writing and signed by properly authorized representatives of the parties.

XIII. Waiver

Failure of any party in any instance to insist upon the strict performance of the terms of this Agreement shall not be construed to be a waiver or relinquishment of any other terms of this Agreement, either at the time of the party's failure to insist upon strict performance or at any time in the future, and such term or terms shall continue in full force and effect.

XIV. Referrals

The parties acknowledge that payment of considerations, whether direct or indirect, to induce referral of any patient or services or equipment reimbursable under the Federal Medicaid Program is unlawful. The parties, and each of them, agree that no benefit incurred hereunder by any party shall be conditioned upon nor granted in consideration of the referral of any patient to any party. The parties specifically disclaim any requirement pursuant to this Agreement that any party refer patients to the other parties for any reason whatsoever.

XV. Force Majeure

The parties understand and acknowledge that none of them shall be liable for any loss, damage, detention, delay, or failure to perform in whole or in part resulting in cause beyond the parties control including but not limited to fire, strikes, natural disasters, insurrections, riots, embargoes, shortages of motor vehicles, delays in transportation, and inability to obtain supplies or raw materials or requirements or regulations of the United States government or any other civil or military authority.

XVI. OBRA Compliance

The parties agree upon request they will make their books, documents, and records available to the Secretary of Health and Human Services, the Controller General or the duly authorized representative to the extent required by Section 952 or the Omnibus Budget Reconciliation Act of 1980.

XVII. Severability

Each clause of this Agreement shall be construed as a distinct and severable clause and, if any clause is deemed illegal, void, or unenforceable, the validity, legality, and/or enforceability of the remaining clauses or portion of this Agreement shall not thereby be affected.

XVIII. Modification for Change in Law

To the extent any law, rule, or regulation of any authority having jurisdiction over any of the parties to this Agreement shall change after the date of this Agreement so as to raise question as to the legality or enforceability of this Agreement or any specific provision herein, the parties agree to negotiate promptly regarding modification as may be necessary or appropriate to bring this Agreement into compliance with the law. Should the parties not be able to agree upon such modification within a period of thirty (30) days from the date any party shall give notice to the others of such change in law, this Agreement shall be deemed terminated.

XIX. Binding Obligation

The rights and responsibilities of this Agreement shall inure to the benefit of the parties hereto and their respective successors and permitted assigns.

XX. Amendment

Any amendment to this Agreement shall be in writing and shall be duly executed by appropriate representatives of each of the parties hereto.

IN WITNESS WHEREOF the parties have duly affixed their signatures to this agreement by their respective duly authorized officers.

Signed:

_____	_____	_____	_____
Angela Lee, Health Director	Date	Wesley P. Smith, Health Director	Date
Onslow County Health		Jones County Health Department	
Department			

SECTION XIX: STATEMENT OF COMPLIANCE WITH THE LOCAL GOVERNMENT FISCAL CONTROL ACT

This agreement has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

_____	_____
Jones County Finance Officer	Date

EXHIBIT E

Division of Public Health
Agreement Addendum
FY 16-17

Page 1 of 4

Jones County Health Department
Local Health Department Legal Name

Administrative, Local and Community Support /
Local Technical Assistance & Training
DPH Section/Branch Name

113 Electronic Health Record
Activity Number and Description

Phyllis M. Rocco, 919-707-5131
phyllis.rocco@dhhs.nc.gov
DPH Program Contact
(name, telephone number with area code, and email)

10/01/2016 - 05/31/2017
Service Period

DPH Program Signature Date
(only required for a negotiable agreement addendum)

11/01/2016 - 06/30/2017
Payment Period

- Original Agreement Addendum
Agreement Addendum Revision # (Please do not put the Budgetary Estimate revision # here.)

I. Background:

In 2007, the North Carolina Department of Health and Human Services (NCDHHS) purchased customizable, off-the-shelf software to implement a fully automated health information system (HIS) to meet the needs of three major agencies within NCDHHS. The software was designed primarily for behavioral health applications and required extensive customization to meet the needs of public health. The Division of Public Health (DPH) is currently the sole state agency using this software. Eventually, the software was customized sufficiently to be a useful billing system for local health departments, but clinical workstations for the electronic health record component evolved with almost 100 customized data entry screens.

With passage of the Health Information Technology for Economic and Clinical Health Act (HITECH) enacted under Title XIII of the American Recovery and Reinvestment Act of 2009 (Public Law 111-5), NCDHHS was further challenged to contemplate how health information would be stored, shared, and analyzed. Many local health departments, eager to benefit from the Meaningful Use incentive monies for eligible providers, left NCDHHS's HIS and purchased software systems with local funds.

This electronic health record development has proven to be a costly, unsatisfactory software solution for electronic health records (EHR) with a public health application. Approximately 79 counties have opted to use non-HIS vendors for their electronic health record, practice management and billing services. Continued development of an EHR for the remaining counties is not in the best interests of the North Carolinians we serve.

Health Director Signature (use blue ink)

Date

Local Health Department to complete:
(If follow up information is needed by DPH)

LHD program contact name: WESLEY P. SMITH
Phone number with area code: 252-448-9111 EXT 3000
Email address: wsmith@jonescountync.gov

Signature on this page signifies you have read and accepted all pages of this document.

State appropriations have allocated approximately \$420,000 for Fiscal Year 2017. The intent of this Agreement Addendum is to make available approximately \$20,000 dollars to qualified local health departments based upon need, so that 100% of all local health departments can submit population health and program service data to DPH.

II. Purpose:

As the Local Health Department has not yet transitioned to an electronic health record (EHR) pending implementation of that component in the state's Health Information System (HIS), this Agreement Addendum provides supplementary funding enabling the Local Health Department to acquire an EHR system.

III. Scope of Work and Deliverables:

The Local Health Department shall:

1. Transition to an electronic health record system by May 31, 2017.
2. Apply funds to enhance public health reporting in one or more of the following ways:
 - a. Offset the initial purchase cost of a Centers for Medicare and Medicaid Services (CMS) certified electronic health record
 - b. Support subscription services for use of electronic health record for e-prescribing
 - c. Support customization of an electronic health record to accommodate batch reporting to HIS, and/or
 - d. Support imaging solutions to work in conjunction with an electronic health record.
3. Complete the Activity 113 Electronic Health Record Report for FY17 (Attachment A) at the end of the fiscal year in order to indicate how the funds were spent based upon locally determined needs.
4. In order to qualify for these funds, have in place a permanent or interim health director who either meets the qualifications to serve as a county health director as required in NC GS 130A-40, or has an approved exception and has been sworn in using the Oath of Office so that he or she can fulfill the statutory functions assigned only to a local health director. In addition, if that health director has never served in that role in North Carolina previously, that health director must participate in the Orientation for New Local Health Directors coordinated by the North Carolina Association of Local Health Directors.

IV. Performance Measures/Reporting Requirements:

1. By June 30, 2017, the Local Health Department shall submit the Activity 113 Electronic Health Record Report for FY17 (Attachment A) to the Local Technical Assistance & Training Branch (LTAT), and report information for the FY17 Service Period of October 1, 2016 – May 31, 2017. Do not return Attachment A with the signed Agreement Addendum 113. This report shall provide:
 - a. Information on how the funds were distributed
 - b. A copy of the Department of Natural and Cultural Resources approved Electronic Records and Imaging Policy, and
 - c. A copy of the local board of health approved Electronic Health Records Policy.
2. The Local Health Department Batch Data Total Error Report (HIS Report 200, 201, or equivalent) must be below 5% within six months of the go live date for the EHR.

V. Performance Monitoring and Quality Assurance:

1. Performance will be monitored by:
 - a. A review of the Electronic Health Record Report (Attachment A) by the LTAT Branch Head. If additional information is required, a phone conference will be conducted, and
 - b. A monthly review of the HIS Batch Data Reports by HIS staff. If performance rises above 5% total error rate, phone conferences will be required until such time total error rates improve (below 5% total error rate).

VI. Funding Guidelines or Restrictions:

1. Requirements for pass-through entities: In compliance with 2 *CFR* §200.331 – *Requirements for pass-through entities*, the Division provides Federal Award Reporting Supplements to the Local Health Department receiving federally funded Agreement Addenda.
 - a. Definition: A Supplement discloses the required elements of a single federal award. Supplements address elements of federal funding sources only; state funding elements will not be included in the Supplement. Agreement Addenda (AAs) funded by more than one federal award will receive a disclosure Supplement for each federal award.
 - b. Frequency: Supplements will be generated as the Division receives information for federal grants. Supplements will be issued to the Local Health Department throughout the state fiscal year. For federally funded AAs, Supplements will accompany the original AA. If AAs are revised and if the revision affects federal funds, the AA Revisions will include Supplements. Supplements can also be sent to the Local Health Department even if no change is needed to the AA. In those instances, the Supplements will be sent to provide newly received federal grant information for funds already allocated in the existing AA.
2. In order to qualify for these funds, the Local Health Department must not have been under contract with a vendor to provide a CMS-certified EHR on July 1, 2015. Furthermore, funds are available to the Local Health Department only if it has a currently approved Department of Natural and Cultural Resources Electronic Records Imaging Policy.
3. No funds may be expended until the Local Health Department has committed to the purchase of a CMS-certified electronic health record with a scheduled implementation before June 30, 2017.

Attachment A

Activity 113 Electronic Health Record Report for FY17

Local Health Department
 (specify county if this is a
 district health department): _____

Attachment A is for FY17, which is for the Service Period of October 1, 2016 – May 31, 2017.

Complete Attachment A and return between June 1–30, 2017.

I. Complete the following grid indicating how funds were utilized.

Deliverables	Dates of service	Vendors	Amount expended (Activity 113)
Financial support for the purchase of Centers for Medicare and Medicaid Services (CMS) certified electronic health record			
Financial support for subscription services associated with ePrescribing			
Financial support for customization of an electronic health record to accommodate batch reporting to HIS			
Financial support for purchase of imaging solutions to work in conjunction with an electronic health record			

II. Attach a copy of the approved Electronic Records and Imaging Policy

(Template available from Kurt Brenneman, Records Management Analyst, Government Records Section/Division of Archives and Records, N.C. Department of Natural and Cultural Resources
 4615 Mail Service Center, Raleigh, NC 27699-4615, (919) 807-7357)

III. Attach a copy of the approved Electronic Medical Records policy specific to the purchased EHR software

Return to Beth Murray by June 30, 2017 either by email, fax, or mail.

Email: beth.murray@dhhs.nc.gov

Fax: 919-870-4833

Mail: 1916 Mail Service Center, Raleigh, NC 27699-1916

WicGridPrint

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DPH-Aid-To-Counties

For Fiscal Year: 16/17

Budgetary Estimate Number : 0

Activity 113	AA	2117 4113 00	Proposed Total	New Total
Service Period		10/01-05/31		
Payment Period		11/01-06/30		
01 Alamance		0	0	0
D1 Albemarle		0	0	0
02 Alexander	* 0	20,000	20,000	20,000
04 Anson	* 0	20,000	20,000	20,000
D2 Appalachian		0	0	0
07 Beaufort		0	0	0
09 Bladen		0	0	0
10 Brunswick		0	0	0
11 Buncombe		0	0	0
12 Burke	* 0	20,000	20,000	20,000
13 Cabarrus		0	0	0
14 Caldwell	* 0	20,000	20,000	20,000
16 Carteret		0	0	0
17 Caswell		0	0	0
18 Catawba	* 0	20,000	20,000	20,000
19 Chatham		0	0	0
20 Cherokee	* 0	20,000	20,000	20,000
22 Clay		0	0	0
23 Cleveland		0	0	0
24 Columbus		0	0	0
25 Craven		0	0	0
26 Cumberland		0	0	0
28 Dare		0	0	0
29 Davidson		0	0	0
30 Davie		0	0	0
31 Duplin		0	0	0
32 Durham		0	0	0
33 Edgecombe		0	0	0
34 Forsyth		0	0	0
35 Franklin		0	0	0
36 Gaston		0	0	0
38 Graham		0	0	0
D3 Gran-Vance		0	0	0
40 Greene		0	0	0
41 Guilford		0	0	0
42 Halifax		0	0	0
43 Harnett		0	0	0
44 Haywood	* 0	20,000	20,000	20,000
45 Henderson		0	0	0
46 Hertford		0	0	0
47 Hoke		0	0	0
48 Hyde		0	0	0
49 Iredell		0	0	0
50 Jackson		0	0	0
51 Johnston		0	0	0

. WicGridPrint

Page 2 of 2

52 Jones	* 0	20,000	20,000	20,000
53 Lee	* 0	20,000	20,000	20,000
54 Lenoir	* 0	20,000	20,000	20,000
55 Lincoln	* 0	20,000	20,000	20,000
56 Macon		0	0	0
57 Madison		0	0	0
D4 M-T-W		0	0	0
60 Mecklenburg		0	0	0
62 Montgomery		0	0	0
63 Moore		0	0	0
64 Nash		0	0	0
65 New Hanover	* 0	20,000	20,000	20,000
66 Northampton	* 0	20,000	20,000	20,000
67 Onslow		0	0	0
68 Orange		0	0	0
69 Pamlico	* 0	20,000	20,000	20,000
71 Pender		0	0	0
73 Person		0	0	0
74 Pitt	* 0	20,000	20,000	20,000
76 Randolph	* 0	20,000	20,000	20,000
77 Richmond		0	0	0
78 Robeson		0	0	0
79 Rockingham		0	0	0
80 Rowan		0	0	0
D5 R-P-M	* 0	60,000	60,000	60,000
82 Sampson		0	0	0
83 Scotland		0	0	0
84 Stanly		0	0	0
85 Stokes		0	0	0
86 Surry		0	0	0
87 Swain	* 0	20,000	20,000	20,000
D6 Toe River		0	0	0
88 Transylvania		0	0	0
90 Union		0	0	0
92 Wake		0	0	0
93 Warren	* 0	20,000	20,000	20,000
95 Wayne		0	0	0
97 Wilkes		0	0	0
98 Wilson		0	0	0
99 Yadkin		0	0	0
Totals		420,000	420,000	420,000

Sign and Date - DPH Program Administrator <i>Julio M. Gocco</i> 1/24/17	Sign and Date - DPH Section Chief <i>[Signature]</i> 1/24/17
Sign and Date - DPH Contracts Office <i>[Signature]</i> 1-25-17	Sign and Date - DPH Budget Office <i>[Signature]</i> 1/25/17

EXHIBIT F

**JONES COUNTY BOARD OF HEALTH
RESOLUTION OPPOSING THE CONSOLIDATION OF A LOCAL HEALTH AND
HUMAN SERVICE AGENCY**

WHEREAS, Session Law 2012-126, House Bill 438 was enacted to promote efficiency and effectiveness in the administration of human services and to strengthen the local public health infrastructure by establishing a Public Health Improvement Incentive Program and ensuring the provision of the ten essential public health services.

WHEREAS, the General Assembly of North Carolina revised General Statute 153A-77 to authorize boards of county commissioners in North Carolina to consolidate county human services departments and boards.

WHEREAS, the North Carolina Public Health Improvement Plan developed and adopted by the Secretary of the Department of Health and Human Services specifically addressed consolidation and recommended that the current structure and governance of the local public health systems currently set out in the North Carolina General Statutes be sustained.

WHEREAS, the current structure and governance of local public health in Jones County provides a clearly recognizable entity at the local level with authority and responsibility for public health as well as a Board that is composed of individuals who see promotion and protection of the public's health as their primary role.

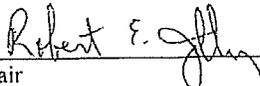
WHEREAS, local attempts to find other ways to provide "governance" for local public health could jeopardize the ability of the local health department to act quickly and decisively during times of crisis, such as pandemic flu or natural or man-made disaster, and are not in the best interests of the citizens of Jones County.

WHEREAS, there has been no evidence to show that a consolidated model neither renders any cost savings nor enhances service delivery.

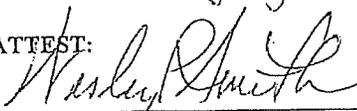
NOW, THEREFORE, BE IT RESOLVED that the Jones County Board of Health opposes the implementation of a consolidated health and human service agency in Jones County.

Adopted this the 17th Day of November, 2016

JONES COUNTY BOARD OF HEALTH



Chair

ATTEST:


Secretary to the Board

EXHIBIT G

WHO WE SEE
DECEMBER 2016

Medicaid	FNS	Work First	C.I.P.	L.I.E.A.P.	Intake	Child Support
101	165	3	21	216	142	52

- Estimated Total: 700 people for the Month

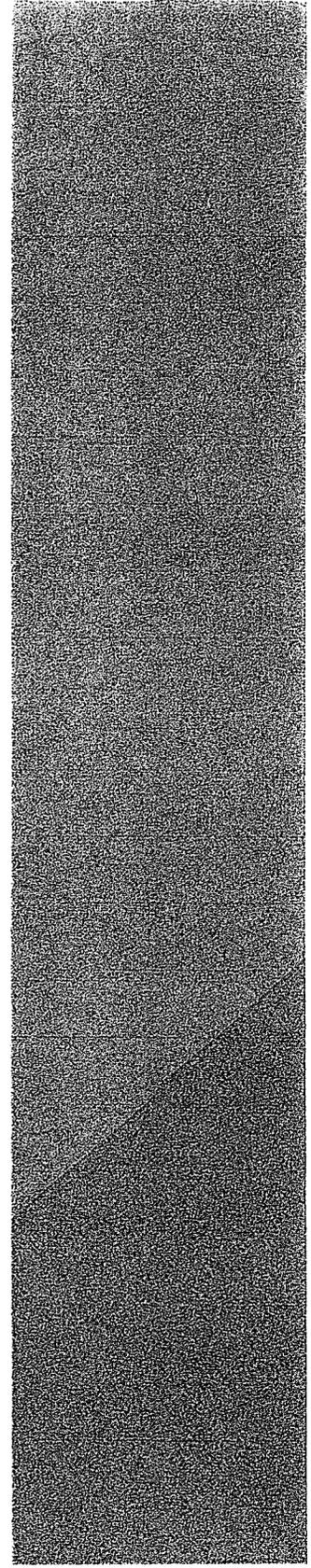


EXHIBIT H

RESOLUTION
BY
THE JONES COUNTY BOARD OF SOCIAL SERVICES

WHEREAS, the General Assembly of North Carolina revised General Statute 153A-77 to allow boards of county commissioners in North Carolina to consolidate county human services departments and boards; and,

WHEREAS, the Jones County Commissioners have researched the various forms of governance including the three primary options for consolidation and, as a result, they have done their due diligence and fulfilled their responsibility for considering the most efficient and effective manner for governing human services in Jones County; and,

WHEREAS, the Department of Social Services currently has a dynamic and fully functional Board staffed with talented, knowledgeable, caring and passionate citizens of the County; and,

WHEREAS, the Jones County Department of Social Services is presently under strong leadership and has improved both its performance and compliance with State and Federal law, rule and policy while improving services to citizens in Jones County. It is believed that the Department of Social Services is the best it has been in recent history.

WHEREAS, Consolidation of social services with other human services agencies such as health could jeopardize the enormous momentum at the Department of Social Services for improved performance, compliance and improved services to our local citizens.

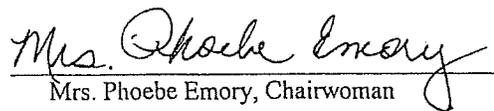
WHEREAS, there has been no evidence to show that a consolidated model neither renders any cost savings nor enhanced compliance or service delivery.

WHEREAS, the current structure of governance in Jones County provides a clearly recognizable entity at the local level with authority and responsibility for Social Services for the citizens of Jones County.

NOW, THEREFORE, BE IT RESOLVED, that the Jones County Board of Social Services formally requests that the Jones County Board of County Commissioners resolve by motion, second and majority vote, to maintain the current, non-consolidated, traditional model of governance for health and social services in Jones County.

Adopted this the 25th Day of January, 2017

JONES COUNTY BOARD OF SOCIAL SERVICES


Mrs. Phoebe Emory, Chairwoman

ATTEST:

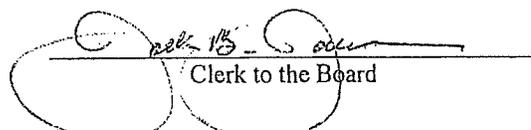

Clerk to the Board

EXHIBIT J

Budget Amendment

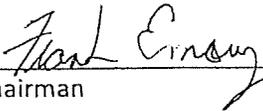
Date: 2/6/2017
Fund: General Fund
Fiscal Year: 2016-2017 Amendment #28

Decrease Expenditures

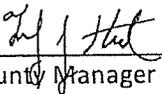
JCPC	Contract - Secretary	11-6121-5440-17	616.00
TOTAL			616.00

Increase Expenditures

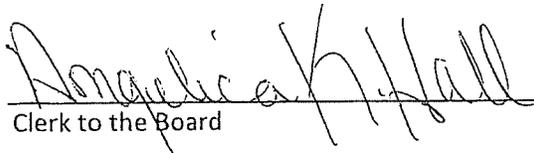
JCPC	Contract - Services	11-6121-5440-13	616.00
Total			616.00



Chairman



County Manager



Clerk to the Board



Finance Officer

Budget Amendment

Date: 2/6/2017

Fund: General Fund

Fiscal Year: 2016-2017 Amendment #29

Decrease Expenditures

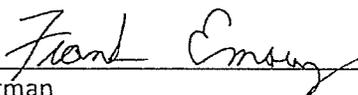
Elections	Voting Machines	11-4170-5356-00	500.00
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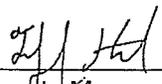
TOTAL			500.00
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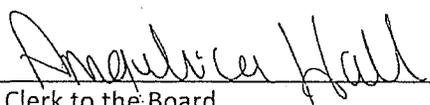
Increase Expenditures

Elections	Capital/Under \$5000	11-4170-5500-00	500.00
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Total			500.00
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Chairman


County Manager


Clerk to the Board


Finance Officer

Budget Amendment

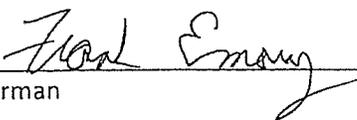
Date: 2/6/2017
Fund: General Fund
Fiscal Year: 2016-2017 Amendment #30

Decrease Expenditures

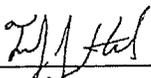
HCCBG	HCCBG Program	11-5551-5298-15	105,292.00
TOTAL			105,292.00

Increase Expenditures

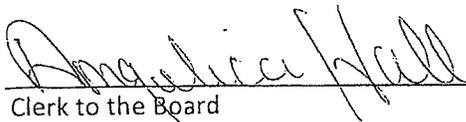
HCCBG	In Home Level II	11-5551-5298-14	21,693.00
HCCBG	In Home Level III	11-5551-5298-17	8,632.00
HCCBG	Transportation	11-5551-5313-00	23,297.00
HCCBG	Home Delivered Meals	11-5551-5313-01	34,020.00
HCCBG	Congregate Nutrition	11-5551-5315-00	9,903.00
HCCBG	Senior Companion	11-5551-5316-00	7,747.00
Total			105,292.00



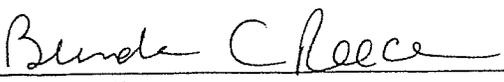
Chairman



County Manager



Clerk to the Board



Finance Officer

Budget Amendment

Date: 2/6/2017

Fund: General Fund

Fiscal Year: 2016-2017 Amendment #31

Increase Revenue

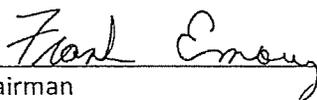
Restricted DSS	Home Delivered Meals	11-0212-4586-04	39,704.00
Restricted DSS	Congregate Nutrition	11-0212-4586-03	38,736.00
Restricted DSS	In Home Aid II	11-0212-4586-23	27,293.00
Restricted DSS	HCCBG Transportation	11-0212-4586-19	20,967.00
Restricted DSS	Sr Companion	11-0212-4586-20	6,972.00

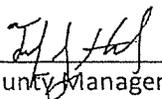
TOTAL 133,672.00

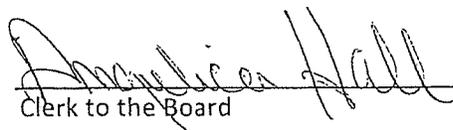
Decrease Revenue

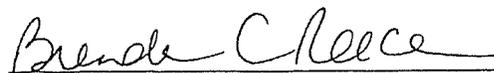
Restricted DSS HCCBG 11-0212-4586-07 133,672.00

Total 133,672.00


Chairman


County Manager


Clerk to the Board


Finance Officer

Budget Amendment

Date: 2/6/2017

Fund: General Fund

Fiscal Year: 2016-2017 Amendment #32

Increase Revenue

Fund Balance Fund Balance 11-0991-4991-00 2,353.00

Total Decrease in Expenditures 2,353.00

Increase Expenditures

HCCBG Congregate Nutrition 11-5551-5315-00 2,353.00

Total Increase in Expenditures 2,353.00

Chairman

County Manager

Clerk to the Board

Finance Officer

County Commissioner

EXHIBIT K

White Oak River RD 1116

MAY SULLIVAN

Bridge No Lyndell

Stop

1115

Pole Tower

16ft 8 in

Q

3 miles

2 1/2 62 miles

15 1/2 9

White Oak River Rd. joins
Road 1116
Road 1115
Davis Field Rd
Pole Tower

252 678-2274

Randy Holland

