

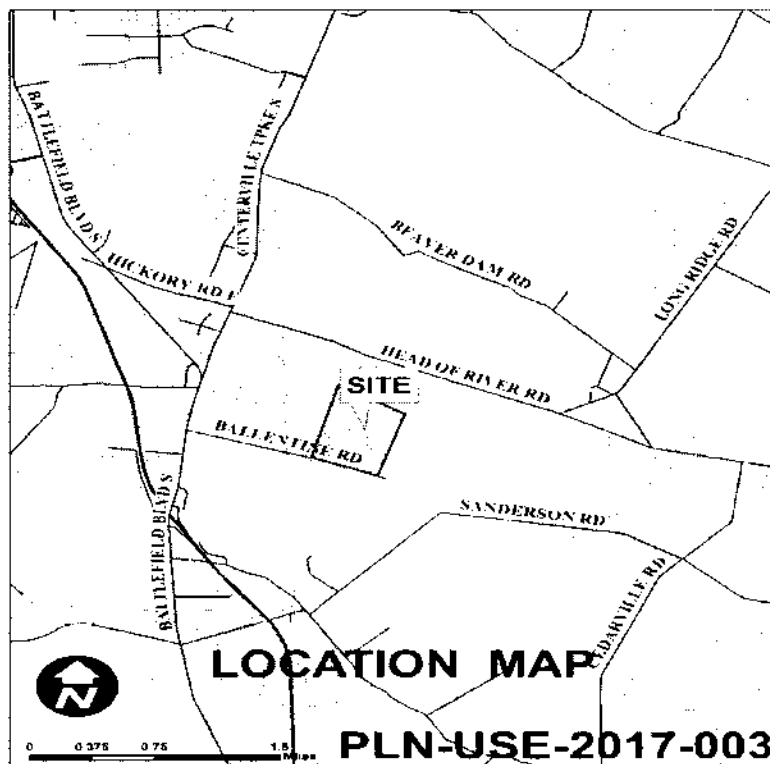
Docket Item "C"

**PLN-USE-2017-003**

**Hickory Solar Farm**

**CITY COUNCIL PACKAGE FOR  
SEPTEMBER 19, 2017**

**Chesapeake**  
VIRGINIA



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## APPLICATION SUMMARY

### **PLN-USE-2017-003 Hickory Solar Farm**

**LOCATION:** On Ballentine Road, approximately 5000 feet east from the intersection of Ballentine Road and Battlefield Blvd.

**PROPOSAL:** A conditional use permit to allow a solar energy facility on a 154.40 acre parcel.

**SUBMITTED:** 1-9-17                      **ACCEPTED:** 1-25-17

#### **STAFF RECOMMENDATION**

Approval with stipulations

#### **PLANNING COMMISSION**

**HEARING DATE:** 5-10-17

**RECOMMENDATION:** **APPROVAL** with stipulations

**VOTE:** 8 - 1

#### **CITY COUNCIL**

**HEARING DATE:** 6-20-17

**ACTION:** **CONTINUED to September 19, 2017**

**VOTE:** 9 – 0

#### **ATTACHMENTS**

*Minutes, Staff Reports, Pictures, Site Plan, Aerials, GIS Parcel Exhibit*

**APPLICATION SUMMARY****PLN-USE-2017-003 Hickory Solar Farm**

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**APPLICANT:**                   **New Energy Ventures, Inc.**  
Attn: Doug Haroldson  
2888 Loker Avenue East, Suite 113G  
Carlsbad, CA, 92010  
(760) 271-3628  
doug.haroldson@neventures.com

**OWNER:**                       **Newbern Farms LLC**  
999 Waterside Drive, Ste 1400  
Norfolk, VA 235103300  
(757) 477-3911  
richardburroughs@harveylindsay.com

**AGENT:**                       **North Ridge Resources LLC**  
Attn: Ken Niemann  
2701 Farm Road  
Alexandria, VA, 22302  
(703) 801-0412  
kniemann1@comcast.net

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**PLN-USE-2017-003**

**PROJECT:** Hickory Solar Farm

**APPLICANT:** New Energy Ventures, Inc.

**AGENCY:** North Ridge Resources, LLC

**PROPOSAL:** A conditional use permit to allow a solar energy facility on a 154.40 acre parcel.

**ZONE:** A-1, Agricultural District

**LOCATION:** On Ballentine Road, approximately 5000 feet east from the intersection of Ballentine Road and Battlefield Blvd.

**TAX MAP SECTION/PARCEL:** 0970000000660

**BOROUGH:** Butts Road

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**PLANNING COMMISSION RECOMMENDATION:**

Planning Commission recommends that **PLN-USE-2017-003** be **APPROVED** with the following stipulations: (8 - 1; Johnson/Gilbert, Perry opposed):

1. The applicant/owner shall construct a City Standard Commercial Entrance, CG-11A to access the site prior to issuance of a Certificate of Occupancy. The entrance shall be constructed at the intersection of Battlefield Boulevard South and Ballentine Road and shall be depicted on the final site construction plan which is subject to review and approval of the Director of Development and Permits, or designee. In addition, a closure and restoration plan shall be a required component of the final site construction plan.
2. The applicant/owner shall submit a Landscape Plan pursuant to the Chesapeake Zoning Ordinance prior to final construction plan approval. Said plan shall be subject to the review and approval of the City's Landscape Coordinator. Said plan shall consist of the following: a modified Buffer Yard E along the entirety of the property line, consisting of small and medium canopy trees that are at least 6 feet in height, shrubs that are in a minimum industry standard 3 gallon container at planting, and a solid evergreen buffer along the entirety of the property line adjacent to the residential properties to screen the use. The solid evergreen buffer shall include trees that are at least 8 feet in height at time of planting, and shrubs that are in a minimum industry standard 3 gallon container at time of planting. All plant materials shall be subject to the review and approval of the City's Landscape Coordinator and shall be installed prior to the issuance of a Certificate of Occupancy for the use. The applicant/owner shall also install and maintain a 6 foot security fence around the entire perimeter of the solar farm prior to the issuance of a Certificate of Occupancy for the use.

3. The applicant/owner shall obtain a valid Run-Off Control Permit from the Department of Public Utilities prior to the approval of construction plans.
4. The applicant/owner shall obtain all required permits and approvals from the Department of Development and Permits prior to the installation of the security fence and storage shed.
5. The applicant/owner agrees that all power lines transferring the power generated from the property to the existing Dominion Virginia Power distribution system on Battlefield Boulevard South, which are both on-site and off-site, shall be placed underground unless the applicant/owner provides written correspondence from Dominion Virginia Power which requires the lines to be placed above ground to the Zoning Administrator.
6. The applicant/owner agrees that the proposed use shall utilize SMA 2200-EV-US, SMA 2500-EV-US or an alternative solar panel inverter approved by the Navy and in compliance with the Navy's Electromagnetic Interference (EMS) assessment.
7. The approval of this Conditional Use Permit is limited to the applicant only.
8. The applicant/owner shall provide written notice to the Director of Development and Permits or designee at least 30 days in advance of the cessation or abandonment of this use. Within 180 days of the cessation or abandonment of this use, the applicant/owner shall remove all photovoltaic systems (including but not limited to inverters, modules/solar panels, solar trackers) and all other structural elements related to the photovoltaic system use. The applicant/owner shall also restore the property to its pre-use grade, as approved by the Director of Development and Permits or designee, within the referenced 180 days.
9. Prior to receiving a certificate of occupancy, an Emergency Management Plan (EMP) will be provided to, and subject to the approval of, the Director of Development and Permits for the solar energy facility. The goal of this EMP is to provide safety guidelines and procedures for potential emergency-related incidents during all phases of the life of the facility (construction, operation, and decommissioning). The EMP shall cover at minimum emergency communications and training, theft and vandalism, inclement weather, high voltage equipment, and fire safety and prevention.
10. The applicant/owner shall maintain insurance for the duration of the use. The applicant/owner shall provide to the City Attorney a certificate of insurance providing General Liability Insurance which shall include at least the following information: (i) the name of the insurance company, policy number and expiration date; and (ii) the coverage and limits on coverage and including the amount of deductibles or self-insured retentions with a minimum limit of One Million Dollars (\$1,000,000) per occurrence and Two Million Dollars (\$2,000,000) aggregate, combined single limit, for bodily injury (including death) or property damage and Environmental Impairment insurance with minimum limits of \$1,000,000 per occurrence. The certificate of insurance shall be provided to the City Attorney prior to the issuance of a certificate of occupancy.

Chesapeake Planning Commission  
May 10, 2017 Public Hearing Minutes

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11. The applicant/owner agrees that the solar array shall be designed to withstand 120 mph wind speeds, as depicted on the approved final site plan.
  12. The applicant/owner agrees that the proposed solar energy facility shall only use mono-crystalline or poly-crystalline photovoltaic (PV) technology. This stipulation shall be included as a condition on the final site plan.
- 

Mrs. Shaffer read **PLN-USE-2017-003** into the record for Commission review and action.

Staff Presentation:

Mr. Dao stated that based on the findings listed in the staff report, planning staff recommended that **PLN-USE-2017-003** be **APPROVED** with the stipulations as listed in the official agenda.

Proponent:

Ken Niemann, President, North Ridge Resources, LLC, 2701 Farm Road, Alexandria, Virginia, appeared before the Commission on behalf of PLN-USE-2017-003 representing applicant. Mr. Niemann described the project and its location. The nearest residence is 1300 feet away and there is a visual buffer with trees in place on 3 of the property lines. The lease with the property owner requires removal of the equipment at the end of the project and restored to agricultural use. Power lines run underground in existing easement, then the power generated will use the existing lines to Hickory substation so there are no new power lines. This project along with others proposed will max out the capacity of the Hickory substation and additional capacity would be cost-prohibitive. There is no change to storm water runoff. Property is subject to roll back taxes and property taxes will apply in the future. A community meeting was held and adjacent property owner as well as those within a ½ mile of the project were invited. A Phase 1 Environmental Site Assessment found no issues, there are no impacts to endangered species, historic resources and wetlands. The U.S. Navy has approved the use.

Rogard Ross, 3800 Rivercrest Place, Chesapeake, Virginia, appeared before the Commission on behalf of PLN-USE-2017-003 representing self. Mr. Ross supports renewable energy. Solar farms are proven to provide clean energy at competitive rates. This application provides the landowner an option to his land without converting to residential. The solar projects need to be screened and have a management plan for pesticides.

Jeff Staples, 1453 Boxwood Drive, Chesapeake, Virginia, Deep Creek, appeared before the Commission on behalf of PLN-USE-2017-003 representing self. Mr. Staples is a former resident of Southern Chesapeake. Mr. Staples stated that solar energy is a proven alternative to fossil fuels. There are no risk for spills or toxins as compared to natural gas and other carbon fuels. Mr. Staples stated that solar farms provide benefits and tax revenues.

Richard Burroughs, property owner appeared before the Commission on behalf of PLN-USE-2017-003 representing self. This property is remote and is one mile from Battlefield Boulevard and 1800 feet from the nearest residence. He also owns the adjacent properties and has no objections. There will be sufficient landscaping and bonds in place with the City to ensure that the site will be restored.

Opponent:

Joseph Tuinstra, 901 Head of River Road, Chesapeake, Virginia, appeared before the Commission in opposition to PLN-USE-2017-003 representing self. His property is in between two of the solar farms. He is concerned about declining property values. He feels that there will be minimal jobs created and that stormwater is a problem in the area. He read that a solar farm in Fauquier County was not profitable and the power customers had to pay the difference.

Tom Freeman, Chairman of the Agricultural Advisory Commission, 1900 Pocatoy Road, Chesapeake, Virginia, appeared before the Commission in opposition to PLN-USE-2017-003. Mr. Freeman presented a handout that outlines the pros and cons of solar farms as identified by the Commission. The Agricultural Advisory Commission is charged by City Council to ensure agricultural land is preserved under the Open Space and Agricultural Program. The Commission support the farmer's rights to negotiate for non-agricultural users; however, impacts on adjacent property owners need to be considered. Mr. Freeman requested that this application be continued so that the solar advisory committee can be formed and make recommendations to City Council.

Wayne Dawn, 1645 Peoples Road, Chesapeake, Virginia, appeared before the Commission in opposition to PLN-USE-2017-003 representing self. Mr. Dawn agrees that farmers should be able to use their land but farmers were allowed to sell their land for 3 acre lots. He is concerned that a precedent will be set to approve additional projects under the guise of increased revenues. He is concerned about glare, impacts on property values, impacts on wildlife, and increased heat.

Russell Meier, 2008 Beaver Dam Court, Chesapeake, Virginia, appeared before the Commission in opposition to PLN-USE-2017-003 representing self. Mr. Meier stated that City Council denied a solar farm last fall based on a finding that it would degrade to rural character. This proposal is no different and will have the same impact. Mr. Meier requested a continuance to see results of the work of the committee.

Larry Crum, 925 Land of Promise Road, Chesapeake, Virginia, appeared before the Commission in opposition to PLN-USE-2017-003 representing self. Mr. Crum is concerned about heat generation and electromagnetic radiation impacts on wildlife and vegetation.

**COMMISSION DISCUSSION:**

Commissioner Johnson asked Mr. Niemann to address the heat concerns. Mr. Neimann stated that there is no heat impact due to the panels being passive and there is no glare since the panels are matted screens and there are no moving parts. Commissioner Johnson asked if the panels will have any glare impacts on the jets flying into NALF Fentress. Mr. Neimann responded that they are outside of the Fentress overlay and since the panels are matted, there is no glare.

Commissioner Amick asked Mr. Niemann about the height of the fence. Mr. Neimann stated that the fence will be a minimum of 6 feet and could be if 8 feet is allowed.

Commissioner Kish read that a solar farm was installed by the Navy at Oceana which confirms there is no impact on flight operations. Commissioner Kish asked Mr. Neimann to describe the power transfer to Dominion Power and any rate increases. Mr. Neimann replied that rates are controlled by the State Corporation Commission. He also stated that there is no guarantee that Dominion Power will buy their power since there are at least 60 applications under consideration to sell their power. There are other companies who want to purchase solar power from locally sourced solar farm which is marketed in the free market. Commissioner Kish asked what the advantages are of diversified power sources, including solar power. Mr. Neimann replied that an advantage is reduced reliance on transmission of distribution system. The need for fossil fuels cannot be eliminated, but additional energy sources will complement other sources of power generation. Commissioner Kish asked if costs are a fixed and Mr. Neimann replied that the costs are fixed in the terms of the contract. Mr. Kish asked what environmental testing was done should the panels be destroyed? Mr. Neimann replied that the panels were retested to determine if panels are toxic if damaged and the tests found that they are not toxic and non-hazardous.

Commissioner Van Laethem thanked Mr. Niemann for holding the community meeting. Commissioner Van Laethem asked Mr. Niemann to describe the maintenance of land underneath the panels and the use of herbicides and pesticides and emergency procedures. Mr. Neimann stated that the farm is over seeded with grass and maintained by mowing. Emergency response was reviewed with fire and EMS staff. If there is a problem, farm can be disconnected remotely and locally. There will also be a Knox box to allow Fire Department access. Commissioner Van Laethem asked how the site will be restored and Mr. Neimann replied that all equipment, pads, fences, and shrubs will be removed and the site would be graded and reseeded to restore the site to its current condition.

Commissioner McCormick asked Mr. Niemann to describe the bonding methodology for calculating the amount. The valuation is dependent on the scrap products market at the time. The value is a contractual requirement of the lease with the property owner.

Chairman Williams asked how communication will take place without internet, how long to construct and job generation. Phone infrastructure and communication systems with the emergency dispatchers will be installed. The project will take eight (8) months to construct. Jobs will be sourced locally, mostly electricians. After construction, the project is unmanned except for maintenance visits one to two (1-2) times per month.



Vice Chairman Perry moved to continue to PLN-USE-2017-003 until August 9, 2017 to allow time for the advisory commission to complete their review as well as a forthcoming strategic review of the Comprehensive Plan. Commissioner Gilbert seconded the motion.

Commissioner Johnson asked Mr. Niemann, what is the impact of a 90 day continuance? Mr. Niemann replied that his project will not survive a 90 day continuance and requested a vote tonight.

Commissioner Van Laethem stated that he is opposed to the continuance. The formation of advisory commission and comprehensive plan review is speculative. The application complies with land use policies, laws and the Comprehensive Plan. The project will be buffered and stipulations are recommended that address land use issues. There is no impact to schools or roads, except during construction. Job creation and tax revenues are beyond the land use considerations that are under the purview of the Planning Commission. There is a need to reduce dependence on fossil fuels for the benefit of the future. A property owner has the right to use his land as long as impacts are mitigated, which are addressed with this application.

Commissioner Amick offered a substitute motion to approve PLN-USE-2017-003 with stipulations as recommended by staff. Commission Johnson seconded the motion.

Vice Chairman Perry stated that he has received comments from citizens who are concerned about predictability and consistency. A previous application was rejected due to rural impacts. The commission continued two other application and now there is a third application under consideration. Vice Chairman Perry stated that the project is not compatible with the Comprehensive Plan's Vision Statement to protect the treasured rural areas of the City and he will not support the application.

Chairman Williams believes that the application is City Council ready. The application has complied with City requirements and the land owner has the right to use their property if there is no impacts to the neighbors.

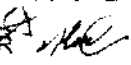
#### **COMMISSION VOTE:**

Commissioner Amick moved that **PLN-USE-2017-003** be **APPROVED** with the stipulations as listed in the official agenda and as recommended by staff. Commissioner Johnson seconded the motion. The motion was carried by a vote of 8 - 1. Commissioner Perry voted against the motion.

Department of Planning  
 P.O. Box 15225  
 Chesapeake, VA 23328  
 Office: 757-382-6176  
 Fax: 757-382-6406

HEARING DATE: MAY 10, 2017

**TO:** CHESAPEAKE PLANNING COMMISSIONERS

**FROM:** HOA N. DAO, SENIOR PLANNER  

**THROUGH:** JALEH M. SHEA, AICP, PLANNING DIRECTOR

**DATE:** MAY 10, 2017

**RE:** PLN-USE-2017-003  
**PROJECT:** Hickory Solar Farm  
**APPLICANT:** New Energy Ventures, Inc.  
**PROPOSAL:** A conditional use permit to allow a solar energy facility on a 154.4 acre parcel.  
**ZONE:** A-1, Agricultural District  
**LOCATION:** On Ballentine Road, approximately 5,000 feet east from the intersection of Ballentine Road and Battlefield Boulevard South.  
**TAX MAP SECTION/PARCEL:** 0970000000660  
**BOROUGH:** Butts Road

**PROJECT DESCRIPTION:**

The applicant seeks approval of a conditional use permit to allow for the construction and operation of an unmanned, 32 megawatt (MW) photovoltaic (PV) solar farm (consisting of a 20 MW and 12 MW project). The project will consist of approximately 144,000 ground-mounted panel arrays on a single-axis tracking system, up to eight feet height, and capable of withstanding wind speeds of 120 m.p.h. The project will be located on a 154.4 acre parcel on Ballentine Road, approximately 5,000 feet east from the intersection of Ballentine Road and Battlefield Boulevard South. Approximately 15 inverters/transformers will be utilized to convert the DC current generated by the solar panels into AC current. The power is then transferred via overhead power lines along an existing Dominion Virginia Power easement running parallel to Ballentine Road and connecting with the existing Dominion Virginia Power distribution system on Battlefield Boulevard South.

The solar farm use is categorized as 'electric services,' which is a conditional use in the A-1, Agricultural District. The proposed use will be required to install a security fence and

landscape buffer for screening. Screening the entire perimeter of the project site will help buffer the facility from the public rights-of-way and mitigate any potential glint and glare from the panel arrays onto nearby residences. However, little to no impact from noise or glint and glare are anticipated since the nearest residence is located over 1,200 feet from the project site.

The applicant held a public awareness meeting on May 4, 2017 at the Hickory Ruritan Club on Battlefield Boulevard South, inviting all concerning citizens and community members to attend. Invitation letters were mailed out to properties located approximately within half a mile of the project site and ads were posted in the Chesapeake Clipper on April 27<sup>th</sup> and 29<sup>th</sup>.

#### **UPDATE:**

To ensure the proposed solar energy facility does not affect the health and safety for the citizens of Chesapeake and to be consistent with the other solar energy facility applications, staff has offered the following additional stipulation #12:

12. **The applicant/owner agrees that the proposed solar energy facility shall only use mono-crystalline or poly-crystalline photovoltaic (PV) technology. This stipulation shall be included as a condition on the final site plan.**

#### **FINDINGS:**

1. The proposed use of a solar farm on agricultural land is in conformity with and consistent with the policies contained in the City's Comprehensive Plan.
2. The solar farm use does not preclude the land from future use for traditional agricultural practices.
3. The proposal, with stipulations, is compatible with the surrounding community and will have no more adverse effects on the health, safety, or comfort of persons living or working in or driving through the area than would any other use generally permitted in the same district.
4. The Navy has no objection to the proposed use that is within 5 miles of the U. S. Navy Northwest Annex.

#### **STAFF RECOMMENDATION:**

Based on the findings contained in this staff report, Staff recommends that **PLN-USE-2017-003** be **APPROVED** with the following stipulations:

1. The applicant/owner shall construct a City Standard Commercial Entrance, CG-11A to access the site prior to issuance of a Certificate of Occupancy. The entrance shall be constructed at the intersection of Battlefield Boulevard South and Ballentine Road and shall be depicted on the final site construction plan which is subject to review

and approval of the Director of Development and Permits, or designee. In addition, a closure and restoration plan shall be a required component of the final site construction plan.

2. The applicant/owner shall submit a Landscape Plan pursuant to the Chesapeake Zoning Ordinance prior to final construction plan approval. Said plan shall be subject to the review and approval of the City's Landscape Coordinator. Said plan shall consist of the following: a modified Buffer Yard E along the entirety of the property line, consisting of small and medium canopy trees that are at least 6 feet in height, shrubs that are in a minimum industry standard 3 gallon container at planting, and a solid evergreen buffer along the entirety of the property line adjacent to the residential properties to screen the use. The solid evergreen buffer shall include trees that are at least 8 feet in height at time of planting, and shrubs that are in a minimum industry standard 3 gallon container at time of planting. All plant materials shall be subject to the review and approval of the City's Landscape Coordinator and shall be installed prior to the issuance of a Certificate of Occupancy for the use. The applicant/owner shall also install and maintain a 6 foot security fence around the entire perimeter of the solar farm prior to the issuance of a Certificate of Occupancy for the use.
3. The applicant/owner shall obtain a valid Run-Off Control Permit from the Department of Public Utilities prior to the approval of construction plans.
4. The applicant/owner shall obtain all required permits and approvals from the Department of Development and Permits prior to the installation of the security fence and storage shed.
5. The applicant/owner agrees that all power lines transferring the power generated from the property to the existing Dominion Virginia Power distribution system on Battlefield Boulevard South, which are both on-site and off-site, shall be placed underground unless the applicant/owner provides written correspondence from Dominion Virginia Power which requires the lines to be placed above ground to the Zoning Administrator.
6. The applicant/owner agrees that the proposed use shall utilize SMA 2200-EV-US, SMA 2500-EV-US or an alternative solar panel inverter approved by the Navy and in compliance with the Navy's Electromagnetic Interference (EMS) assessment.
7. The approval of this Conditional Use Permit is limited to the applicant only.
8. The applicant/owner shall provide written notice to the Director of Development and Permits or designee at least 30 days in advance of the cessation or abandonment of this use. Within 180 days of the cessation or abandonment of this use, the applicant/owner shall remove all photovoltaic systems (including but not limited to inverters, modules/solar panels, solar trackers) and all other structural elements related to the photovoltaic system use. The applicant/owner shall also restore the

property to its pre-use grade, as approved by the Director of Development and Permits or designee, within the referenced 180 days.

9. Prior to receiving a certificate of occupancy, an Emergency Management Plan (EMP) will be provided to, and subject to the approval of, the Director of Development and Permits for the solar energy facility. The goal of this EMP is to provide safety guidelines and procedures for potential emergency-related incidents during all phases of the life of the facility (construction, operation, and decommissioning). The EMP shall cover at minimum emergency communications and training, theft and vandalism, inclement weather, high voltage equipment, and fire safety and prevention.
10. The applicant/owner shall maintain insurance for the duration of the use. The applicant/owner shall provide to the City Attorney a certificate of insurance providing General Liability Insurance which shall include at least the following information: (i) the name of the insurance company, policy number and expiration date; and (ii) the coverage and limits on coverage and including the amount of deductibles or self-insured retentions with a minimum limit of One Million Dollars (\$1,000,000) per occurrence and Two Million Dollars (\$2,000,000) aggregate, combined single limit, for bodily injury (including death) or property damage and Environmental Impairment insurance with minimum limits of \$1,000,000 per occurrence. The certificate of insurance shall be provided to the City Attorney prior to the issuance of a certificate of occupancy.
11. The applicant/owner agrees that the solar array shall be designed to withstand 120 mph wind speeds, as depicted on the approved final site plan.
12. The applicant/owner agrees that the proposed solar energy facility shall only use mono-crystalline or poly-crystalline photovoltaic (PV) technology. This stipulation shall be included as a condition on the final site plan.

HD:th

cc: Tim Howlett, Current Planning Administrator

HEARING DATE: MAY 10, 2017

**TO:** CHESAPEAKE PLANNING COMMISSIONERS  
**FROM:** HOA N. DAO, SENIOR PLANNER *ND*  
**THROUGH:** JALEH M. SHEA, AICP, PLANNING DIRECTOR *JS*  
**DATE:** APRIL 28, 2017  
**RE:** PLN-USE-2017-003  
**PROJECT:** Hickory Solar Farm  
**APPLICANT:** New Energy Ventures, Inc.  
**PROPOSAL:** A conditional use permit to allow a solar energy facility on a 154.4 acre parcel.  
**ZONE:** A-1, Agricultural District  
**LOCATION:** On Ballentine Road, approximately 5,000 feet east from the intersection of Ballentine Road and Battlefield Boulevard South.  
**TAX MAP SECTION/PARCEL:** 0970000000660  
**BOROUGH:** Bufts Road

**PROJECT DESCRIPTION:**

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The solar farm use is categorized as 'electric services,' which is a conditional use in the A-1, Agricultural District. The proposed use will be required to install a security fence and

landscape buffer for screening. Screening the entire perimeter of the project site will help buffer the facility from the public rights-of-way and mitigate any potential glint and glare from the panel arrays onto nearby residences. However, little to no impact from noise or glint and glare are anticipated since the nearest residence is located over 1,200 feet from the project site.

The applicant held a public awareness meeting on May 4, 2017 at the Hickory Ruritan Club on Battlefield Boulevard South, inviting all concerning citizens and community members to attend. Invitation letters were mailed out to properties located approximately within half a mile of the project site and ads were posted in the Chesapeake Clipper on April 27<sup>th</sup> and 29<sup>th</sup>.

**BACKGROUND:**

Adjacent land uses and zoning designations are as follows:

DIRECTION	ADJACENT ZONING AND LAND USE DESIGNATION
North	A-1, Agricultural District, Agriculture / Open Space.
South	A-1, Agricultural District, Agriculture / Open Space.
East	A-1, Agricultural District, Agriculture / Open Space.
West	A-1, Agricultural District, Agriculture / Open Space.

**DEPARTMENTAL COMMENTS:**

**Development Engineering:**

- See attached memo dated February 2, 2017 for comments.

**Building Review:**

- Building Permit is required for the solar panels being placed in field. Must be designed to resist 120 m.p.h. wind load.

**Landscaping:**

- The applicant/owner shall submit a Landscape Plan pursuant to Chesapeake Zoning Ordinance Section 19-600 et seq. prior to final construction plan approval. Said plan shall be subject to the review and approval of the City's Landscape Coordinator. Said plan shall consist of the following: 1) A modified Buffer Yard "E" along the entirety of the property line, consisting of small and medium canopy trees that are at least 6 feet in height, and shrubs that are in a minimum industry standard 3 gallon container at planting, and 2) the modified Buffer Yard "E" shall also include a solid evergreen buffer along the entirety of the property line adjacent to the residential properties to screen the use. The solid evergreen buffer shall include trees that are at least 8 feet in height at time of

planting, and shrubs that are in a minimum industry standard 3 gallon container at time of planting. The plant materials shall be installed prior to the issuance of a Certificate of Occupancy, to be inspected and approved by the City's Landscape Coordinator. The applicant/owner shall also install a 6 foot security fence around the entire perimeter of the solar farm prior to the issuance of a Certificate of Occupancy.

**Zoning Administrator:**

- See attached memo dated February 7, 2017 for comments.

**Public Utilities:**

- This development is outside the City's franchise service area; therefore, City water and sewer are not available or required.

Advisory:

- The project is located in the Northwest River Watershed Protection District. Prior to any construction plan approval, the applicant must apply for and received a valid Run-Off Control Permit from the Department of Public Utilities.

**Fire Prevention:**

- See attached memo dated January 24, 2017 for comments.

**Police:**

- See attached memo dated February 2, 2017 for comments.

**Navy:**

- See attached email dated April 20, 2017 for comments.

**STAFF ANALYSIS:**

Section 17-106.A of the Chesapeake Zoning Code (CZC) requires conditional use permit applications to meet the following standards:

1. **STANDARD:** The proposal, as submitted or as modified, is in conformity with the Comprehensive Plan, including specific applicable elements of the Plan, and with official policies adopted in relation to the Plan, including the purposes of this ordinance.

**FINDING:** The proposed solar farm facility meets the goals and policies of the 2035 Comprehensive Plan and Land Use Plan, specifically the following objectives and action strategies:



- *The City will encourage the development of alternative energy sources. Land use regulations should incorporate flexibility to allow for new technologies such as solar panels.*
- *The City will identify realistic, cost-effective measures that provide tangible benefits to local air quality, as well as long-term quality of life and economic benefits. Increase energy efficiency and use of renewable energy sources such as solar energy.*

The Land Use Plan designates the property for agricultural/open space uses. Solar energy generation is viewed as compatible with the City's agricultural preservation goals by providing rural property owners with a viable source of income and reducing pressure to convert farmland for residential uses. The proposed solar farm will be unmanned and community facilities will not be utilized. The use of the land for solar farming instead of traditional crops would have less of an environmental impact on the surrounding area since less chemicals are utilized. At the ends of the project life, the solar panel arrays will be removed. Thus, the solar farm use does not preclude the land from future use for traditional agricultural practices.

2. **STANDARD:** The proposal, as submitted or as modified, is compatible with the surrounding community and will have no more adverse effects on the health, safety, or comfort of persons living or working in or driving through the area than would any other use generally permitted in the same district.

**FINDING:** The proposed solar farm will be unmanned and will not utilize any public facilities. The use of the land for a solar farm instead of traditional crops would not require as much pesticides/chemicals or water for irrigation. Thus, the proposed use would result in less environmental impact than traditional farming practices.

One of the concerns regarding solar farms is that the panels create glint and glare. The primary purpose of a solar panel is to absorb the sun rays to generate electricity. With the proposed project, the applicant/owner plans to utilize anti-glare panels. In addition, the nearest dwelling unit is located approximately 1,262 feet from the project site, and the project shall be surrounded with a security fence and perimeter landscaping. Therefore, any adverse impacts regarding glint, glare, and noise from transmissions/inverters over 1,200 feet away would be extremely minimal.

The proposed project site is located just outside of the U.S. Navy's Fentress airfield easements. However, the project is located within the Area of Influence of the NSA Northwest Annex. The Navy has reviewed the proposal and has no objection with the project as proposed. There are no known health or safety issues associated with the proposed use. With stipulations, the proposal is compatible with the surrounding community.

Section 17-106.B. offers factors which may be considered in determining whether a Conditional Use Permit application meets the required standards. Only those factors considered applicable to this application are discussed below:

1. **STANDARD:** Whether the proposed conditional use will be consistent with the adopted policies in the Chesapeake Comprehensive Plan.

**FINDING:** Addressed above for #1 of Section 17-106.A.

2. **STANDARD:** Whether the existing or proposed streets and highways are adequate to safely accommodate and serve the site, with particular attention being given to the following:

- a. The capacity of existing or proposed streets and highways located on or near the site to accommodate projected traffic volumes.
- b. The adequacy and safety of the size and design of access roads, entrance and exit drives, and traffic circulation patterns, for both vehicular and pedestrian traffic on and near the site.

**FINDING:** Traffic impacts to the area will only occur during the brief construction period. Post construction, the amount of traffic for maintenance of the site with no more than a few trips per month would be minimal and well below the average daily trips of a single-family residence.

The Department of Development and Permits has indicated that a commercial access at the intersection of Battlefield Boulevard South and Ballentine Road is required for the proposed development.

3. **STANDARD:** Whether the proposed conditional use will be adequately served by other essential public facilities, including but not limited to the following: water and sewers, drainage facilities, schools, recreational facilities, police and fire protection, refuse disposal.

**FINDING:** The proposed solar farm will be an unmanned facility and will not require services such as schools, recreational facilities, refuse disposal, or water and sewer. The applicant/owner will work with the fire department regarding the appropriate method of fire protection using non-water sources when addressing fire hazards involving electricity.

4. **STANDARD:** Whether the proposed conditional use will have any adverse effect upon or will be incompatible with the use or enjoyment of adjacent and surrounding property, with particular attention being given to the following:

- a. The noise characteristics of the proposed use and whether they exceed the maximum sound levels that are typical of uses permitted as a matter of right in the district.

- b. The anticipated glare from vehicular and stationary lights and the extent to which such lights will be visible from any residential district.
- c. The vulnerability of the proposed use to fire and related safety hazards.
- d. The interference by the proposed use with any easement, roadways, rail lines, utilities and public or private rights-of-way.
- e. The possible destruction, loss, or damage of a natural, scenic, or historic feature of significant importance.
- f. The adequacy of proposed landscaping and buffering measures to screen the site from neighboring properties zoned for or containing less intensive uses.

**FINDING:** The proposed use will have minimal impact on the surrounding community. As stated earlier, the facility will be unmanned with maintenance employees visiting the site a few times per month. The nearest residence is located over 1,200 feet from the project site; therefore, any potential noise and/or visual impact is unlikely. In addition, the project will have a security fence and landscaping along the entire perimeter to help buffer the facility. Based on these findings, the proposed conditional use is not expected to have any adverse effect upon or be incompatible with the use or enjoyment of adjacent and surrounding properties.

- 5. **STANDARD:** Whether the proposed conditional use will be constructed, arranged, and operated so as not to dominate or interfere with the immediate vicinity or to interfere with the development and use of neighboring property in accordance with the applicable district regulations. In determining whether the proposed conditional use will so dominate the immediate neighborhood, considerations shall be given to:
  - a. The location, nature, and height of buildings, structures, walls, and fences on the site; and
  - b. The overall compatibility of the appearance of the site as proposed with neighborhood sites;
  - c. The nature and extent of landscaping and screening on the site.

**FINDING:** The proposed solar farm will include ground-mounted solar panel arrays and a single-story storage shed, no larger than 250 square foot in size. A security fence and landscaping will be installed along the entire perimeter of the project site to offer screening from adjacent residential properties, located over 1,200 square feet from the project site. The applicant is proposing to run overhead power lines from the project site running parallel to Ballentine Road and connecting with the existing Dominion Virginia Power distribution system on Battlefield Boulevard South. One of the goals of the Comprehensive Plan is to preserve and protect rural character. Therefore, staff is recommending that all power lines for the proposed use, both on-site and off-site, be buried underground to protect the health, safety, and rural character of the community.

The proposed conditional use will be constructed, arranged, and operated so as not to dominate or interfere with the immediate vicinity or to interfere with the development and use of neighboring property in accordance with the applicable district regulations.

**FINDINGS:**

1. The proposed use of a solar farm on agricultural land is in conformity with and consistent with the policies contained in the City's Comprehensive Plan.
2. The solar farm use does not preclude the land from future use for traditional agricultural practices.
3. The proposal, with stipulations, is compatible with the surrounding community and will have no more adverse effects on the health, safety, or comfort of persons living or working in or driving through the area than would any other use generally permitted in the same district.
4. The Navy has no objection to the proposed use that is within 5 miles of the U. S. Navy Northwest Annex.

**STAFF RECOMMENDATION:**

Based on the findings contained in this staff report, Staff recommends that **PLN-USE-2017-003** be **APPROVED** with the following stipulations:

1. The applicant/owner shall construct a City Standard Commercial Entrance, CG-11A to access the site prior to issuance of a Certificate of Occupancy. The entrance shall be constructed at the intersection of Battlefield Boulevard South and Ballentine Road and shall be depicted on the final site construction plan which is subject to review and approval of the Director of Development and Permits, or designee. In addition, a closure and restoration plan shall be a required component of the final site construction plan.
2. The applicant/owner shall submit a Landscape Plan pursuant to the Chesapeake Zoning Ordinance prior to final construction plan approval. Said plan shall be subject to the review and approval of the City's Landscape Coordinator. Said plan shall consist of the following: a modified Buffer Yard E along the entirety of the property line, consisting of small and medium canopy trees that are at least 6 feet in height, shrubs that are in a minimum industry standard 3 gallon container at planting, and a solid evergreen buffer along the entirety of the property line adjacent to the residential properties to screen the use. The solid evergreen buffer shall include trees that are at least 8 feet in height at time of planting, and shrubs that are in a minimum industry standard 3 gallon container at time of planting. All plant materials shall be subject to the review and approval of the City's Landscape Coordinator and shall be installed prior to the issuance of a Certificate of Occupancy for the use. The applicant/owner shall also install and maintain a 6 foot security fence around the

entire perimeter of the solar farm prior to the issuance of a Certificate of Occupancy for the use.

3. The applicant/owner shall obtain a valid Run-Off Control Permit from the Department of Public Utilities prior to the approval of construction plans.
4. The applicant/owner shall obtain all required permits and approvals from the Department of Development and Permits prior to the installation of the security fence and storage shed.
5. The applicant/owner agrees that all power lines transferring the power generated from the property to the existing Dominion Virginia Power distribution system on Battlefield Boulevard South, which are both on-site and off-site, shall be placed underground unless the applicant/owner provides written correspondence from Dominion Virginia Power which requires the lines to be placed above ground to the Zoning Administrator.
6. The applicant/owner agrees that the proposed use shall utilize SMA 2200-EV-US, SMA 2500-EV-US or an alternative solar panel inverter approved by the Navy and in compliance with the Navy's Electromagnetic Interference (EMS) assessment.
7. The approval of this Conditional Use Permit is limited to the applicant only.
8. The applicant/owner shall provide written notice to the Director of Development and Permits or designee at least 30 days in advance of the cessation or abandonment of this use. Within 180 days of the cessation or abandonment of this use, the applicant/owner shall remove all photovoltaic systems (including but not limited to inverters, modules/solar panels, solar trackers) and all other structural elements related to the photovoltaic system use. The applicant/owner shall also restore the property to its pre-use grade, as approved by the Director of Development and Permits or designee, within the referenced 180 days.
9. Prior to receiving a certificate of occupancy, an Emergency Management Plan (EMP) will be provided to, and subject to the approval of, the Director of Development and Permits for the solar energy facility. The goal of this EMP is to provide safety guidelines and procedures for potential emergency-related incidents during all phases of the life of the facility (construction, operation, and decommissioning). The EMP shall cover at minimum emergency communications and training, theft and vandalism, inclement weather, high voltage equipment, and fire safety and prevention.
10. The applicant/owner shall maintain insurance for the duration of the use. The applicant/owner shall provide to the City Attorney a certificate of insurance providing General Liability Insurance which shall include at least the following information: (i) the name of the insurance company, policy number and expiration date; and (ii) the coverage and limits on coverage and including the amount of deductibles or self-insured retentions with a minimum limit of One Million Dollars (\$1,000,000) per occurrence and Two Million Dollars (\$2,000,000) aggregate, combined single limit,

for bodily injury (including death) or property damage and Environmental Impairment insurance with minimum limits of \$1,000,000 per occurrence. The certificate of insurance shall be provided to the City Attorney prior to the issuance of a certificate of occupancy.

11. The applicant/owner agrees that the solar array shall be designed to withstand 120 mph wind speeds, as depicted on the approved final site plan.

HD:th

cc: Tim Howlett, Current Planning Administrator



City of Chesapeake  
 Department of Development and Permits  
 306 Cedar Road  
 Chesapeake, Virginia 23322  
 (757) 382-6101

### MEMORANDUM

**TO:** Hoa N. Dao, Planner, Planning Department

**FROM:** J.B. Tate, P.E., Director of Development and Permits

**DATE:** February 2, 2017

**SUBJECT: APPLICATION REVIEW COMMITTEE**

**PLN-USE-2017-003      New Energy Ventures Hickory Solar Farm**

TMN 097000000660      154 acres solar farm

*The following comments pertain to the application plan stamp dated January 6, 2017.*

**Development Engineering Comments:**

1. As discussed with the applicant at the February 1, 2017 ARC meeting, a final site construction plan is required at the conclusion of the public hearing process. The plan shall address site entrances and stormwater drainage as required by the Public Facilities Manual. This Department recommends the following **stipulation:**

**Applicant/owner shall construct a City Standard Commercial Entrance, CG-11A to access the site. The entrance shall be depicted on the final site construction plan and is subject to review and approval by the Director of Development and Permits, or designee. This access improvement to be constructed at the intersection of Battlefield Blvd. and Ballentine Rd.**

**Development Engineering Advisory:**

1. In accordance with City Code Sec. 70-95, this development shall be required to dedicate one-half of any right-of-way necessary to make the street comply with the minimum width fixed for the same. This appears to be 15' along parcel frontage that abuts the apparent existing 30' wide right-of-way. Dedication shall occur prior to final site plan approval.
2. NOTE: Further conditions may be required during the administration of applicable City Ordinances and Standards. Any site plan submitted with this application may require revision during detailed site plan review to meet all applicable City Codes and Standards. Final construction plans shall meet all applicable requirements prior to City approval.

JBT:mdb

Department of Development and Permits  
 Zoning Administration  
 506 Cedar Road  
 P. O. Box 15225  
 Chesapeake, Virginia 23328  
 Tel. (757) 382-8454  
 Fax: (757) 382-8448

**MEMORANDUM**

**TO:** Hoa N. Dao, Senior Planner

**FROM:** Dale Ware, AICP, CZA  
 D & P/Zoning

**DATE:** February 7, 2017

**RE:** PLN-USE-2016-003; Hickory Solar Farm

Advisory comments:

A final site plan is required. The final site plan shall delineate buffer areas, fencing and other structures or features required for security, access and employee (required) parking. The entrance and parking area shall be designed to minimize on-site and off-site traffic hazards and conflicts in order to provide safe and convenient access; to reduce or prevent congestion in the public street; and to facilitate the provision of emergency service. A 30' front yard setback is required for the fence from the property line adjacent to the right-of-way, and 20' adjacent to the side property lines.

The property is located in the Northwest River Watershed Protection District, see chapter 26, article XI of the city code for supplemental regulations.

A building/zoning permit is required for the structures/use on the property; a certificate of use /occupancy is required to commence the use after all inspections for the permit have been approved and must be completed within 3 years of City Council approval.




**City of Chesapeake**

Chesapeake Fire Department  
 Fire Prevention Division  
 Office of the Fire Marshal  
 304 Albemarle Drive  
 Chesapeake, Virginia 23322  
 (757)382-6566 phone  
 (757)382-8313 fax

**FIRE PREVENTION DIVISION – PLAN REVIEW**

**To:** Bill McKay, Senior Planner  
**Cc:** Sherry Carawan, Planning Department  
**From:** Harold W. Creason, Fire Protection Plans Examiner *HWC*  
**Date:** January 24, 2017  
**RE:** PLN-USE-2017-003 – Hickory Solar Farm

The Fire Dept. has completed the review of this conditional use permit and preliminary site plan submittal and is providing Fire Dept. approval with the following advisory comments to be completed at the time of final site plan approval and/or fire inspection for certificate of occupancy.

1. Must meet the requirements of the Building and Fire Codes including applicable referenced standards, and the Public Facilities Manual (PFM) in regard to following:

**Emergency access** - Access via any gated/locked compounds required to be provided with an approved Knox entry system. Access road and interior drive aisles for circulation within the site must be an all-weather surface capable of supporting a minimum of 75,000 lbs. to mitigate potential Fire or EMS type calls. Grid for circulation and access to panels is noted on the preliminary site plan and is sufficient width provided they can support weight of apparatus under all-weather conditions.

**Water for firefighting** - meeting fire hydrant distance and fire-flow demand to facilities or structures is a standard requirement per the Fire Code, however, since this area is in a no water zone or not within a feasible distance, a water shuttle operation would be utilized for firefighting involving fires other than energized electrical equipment at the site. However, site portable fire extinguishers such as dry chemical or other non-water reactive agents may be required in addition to water shuttling or as alternative fire protection for specific electrical or energized equipment fires.

**Fire protection systems** - Fixed fire protection systems including detection and/or suppression, may be required for applicable structures per the Building or Fire Codes and referenced standards. Note that Fire Code, Section 605 in particular, Section 605.11 addresses the requirements for Solar photovoltaic power systems referencing the Building Code and NFPA 70 (National Electric Code) for specific requirements for these type systems, as may be applicable.

**Fire Code Operational Permit** - May be required for hazardous materials which may be stored, used or handled, or other hazardous processes conducted at the site or in potential accessory building(s).

*"The City of Chesapeake adheres to the principles of equal employment opportunity.  
 This policy extends to all programs and services supported by the City."*

Department of Police  
P.O. Box 15225  
Chesapeake, Virginia 23328

DATE: FEBRUARY 2, 2017  
TO: HOA N. DAO, PLANNER  
FROM: CARL E. LEE, CPP CPTED SECURITY PLANNER  
SUBJECT: PLN-USE-2017-003 HICKORY SOLAR FARM

This department will not require a final construction plan.

There are no regulatory comments pertaining to this conditional use permit to allow a solar energy facility on 154.40 acres.

**Advisory Comments:**

Recommend providing emergency contact information to the Chesapeake Emergency Operations Center (911). Contact information can be relayed by calling 382-6161.

Recommend before going operational that Police, Fire & EMS first responders be invited to review the site.

Security photos were provided to the applicant which depicted reasonable security applications and are for informational purposes only.

Feel free to contact me pertaining to this application review at 757-382-6614 or [clee@cityofchesapeake.net](mailto:clee@cityofchesapeake.net).

Reviews Conducted

Site Visit - Yes

Crime Mapping - Yes

Pictometry - Yes