

**FINDING OF NO SIGNIFICANT IMPACT**

**Proposed Solar Power Generation Project**

**City of Alliance, Box Butte County, Nebraska**

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

**SE Municipal Solar, LLC**

**Prepared by:  
Terracon Consultants, Inc.**

**For:  
Engineering and Environmental Staff  
Rural Utilities Service**

**August 2023**

## **A. INTRODUCTION**

SE Municipal Solar, LLC (SE Municipal Solar, LLC) plans to submit a financing request to the U.S. Department of Agriculture, Rural Utility Service (RUS) to construct a solar power generating facility and connect to Alliance's electric grid. The proposed facility will be placed on land owned by Alliance, connecting to its municipal electric distribution system. The proposed project area is approximately 1.5 miles west of Alliance and consists of a 60-acre tract of farmland located approximately 1,700 feet west of the intersection of Country Club Road and County Road 62 in Box Butte County, NE. No transmission lines are being proposed in association with this project. RUS is considering this financing request. Prior to taking a federal action (i.e., providing financial assistance), 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 CFR Parts 1500-1508), and Rural Development's (RD) NEPA implementing regulations, Environmental Policies and Procedures (7 CFR Part 1970). After completing an independent analysis of an environmental report prepared by SE Municipal Solar, LLC, 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. SE Municipal Solar, LLC 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 60-acre site will be developed for distributed solar power generation, which includes the solar panels and associated support structures (racking), electrical inverters/transformers, buried electrical conduit, access apron, and security fencing. The proposed solar generation facility will be placed on land owned by Alliance, connecting to its municipal electric distribution system. The project will deliver its generation to a transformer on site and will connect to its distribution system. Power will not be exported from the Alliance's electric distribution system. SE Municipal Solar will be responsible for running a buried connection line to the point of interconnection to Alliance's grid. Alliance's municipal utility will be responsible for providing a transformer at the point of interconnection and connecting it to its distribution system. There will be no transmission lines constructed in association with this project.

The purpose of the project is to construct a distributed generation facility that will produce and supply the City of Alliance with up to five percent of its annual energy usage, per the existing power purchase agreement (PPA) with SE Municipal Solar, LLC. The project will enable Alliance to lock in a competitive price for electricity over the next 25 years.

## **C. ALTERNATIVES EVALUATED**

### **1. No Action**

Under the No Action Alternative, RUS would not provide financial assistance to SE Municipal Solar, LLC, and the site would not be developed with a solar facility. The City would not receive the required distributed power in accordance with the PPA with SE Municipal Solar. The anticipated generation from this potential alternative energy/solar source would not be available, and Alliance would then have to seek alternative electric generation sources to meet anticipated need to replace existing power supply contracts that will come to an end. The project area would continue as agricultural land. The no-action alternative does not achieve the project's purpose and need.

## **2. Action Alternative (Preferred Alternative)**

Under the Action Alternative, RUS would consider financing the proposed project, and SE Municipal Solar, LLC will construct and operate a 9.4-MW DC PV solar energy power system for the City of Alliance. The project involves installation of ground mounted photo voltaic (PV) solar arrays of various kilowatt (kW) sizes using single axis trackers as detailed in the site plans in Appendix B of the EA. The layout areas have been previously disturbed through either agricultural activities or prior construction (shelterbelts, overhead power lines, wells and wellhouses) in the area. Each array will have driven posts for mounting of the racking with cross pieces for the actual module installation. The posts for racking will be in rows with the posts generally 8—10 feet apart and 4—6 feet deep, posts are generally 3 inches in diameter. Each row of racking will be connected by a trench along the edge of the array, the trench from each portion of the array will extend to the location of the transformer on a concrete pad, where the City will take control of the energy generated. The trenches will be 18—24 inches deep and 12 inches wide. The ground disturbance will also include an area for project construction staging including parking and equipment/component storage. This area will receive heavy traffic and may be rutted at times. Ground-located facilities will be surrounded by perimeter safety fencing and will feature internet accessible Supervisory Control and Data Acquisition (SCADA) readouts. Access to the facility for construction and operations will be from existing two-track access roads. The areas where arrays will be installed on driven piles will be accessed by vehicles driving on the existing ground surface. No grading for roads will be required and no new roads will be constructed. The buried medium voltage (MV) electric line that will connect the arrays to Alliance's grid will involve trenching within the defined project area for approximately 2,150 feet. The MV line will connect to an existing overhead power line located on the northeast corner of the project area via a new transformer on a concrete pad.

## **3. Alternatives Eliminated from Further Consideration**

Wind power generation was not considered for this site because there is insufficient space to accommodate the number of turbines needed to generate 9.4 MW. Geothermal power generation was not considered because of the larger scale energy need that likely would not be met using geothermal sources.

## **D. SUMMARY OF ENVIRONMENTAL EFFECTS**

The analyses in the EA documented that the proposed project would have no adverse effects to land use, important farmland, formally classified lands, floodplains, wetlands, water resources, coastal resources, biological resources, cultural/historic resources, air quality, social impact and environmental justice, noise, transportation, aesthetics, 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. SE Municipal Solar, LLC is responsible for implementing these measures.

### **General Land Use**

Land use within the project area will change from agriculture to solar power generation. The zoning classification will need to be modified and a conditional use permit will be required from Box Butte County.

### **Formally Classified Lands**

There are no FCL's within the project boundary; therefore, no impacts to FCL's are anticipated.

### **Important Farmland**

Based on the completed AD-1006, the rating for the project area was calculated by the Natural Resources Conservation Service in Lincoln, NE at 150. Sites with a rating less than 160 will need no further consideration for protection and no additional valuation is necessary.

**Floodplains**

The site is mapped by Federal Emergency Management Agency as being outside of the 500-year floodplain. No impacts to floodplains will occur.

**Wetlands**

No wetlands are present within the project area; therefore, no impacts to wetlands will occur.

**Water Resources**

The City of Alliance's water wells are near the project area. A moratorium on the development of high-capacity wells, greater than 50 gallons per minute is in place for the project site. The project will not consume groundwater, nor will new wells be required. The construction and operation of the facility will not impact groundwater.

There are no surface waters within the project area, therefore, no impact to surface water will occur. The applicant will implement a Storm Water Pollution Prevention Plan (SWPPP) to minimize potential for pollutants to be washed off the site as required by Nebraska's Construction Stormwater General Permit.

**Biological Resources - General Fish, Wildlife and Vegetation**

The project is not expected to have any long-term effects to general fish, wildlife, and vegetation resources. While the construction of the project may result in short-term temporary displacement impacts to wildlife species that may forage in the area, the reduced use of herbicides due to the change in land use from agricultural to renewable power generation may result in beneficial ecological impacts over time. A weed management plan will be developed by the applicant that specifies post-construction measures to be taken to identify and manage noxious weed species until the site is revegetated with the desirable species. These measures may include overseeding, controlled grazing or chemical treatments depending on the species identified and the desired measure of control.

**Biological Resources - Listed Threatened and Endangered Species**

Species listed as threatened or endangered, or proposed for listing under the Endangered Species Act have not been observed on the site. The USFWS has identified the potential for northern long-eared bats, piping plovers, and blowout penstemon to potentially be present in the region. Based on the absence of habitat these species require, the USDA determined the project will have no effect on federally listed species and consultation with USFWS is not required.

The three federally listed species are also listed on the State's T&E species list. One state-listed species is not federally listed (swift fox). The Nebraska Game & Parks Commission reviewed the EA findings and acknowledged the "no effect" determinations to all four listed species.

**Biological Resources – Bald and Golden Eagles/Migratory Birds**

There are no large trees suitable for roosting or nesting within the project area. Impacts during construction are unlikely as construction noise and the presence of people will likely cause eagles and other migratory bird species to avoid the area and due to the lack of suitable habitat. No new overhead powerlines are planned for this project; therefore, no impacts are anticipated.

**Biological Resources - Invasive Species**

Revegetation efforts should utilize species that are endemic to the area and are suitable for the soil type that exists at the site. Reseeding efforts should also be initiated as soon as practical after construction is completed, and should include, in addition to grasses, native forbs and pollinator species to occupy the niches that invasive

weeds may otherwise colonize. An increase in weed species is expected for the first one or two growing season after construction. A weed management plan will be developed by the applicant that specifies post-construction measures to be taken to identify and manage noxious weed species until the site is revegetated with the desirable species. These measures may include overseeding, controlled grazing or chemical treatments depending on the species identified and the desired measure of control.

### **Cultural Resources and Historic Properties**

In August 2022 a Phase II intensive cultural resources investigation of the Alliance project area (Archeology Laboratory of Augustana 2022) was conducted. The Phase II Cultural Resources Investigation Report was submitted to the Nebraska SHPO. The report included the recommendation for no further archeological work and a determination of No Historic Properties Affected (Augustana 2022). The Nebraska SHPO provided a concurrence with the recommendation by letter to the applicant on August 24, 2022.

To comply with tribal consultation requirements under EO 13175 the applicant sent letters requesting comments to 10 federally recognized tribes. Tribes who may have an interest in evaluating the project's effects to cultural or archeological resources were requested to participate. Dates and responses associated with Section 106 consultation are provided in Chapter 6, Table 6 of the EA. In the event of inadvertent discoveries during construction, ground-disturbing work will cease, and the SHPO and the 10 federally recognized tribes will be contacted.

### **Aesthetics**

Construction will cause minor long-term and short-term impacts to aesthetics. After the arrays are constructed, they may be visible from the neighboring two residences and from the West Side Events Center to the southeast. Since the arrays will be low on the horizon and will not obstruct view of the surrounding landscape, visual impacts are considered not significant. There are no visually sensitive areas within or near the site, therefore, no such resources will be affected by the project.

### **Air Quality**

The project area is currently in attainment and therefore no additional mitigation measures are required for development. Additionally, there would be no long-term air quality effects associated with routine operation of the solar farm. Construction of a solar site could alternatively reduce air emissions, as this is a renewable energy project. If dust is generated during construction, it will be controlled by applying water.

### **Socio-Economic Impacts Assessment/Environmental Justice**

Temporary jobs would be created for construction workers during construction activities, as well as site maintenance and groundskeeping activities. The project will result in creating consistent electricity costs for the City of Alliance over the life of the power purchase agreement.

### **Noise**

Noise impacts during construction of the proposed project would be short-term in duration and limited to daytime hours. Construction would involve driving steel piles into the ground. Equipment used would include mechanical pile drivers. Based on distance from receptors, noise is expected to be audible by the workers and by the adjacent residents during pile driving; this impact would be short-term and would occur only during daytime hours.

### **Traffic and Transportation**

During periods of construction, there will likely be increased truck traffic on Country Club Road and County Road 62 during daylight hours as equipment, materials and personnel arrive and depart. No street closures are

anticipated and areas adjacent to the proposed project will remain accessible to property owners; therefore, no impact would be anticipated to property owners along County Road 62 that runs north/south near the project site.

### **Human Health and Safety**

A Phase I Environmental Site Assessment was prepared in accordance with ASTM E1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process in August 2022. The Phase I Environmental Site Assessment reviewed the site and adjoining properties for the potential of contaminants of concern associated with current and historic use of the site and surrounding properties. The assessment concluded that no Recognized Environmental Conditions (RECs) or Controlled RECs (CREC) were identified in connection with the site, by activities conducted on the site or by adjacent properties/activities.

During construction, all federal and state government and OSHA regulations will be adhered to. Workers will wear protective equipment such as hard hats, ear and eye protection, and safety boots. Perimeter fences and controlled access will remain in place throughout the construction and future operation of the project and the general public will not be allowed to enter any construction areas associated with the proposed project as a mitigative measure.

### **Climate Change/Greenhouse Gases**

The operation of the Proposed Action has a potential to reduce the need for additional energy sources that generate greenhouse gases, allowing for a beneficial impact. Local solar power generating facilities can provide educational opportunities to residents that will promote the conversion (over time) from non-renewable fossil fuels to forms of renewable energy.

### **E. PUBLIC AND AGENCY INVOLVEMENT**

Letters requesting comments from tribes and agencies were distributed during the preparation of the draft EA. Comments received were incorporated into the draft EA and were used to assist with the development of mitigation measures to ensure no significant adverse impacts to important resources. The availability of the EA for public review was announced via notice in the Alliance Times Herald on July 19 and 26, 2023. A 14-day comment period was announced in the newspaper notices which ended on August 2, 2023. The EA was also available for public review at the USDA Rural Development office and website at <https://www.rd.usda.gov/resources/environmental-studies/assessments>. No comments were received.

### **F. FINDING OF NO SIGNIFICANT IMPACT**

Based on its EA, RUS has concluded that the proposed project would have no significant impacts to water quality, wetlands, floodplains, land use, aesthetics, transportation, or 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 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 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 Finding of No Significant Impact is effective upon signature.

Christopher McLean  
Assistant Administrator  
Rural Utilities Service  
USDA Rural Development

#### **Contact Person**

For additional information on this FONSI and EA, please contact Robert Deems, Environmental Protection Specialist at [Robert.Deems@usda.gov](mailto:Robert.Deems@usda.gov).