

FINDING OF NO SIGNIFICANT IMPACT

Madison County Solar Array

Madison County, Nebraska

Rural Utilities Service
U.S. Department of Agriculture

Bluestem Energy Solutions, LLC

Prepared by:
Rural Utilities Service Staff
United States Department of Agriculture

August 2024

A. **INTRODUCTION**

Bluestem Energy Solutions, LLC (Bluestem/Applicant) plans to submit a financing request to the U.S. Department of Agriculture, Rural Utilities Service (RUS) to construct the proposed Madison County Solar Array (Project) in Madison County, Nebraska. RUS is considering this financing request. Prior to taking a federal action (i.e., providing financial assistance), RUS is required to complete an environmental analysis in accordance with the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. §§ 4231–4347), the Council on Environmental Quality’s (CEQ) regulations for implementing NEPA (40 CFR Parts 1500-1508), and RD’s NEPA implementing regulations, Environmental Policies and Procedures (7 CFR Part 1970). After completing an independent analysis of an environmental report prepared by Bluestem and its consultant, RUS concurred with its scope and content. In accordance with 7 CFR § 1970.102, RUS will adopt the report and issue 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. Bluestem 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 (NHPA), 16 USC 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 construct an electric generating facility that would provide 2.00 MW to the rate payers within Madison County. Bluestem proposes to construct the 15-acre facility on a tract of land located southeast of North Main Street and west of US-81. The Project is needed to meet the growing demand for energy production from environmentally friendly and renewable resources, which are essential to achieving the sustainability goals of Nebraska. RUS has reviewed the purpose and need for the Project and determined that the proposal will meet the RUS purpose and need.

C. **ALTERNATIVES EVALUATED**

1. **No Action**

Under the No Action Alternative, RUS will not provide financial assistance to Bluestem, and/or the proposed Project will not be constructed. This alternative will not assist Bluestem in providing clean and renewable energy to the existing electrical grid that would service the rate payers of Madison County, Nebraska.

2. Action Alternative (Preferred Alternative)

Under the Action Alternative, RUS will consider financing the proposed Project, and Bluestem will construct the Madison County Solar Array. The proposed Project will encompass 15 acres of a 68-acre parcel and includes the construction of a 2.00 MW AC and 2.88 MW DC solar array located just north of the City of Madison, Nebraska. The solar array will interconnect to the City of Madison's electric distribution system, and 100 percent of the electricity will be used locally by their rate payers. The Project is located southeast of North Main Street and west of US-81. The Project will contain a solar array with approximately 32 rows and approximately 7,488 Photovoltaic (PV) modules. There will be 26 PV modules per string, 288 strings, 16 strings per inverter, and 16 inverters. The interconnection route will be installed at a depth of approximately 36 to 48 inches through the row crop agricultural field and will connect to the existing overhead power lines along 829th Road.

3. Alternatives Eliminated from Further Consideration

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

The Action Alternative meets the purpose and need and was selected as the Preferred Alternative.

D. SUMMARY OF ENVIRONMENTAL EFFECTS

The analyses in the EA documented that the proposed Project will have no adverse effects to land use, important farmland, formally classified lands, floodplains, wetlands, water resources, coastal resources, biological resources, cultural resources and historic properties, aesthetics, air quality, socioeconomics and environmental justice, noise, transportation, human health and safety, and corridors. A detailed discussion of the resource categories analyzed and the consequences of the implementation of the proposed Project is presented in Chapter 3 of the EA.

A summary of anticipated effects on the human environment for select resources is provided below, including any mitigation measures deemed necessary to avoid or minimize effects. Bluestem is responsible for implementing these measures.

Important Farmland

The entirety of the 15-acre Project site is designated as prime farmland or farmland of statewide importance; however, consultation with the National Resource Conservation

Service (NRCS) concluded that the site does not require further consideration under the Farmland Protection Policy Act (FPPA) and the Project would not result in an adverse effect to important farmland.

Water Resources

The Project is in a Wellhead Protection Area (WHPA). The site would require a Stormwater Pollution Prevention Plan (SWPPP) for soil disturbance and storm water runoff. Proper permits would be obtained to construct in the WHPA and the Project would comply with all local ordinances regarding water quality, resulting in no adverse effect to water resources.

Biological Resources

There is little to no suitable habitat for native vegetation, aquatic species, or terrestrial wildlife within the Project area. There is no suitable habitat for state- or Federally-listed threatened or endangered species within the Project area or the vicinity of the Project. Concurrence with the U.S. Fish and Wildlife Service (USFWS) and the Nebraska Game and Parks Commission (NGPC) was received for determinations of Not Likely to Adversely Affect the monarch butterfly and No Effect to all other state- and Federally-listed species. There is little to no suitable habitat for migratory birds and bald eagles within the Project area or the vicinity of the Project. The Project would use low reflective solar panels to avoid adverse effects to migratory birds. There is low potential for invasive herbaceous species to establish during construction due to ground disturbing activities, but all disturbed ground would be reseeded upon completion of the Project with native seed mix to prevent the establishment of invasive species.

The effects of the proposed Project will range from negligible to minor for all resources analyzed. Soil disturbance, stormwater runoff, dust, noise, and traffic will be minimized through the implementation of best management practices. After construction is complete, disturbed areas which are not needed for facility operations will be restored to their prior condition, or better, using a native seed mix.

Cultural Resources and Historic Properties

Due to the ground disturbance activities associated with the Project, the Nebraska State Historic Preservation Officer (NeSHPO) requested a Phase II archeological survey for the property. No previously recorded cultural resources or archaeological sites were noted in the records; however, three (3) previously eligible structures were noted within one (1) mile of the Area of Potential Effect (APE). No archaeological sites or isolated occurrences were identified within the APE. RUS determined that there would be no significant cultural

resources impacted by construction of the Project, with NeSHPO concurrence. The effects determination includes visual impacts associated with the eligible historic properties in the vicinity of the APE. To date, there has been no response received from the intergovernmental review consultation request sent to Federally recognized American Indian Tribes.

E. PUBLIC AND AGENCY INVOLVEMENT

A Notice of Availability (NOA), announcing the availability of the EA and participation under Section 106 of the National Historic Preservation Act, was published on August 12, 13, and 14 in Norfolk Daily News, Norfolk, Nebraska. A copy of the EA was made available for review at <https://www.rd.usda.gov/resources/environmental-studies/assessment/madison-county-solar-array>. The 14-day comment period ended on August 25, 2024. RUS did not receive comments.

F. FINDING OF NO SIGNIFICANT IMPACT

Based on its EA, RUS has concluded that the proposed Project will have no significant effects to land use, important farmland, formally classified lands, floodplains, wetlands, water resources, coastal resources, biological resources, cultural resources and historic properties, aesthetics, air quality, socioeconomics and environmental justice, noise, transportation, human health and safety, or corridors. 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 will not disproportionately affect minority or low-income populations.

In accordance with the National Environmental Policy Act, as amended, the Council on Environmental Quality Regulations, and RD's Environmental Policies and Procedures, 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 will 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 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 FONSI or the agency's other environmental determinations. Legal challenges to the FONSI may be filed in Federal District Court under the Administrative Procedures Act.

H. **APPROVAL**

This Finding of No Significant Impact is effective upon signature.

Dated: 08/27/2024

Christopher McLean
Assistant Administrator
Rural Utilities Service
USDA Rural Development

Contact Person

For additional information on this FONSI and EA, please contact RUS.EHPD.IRA@usda.gov.