

FINDING OF NO SIGNIFICANT IMPACT

**Moran Solar Project
Prince Edward County, Virginia**

**RURAL UTILITIES SERVICE
U.S. Department of Agriculture**

Holocene Clean Energy

**Prepared by:
Engineering and Environmental Staff
Rural Utilities Service**

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A. INTRODUCTION

Holocene Clean Energy has submitted a financing request to the U.S. Department of Agriculture, Rural Utilities Service (RUS) to construct the proposed Moran Solar Project in Rice, Prince Edward County, Virginia (VA). Holocene proposes to lease 18.8 acres of land for the construction of a solar farm, (photovoltaic panel arrays) along with a security fence, associated concrete washout area and temporary access road.

RUS may consider approving this financing request. Prior to taking a federal action (e.g., providing financial assistance), RUS is required to complete an environmental effects analysis in accordance with the National Environmental Policy Act of 1969 (NEPA) (U.S.C. 4231 et seq.), the Council on Environmental Quality's (CEQ) regulations for implementing NEPA (40 CFR Parts 1500-1508), and RUS's NEPA implementing regulations, Environmental Policies and Procedures (7 CFR Part 1970). RUS is required to prepare an Environmental Assessment (EA) for the proposed Project.

After completing an independent analysis of a report prepared by Holocene Clean Energy, RUS concurred with its scope and content. In accordance with 7 CFR § 1970.102(6), RUS adopted the report and issued it as the agency's EA for the proposed Project. RUS finds that the EA is consistent with federal regulations and meets the standards for an adequate EA. Holocene published three newspaper notices in a semi-weekly periodical, announcing the availability of the EA for public review, in accordance with 7 CFR §1970.102(6)(ii).

B. PROJECT DESCRIPTION

Holocene Clean Energy is proposing to construct an 18.8 acre solar farm on a leased portion of a larger 99.63 acre property located at 1867 Piney Grove Road, Rice, Prince Edward County, VA. Of the 18.8 acres, 16.1 acres will be the fenced solar arrays with the remaining acreage associated with roadway setbacks. Project components include the installation of photovoltaic panel arrays ground-mounted on single-axis tracking solar racking equipment with a maximum height of 15 feet from the ground surface. The solar panel array will include approximately 61 rows of panels that are anticipated to generate roughly 3.8 mega-watts (MW) of Direct Current (DC) power and 3 MW of Alternating Current (AC) power. The Project will also include the construction of an inverter and control unit, a perimeter fence to enclose the arrays, native- species vegetative screening buffers and required stormwater management features. Proposed grading will be minimized through the use of driven piles for the mounting poles which will therefore reduce excavation and earth disturbance. Interconnection to the electrical grid will be completed by the electric company sometime in the future as part of a separate project. Existing infrastructure (power poles, utility lines) is located in close proximity to the site and the planned interconnection point is to the existing power poles located immediately adjacent to the access road

entering the site.

The proposed Project would operate seven days a week during daylight hours. Operational activities would consist of a monitoring system to track status, performance and diagnostics. The Project will be fenced to prevent access by the public and to ensure the safety of the equipment from theft and vandalism. The solar field will be inspected annually for condition of arrays, inverters and controls. Damaged or underperforming solar modules would be repaired and replaced as indicated by the monitoring system. No on-site lighting will be installed as part of the Project.

The site is currently an open field with some scrubby areas. Tree clearing is not proposed. Three existing buildings located on the site, a fire damaged residential dwelling and two outbuildings, will be demolished prior to construction of the solar farm.

C. PURPOSE/NEED

1. Agency Purpose and Need

RUS is authorized to make loans and loan guarantees to finance the construction of electric distribution, transmission, and generation facilities, including system improvements and replacements required to furnish and improve electric service to rural areas, as well as demand side management, energy conservation programs, and on-grid and off-grid renewable energy systems. The Rural Electrification Act of 1936, as amended (7 USC §901 et seq.), generally authorizes the Secretary of Agriculture to make rural electrification and telecommunication loans, including specifying eligible borrowers, references, purposes, terms and conditions, and security requirements.

2. Applicant Purpose and Need

The Commonwealth of Virginia has recently established renewable energy goals across the state and those goals can only be met through cooperation with private projects. Holocene Clean Energy, Raleigh, North Carolina, has therefore partnered with the local utility provider to construct the Project and allow its future interconnection to the utility grid. The proposed Project will help limit greenhouse gas emissions through the generation of solar energy while providing electricity to residential and commercial customers connected to the existing electrical grid.

D. ALTERNATIVES EVALUATED

1. No Action

The No Action Alternative would not provide benefits to the human environment or provide a clean renewable energy alternative to other energy sources. The objective of the project to provide clean energy for the existing grid and reduce fossil fuel emissions would not be realized.

2. Proposed Action

The Proposed Action involves the construction of an approximate 18.8-acre solar farm (16.1-acre operational) on a portion of a larger 99.63 acre property located at 1867 Piney Grove Road, Rice, Prince Edward County, VA. As part of the development, three existing derelict structures located onsite are proposed for demolition. Project components include the installation of photovoltaic panel arrays ground-mounted on single-axis tracking solar racking equipment. The Project will also include the construction of an inverter and control unit, a perimeter fence to enclose the arrays, vegetative buffers/screening, and necessary stormwater BMPs. The Project has been sited to avoid floodplains, streams, minimize clearing, and is situated within close proximity to existing utility infrastructure to allow easy future interconnection to the existing grid.

3. Alternatives Eliminated from Further Consideration

Holocene conducted an area search for parcels that had few streams or wetlands, no floodplains and had sufficient acreage to support a solar panel farm. Although multiple sites were identified, they were ruled out because the landowners were not agreeable to leasing their land.

E. SUMMARY OF ENVIRONMENTAL EFFECTS

The analyses in the EA documented that the proposed Project would have no adverse effects to land use and important farmland soils. A summary of anticipated effects on the human environment is provided below.

Cultural Resources and Historic Properties. Holocene and their consultant, ECS-Mid-Atlantic, LLC (ESC), conducted a review of the VA Department of Historic Resources (DHR) VA Cultural Resource Information System (VCRIS), and determined that no historic or cultural resources were located within the project area or area of potential effect (APE), both direct or indirect. ESC submitted the results to the VA State Historic Preservation Office (SHPO). SHPO requested that a Phase I archaeological and architectural study be conducted to verify the recommended no adverse effect determination. A second consultant, Dutton and Associates, completed the requested evaluation in October 2020 and concluded that the Project as proposed would have no adverse effect on historic resources and did not recommend additional investigation. The evaluation included the three existing structures located onsite that are

proposed for demolition and proposed a finding of no adverse effect on historic resources. SHPO concurred with their finding in a letter dated December 16, 2020.

Holocene and ESC coordinated with federally recognized tribes by letter dated June 16, 2020 to the Delaware Nation and the Monacan Indian Nation. The Delaware Nation replied that they had no objections to the project and the Monacan Indian Nation responded that they did not wish to actively consult on the project as the “project’s impacts are anticipated to be minimal”. Both tribes did indicate should archaeological sites, artifacts, human remains or other unanticipated native cultural remains be encountered or if the scope of the project changes, all construction and ground disturbing activities should immediately be halted until appropriate state agencies and the tribes are notified and proper archaeological assessments can be made.

Threatened and Endangered Species. The effects of the proposed action to federally listed endangered or threatened species and their habitat were analyzed with a review of the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) database. According to the IPaC database, one species, the Northern long-eared bat (NLEB), is listed as having the potential to occur at the Project site. However, because of the lack of existing preferred habitat at the Project site and no tree clearing is proposed, ECS believes no adverse impacts to habitat or the NLEB will occur. A project review request package was prepared and submitted to the USFWS on June 25, 2020 with a recommended finding of Not Likely to Adversely Effect the NLEB. No response was received from USFWS. An updated IPaC Official Species List was run on December 23, 2020 to verify that no new species had been listed and that was provided to USFWS.

Floodplains. According to the Flood Insurance Rate Map (FIRM) from the Federal Emergency Management Agency, the Project is not located in the 100 year or 500 year floodplains.

Wetlands. Several wetland areas and two jurisdictional streams were identified during field surveys of the project footprint. By adjusting the project boundary, Holocene was able to minimize wetland impacts to the maximum extent practicable. A small emergent wetland (0.01 acre) located in the western portion of the site will be impacted with the placement of poles. A 0.05 acre emergent wetland in the southern area of the project site will be impacted with the installation of a stormwater management feature. The U.S. Army Corps of Engineers determined that the impacts qualify for the Nationwide Permit 51 for Land Based Renewable Energy Projects. The wetland impacts are also below the threshold of 0.1 acre that would trigger required wetland mitigation. Based upon the information gathered, the proposed Project will have no significant impacts to wetlands or streams.

F. PUBLIC AND AGENCY INVOLVEMENT

Local newspaper notices, announcing the availability of the EA, were published on March 19, 24 and 26, 2021, in The Farmville Herald (Prince Edward County, Virginia). A copy of the EA was available for public review at the Farmville Library located at 1303 West 3rd Street, Farmville, VA 23901. The 14-day comment period ended on April 1, 2021. RUS received no comments.

G. FINDING OF NO SIGNIFICANT IMPACT

Based on its EA, RUS has concluded that the proposed Project would have no significant impacts to the human environment. RUS has concluded that the proposed Project would have no adverse effects to federally listed threatened and endangered species, candidate species, or federally designated critical habitat. The proposed Project would not disproportionately affect minority or low-income populations. No historic properties would be affected by the proposed Project.

In accordance with the National Environmental Policy Act, as amended (42 U.S.C. 4321 et seq.), the Council on Environmental Quality Regulations (40 CFR 1500–1508), and RUS's Environmental Policies and Procedures (7 CFR Part 1970), RUS has determined that the environmental effects of the proposed Project have been adequately addressed and that no significant impacts to the quality of the human environment would result from construction and operation of the proposed Project. Any final action by RUS related to the proposed Project will be subject to, and contingent upon, compliance with all relevant federal and state environmental laws and regulations. Because RUS's action will not result in significant impacts to the quality of the human environment, an Environmental Impact Statement will not be prepared for the proposed Project.

H. RUS LOAN REVIEW AND RIGHT OF ADMINISTRATIVE REVIEW

This FONSI is not a decision on a loan application and therefore not an approval of the expenditure of federal funds. Issuance of the FONSI and its notices concludes RUS's environmental review process in accordance with NEPA and RUS's Environmental Policies and Procedures (7 CFR Part 1970). The ultimate decision as to loan approval depends upon conclusion of this environmental review process in addition to financial and engineering reviews. Issuance of the FONSI and publication of notices will allow for these reviews to proceed. The decision to provide financial assistance is also subject to the availability of loan funds for the designated purpose in RUS's budget. There are no provisions to appeal this decision (i.e., issuance of a FONSI). Legal challenges to the FONSI may be filed in federal district court under the Administrative Procedures Act.

I. APPROVAL

This Finding of No Significant Impact is effective on signature.

Dated:

CHRISTOPHER MCLEAN Digitally signed by CHRISTOPHER MCLEAN
Date: 2021.04.14 18:43:19 -04'00'

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For additional information on this FONSI and EA, please contact Ms. Suzanne Kopich, Environmental Protection Specialist, Water and Environmental Programs, USDA Rural Utilities Service, at 202-692-4907; or e-mail: suzanne.kopich@usda.gov.