

FINDING OF NO SIGNIFICANT IMPACT

**Pennichuck Solar
Hillsborough County, NH**

**Rural Utilities Service
U.S. Department of Agriculture**

Aligned Climate Capital LLC

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

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A. INTRODUCTION

Aligned Climate Capital LLC (Aligned) plans to submit a financing request to the U.S. Department of Agriculture, Rural Utilities Service (RUS) to construct the proposed Pennichuck Solar (Project) in Hillsborough County, New Hampshire. RUS is considering this financing request. Prior to taking a federal action, RUS is required to complete an environmental impact 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 Code of Federal Regulations [CFR] Parts 1500-1508), and Rural Development's NEPA implementing regulations, Environmental Policies and Procedures (7 CFR Part 1970).

After completing an independent analysis of an environmental report prepared by Aligned and its consultant, RUS concurred with its scope and content. In accordance with 7 CFR § 1970.102, RUS adopted the report and issued it as the Agency's Environmental Assessment (EA) for the proposed Project. RUS finds that the EA is consistent with federal regulations and meets the standards for an adequate assessment. Aligned published a newspaper notice, announcing the availability of the EA for public review, in accordance with 7 CFR § 1970.102. In addition, RUS considers the proposed Project an undertaking subject to review under Section 106 of the National Historic Preservation Act, 16 U.S. Code 470(f), and its implementing regulation, "Protection of Historic Properties" (36 CFR Part 800).

B. PROJECT DESCRIPTION AND PURPOSE/NEED

The overall purpose of the Project is to provide clean renewable energy to the existing electrical grid for the purposes of improving the natural and human environment. The New Hampshire Climate Action Plan recommends maximizing energy efficiency and increasing renewable and low-CO₂-emitting energy sources as two chief strategies for the state to curb energy consumption and greenhouse gas emissions. Additionally, the state has established its own ambitious renewable energy goals and those goals can only be met through cooperation with private projects. As a result, electrical utility providers have been requesting development of renewable energy projects from private entities to help meet or exceed the goal set by the state. Supportive of this Climate Action Plan and renewable energy goals, Pennichuck Solar generates electricity from solar PV modules without emitting any criteria air pollutants or greenhouse gas emissions. By displacing a portion of the existing electrical demand from fossil fuel generation, the Project reduces both criteria air pollutants and greenhouse gas emissions. Moreover, the project generates all of its electricity by converting solar irradiance (sunshine), so there is no secondary fuel source.

C. ALTERNATIVES EVALUATED

1. No Action

Under the No Action Alternative, RUS would not provide financial assistance to Aligned, and/or the proposed Project would not be constructed. This alternative would not assist Aligned in providing clean renewable energy via a 2,250-kilowatt, direct current solar PV array to the existing electrical grid for the purposes of improving the natural and human environment.

2. Action Alternative (Preferred Alternative)

Under the Action Alternative, RUS would consider financing the proposed Project, and Aligned would construct Pennichuck Solar. The proposed Project would involve the construction of a 2,250 kWDC solar PV array located in Nashua, New Hampshire. The Project would cover a 13.57-acre solar farm on a portion of a of a larger 132.50-acre parcel. Project components include the installation of 65 rows of PV panel arrays ground-mounted on single-axis tracking solar racking equipment with a maximum height of 15-feet from the ground surface.

3. Alternatives Eliminated from Further Consideration

In addition to the No Action Alternative and Action Alternative, Aligned considered other technology and siting alternatives, which are documented in the **Alternatives** section of the EA.

D. SUMMARY OF ENVIRONMENTAL EFFECTS

The analyses in the EA documented that the proposed Project would have no potential adverse effects on floodplains, wetlands, water resources, coastal resources, aesthetics, socio-economic/environmental justice, transportation, and human health and safety. A summary of anticipated impacts on the human environment is provided below, including any mitigation measures deemed necessary to avoid or minimize impacts. Aligned is responsible for implementing these measures.

Land Use: Although the mapped soil type had been determined as not prime farmland according to the National Cooperative Soil Survey, on March 17, 2021, Aligned engaged New Hampshire's Natural Resources Conservation Service (NRCS) local field office to generate a USDA NRCS Soil Report and to complete the AD-1006 form in accordance to the Farmland Protection Policy Act (FPPA). On March 18, 2021, Aligned was reassured that none of the soils listed in the project area are of important farmland. Therefore, it has been concluded that form AD-1006 is not required and FPPA requirements have been fulfilled.

Biological Resources (Fish Wildlife, and Vegetation Resources): The project site consists primarily of managed oak-pine wooded uplands. Due to historic activity, the existing condition is moderately wooded upland with a canopy of mature trees and a generally sparse to moderate shrub understory and sparse herbaceous layer. A Wildlife and Habitat Assessment was conducted by VHB in August 2020 to document the site's existing conditions. This assessment concluded that Pennichuck Solar meets the standards set forth in the NH state rules.

Biological Resources (Federally Listed Threatened and Endangered Species): Aligned reviewed the resources provided by the USFWS regarding compliance with Section 7 of the Endangered Species Act to determine whether the project site and activities will directly or indirectly affect any threatened, endangered, proposed or candidate species, or would adversely affect designated critical habitat. Specifically, Aligned obtained an official species list for USFWS through its Information for Planning and Consultation system. Based on guidance from the USFWS, Aligned submitted the complete package of documents to the USFWS New Hampshire Field Office on March 17, 2021 documenting the following and requesting that USFWS complete its consultation pursuant to Section 7 of the Endangered Species Act. As there was no response from the USFWS during the 30 days review and comment period, Aligned followed up with respective USFWS agency and received a response stating that it had received all documentation necessary to support the no effect finding under Section 7. Therefore, no further Section 7 Endangered Species Act consultation is necessary.

Historic and Cultural Properties: Although state recognized tribes are not included in the Section 106 consultation, as a good faith effort, Aligned sent consultation letters to each of the tribes on March 16, 2021 seeking input on whether Pennichuck Solar raised any concerns under Section 106 of the National Historic Preservation Act. Letters were sent to a total of nine tribes. A comment was received from the Nulhegan Band of the Coosuk - Abenaki Nation on March 17, 2021 regarding the project. On May 5, 2021, a response was sent to the tribe by RUS in order to address and answer any questions. No additional comments were received from the tribe during the 30-day response window.

Air Quality: Aligned has reviewed the air quality de minimis levels documented in 40 CFR 93.153(b) and considered emissions generated at the project site during construction and operation of the solar PV power plant. Aligned expects temporary and transient increases in air pollution as a result of construction activities associated with the project. These sources may include dust and emissions from construction equipment and vehicles. Aligned expects these increases to be sporadic and minimal. Best management practices will be implemented, such as the application of water to suppress dust, washing down construction vehicles and paved roadways immediately adjacent to construction areas, and the allowance of no idle vehicles. No sources of particulate, odorous,

or volatile pollutant emissions are proposed as part of the construction project (i.e. large boilers or generators). The main source of emissions during construction of a plant of this size and scope would be the gravel access road, which is anticipated to take less than 1 week to complete. Aligned has reviewed the equipment utilized during construction and attests to their emissions not exceeding the de minimis levels. Furthermore, best management practices should be utilized to reduce or eliminate construction vehicle emissions or dust generation for the short-term during construction. Long term air quality impacts are not expected; rather, given that the project involves implementing renewable energy generation, overall emissions would be expected to decrease as a result of lower fossil fuel demands for the existing power grid.

Noise: Construction activities will increase some noise levels initially from construction equipment; however, these activities are scheduled to be performed during normal working hours, 7am to 7pm, for a short duration during the construction of the project. Work outside these hours is not anticipated. Therefore, the noise impacts of the project would not be significant.

E. PUBLIC AND AGENCY INVOLVEMENT

A local newspaper advertisement, announcing the availability of the EA and participation under Section 106 of the National Historic Preservation Act, was published on July 22/23, and 25, 2021, in the Union Leader Journal (Hillsborough County, New Hampshire). A copy of the EA is available for public review at <https://www.rd.usda.gov/environmentalstudy/pennichuck-solar-project>. The 14-day comment period ended on August 5, 2021. RUS received no comments on the EA.

F. FINDING OF NO SIGNIFICANT IMPACT

Based on its EA, RUS has concluded that the proposed Project would have no significant impacts to land use, floodplains, wetlands, water resources, coastal resources, biological resources, historic and cultural properties, aesthetics, socioeconomic/ environmental justice, noise, transportation, and human health and safety. The proposed Project will have no effects on historic properties listed or eligible for listing on the National Register of Historic Places and no effects to federally listed species or designated critical habitat. The proposed Project would not disproportionately affect minority or low- income populations.

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 RD's Environmental Policies and Procedures (7 CFR Part 1970), RUS has determined that the environmental impacts 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, RUS will not prepare an Environmental Impact Statement for its potential federal action associated with the proposed Project.

G. RUS LOAN REVIEW AND RIGHT OF ADMINISTRATIVE REVIEW

This Finding of No Significant Impact (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. The ultimate decision on 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 also is 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.

H. APPROVAL

This FONSI is effective upon signature.

Dated:

Christopher A. McLean
Acting Administrator
Rural Development
U.S. Department of Agriculture

Contact Information:

For additional information on this FONSI and EA, go to:
<https://www.rd.usda.gov/environmentalstudy/pennichuck-solar-project>, or contact
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