

FINDING OF NO SIGNIFICANT IMPACT

Proposed Solar Power Generation Project

City of Sidney, Cheyenne County, Nebraska

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

SE Municipal Solar, LLC

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

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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 Sidney's electric grid. The proposed facility will be placed on land owned by Sidney, connecting to its municipal electric distribution system. The site is situated in the Nebraska panhandle approximately 9 miles north of the Colorado border and approximately 55 miles east of the Wyoming border. 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, on February 8 and 15, 2024. 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 facility will be built on land owned by the City of Sidney and leased to SE Municipal Solar. The energy generation system (Proposed Action) would include the construction and operation of a 4,486-kilowatt (kW) direct current (DC) photo voltaic (PV) solar energy power system.

The 22-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 Sidney, connecting to its municipal electric distribution system.

The project will deliver its generation to a transformer on site. Power will not be exported from Sidney's electric distribution system. The point of interconnection (POI) would be located adjacent to the site's southern boundary on the north side of Elm Street. SE Municipal Solar will be responsible for running a buried connection line to the point of interconnection to Sidney's grid. There will be no transmission lines constructed in association with this project.

The purpose of the project is to construct a renewable distributed generation facility that will produce and supply the City of Sidney 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 Sidney 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 Sidney 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 4.4-MW DC PV solar energy power system for the City of Sidney. 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 is subject to change within the fenced area. The 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 to 10 feet apart and 4 to 6 feet deep; the posts are generally 3 inches in diameter. Each row of racking would be connected by a trench along the edge of the array, the trench from each portion of the array would then extend to another trench along the edge of the array, and the trench from each portion of the array would extend to the location of the transformer on a cement pad where the city will take control of the energy generated. The trenches would be 18 to 24 inches deep and 12 inches wide. The ground disturbance would also include an area for project construction staging as well as parking and equipment/component storage. This area would receive heavy traffic and may be rutted at times. A perimeter fence would be installed around the solar facility. A trench (18 to 24 inches deep and 12 inches wide) would be extended approximately 30 feet outside of the southern boundary for the underground MV (medium voltage) cable to connect to a substation that abuts the site, the point of interconnection. Ground-located facilities will be surrounded by perimeter safety fencing and will feature internet accessible Supervisory Control and Data Acquisition (SCADA) readouts. An ingress/egress driveway will also be installed in this area to connect the site to Elm Street. No other ground disturbance outside of project boundaries is anticipated.

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 4.4 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

This parcel is within Sidney city limits and is currently zoned as Light Manufacturing and Industrial Park (M-1). The proposed use of the site as a solar farm is consistent with the current zoning designation.

Formally Classified Lands (FCL's). No FCLs were identified within or immediately adjacent to the proposed project area; 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 (see Appendix F of the EA). The NRCS reviewed the proposed site and determined that the site and activities and the site itself have a combined rating of 95. The rating was provided on June 30, 2022. The FPPA law states that sites with a rating less than 160 need no further consideration for protection and no additional evaluation is necessary.

Floodplains

Because there are no mapped floodplains within the project area, no impacts to floodplains will occur under the No Action or Preferred Alternatives. Based on correspondence with the City of Sidney's floodplain administrator, the project area is within FEMA Zone C, which is above the anticipated 500-year flood elevation. A detailed analysis of floodplains is not required.

Wetlands

On August 22, 2023, a wetland field delineation was conducted. No wetland or drainages were identified during the field delineation. The Wetland Delineation Report is provided in Appendix C of the EA. No wetlands are present within the project area; therefore, no impacts to wetlands will occur.

Water Resources

The City of Sidney'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 piping plovers, whooping cranes, and western prairie fringed orchids, 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. Two state-listed species are not federally listed (swift fox and mountain plover). The Nebraska Game & Parks Commission reviewed the project description and location and acknowledged the "no effect" determinations to state-listed species on August 29, 2023 through its CERT website (NE-CERT-010584) found in Appendix A of the EA.

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 Sidney 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.

In December 2022, the site boundary was adjusted to increase the size of the site, therefore, the 5 tribes were given the opportunity to review the changes. A response was received on January 20, 2023, from Ms. Teanna Limpy with the Northern Cheyenne Tribe indicating a formal determination of "No Adverse Effect" regarding this undertaking. See Appendix F for Agency and Tribe correspondence.

To comply with tribal consultation requirements under EO 13175 the applicant sent letters requesting

comments to 5 federally recognized tribes: Apache Tribe of Oklahoma; Arapaho Tribe of the Wind River Reservation, Wyoming; Cheyenne and Arapaho Tribes, Oklahoma; Comanche Nation, Oklahoma; and the Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation, Montana. 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.

If buried cultural resources are discovered during construction activities, construction activity would immediately cease within a 50-foot buffer radius and the 5 tribes, SHPO and RUS would be notified within 24 hours. The 50-foot buffer area would be demarcated by high-visibility construction fencing. Construction within the 50-foot radius of the find would not continue until notification from RUS is received. An inadvertent discovery plan should be developed and kept onsite during construction and maintenance activities. The construction and maintenance crews should be familiar with the plan and its contents, such that they can take action if an inadvertent discovery is made.

Aesthetics

After the arrays and supporting equipment are constructed, they may be visible from Elm Street to the south and from the cemetery to the east. The facility is not likely to be visible from residences to the west and southwest due to existing commercial structures between the residences and the proposed site.

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. Construction of a solar site could alternatively reduce long-term air emissions by power generation as it provides renewable energy as opposed to energy derived from sources that generate greenhouse gases.

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 operation of the Proposed Action could result in economic benefit to the residents of Sidney by implementing an additional, reliable energy source to the area and by locking in a competitive price for electricity over 25 years, which would result in lower electricity costs 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. The nearest sensitive noise receptor is the neighborhood approximately 1,600 feet southwest of the site. Based on distance and the presence of applicable buffers, construction noise would have no anticipated significant adverse impact to the sensitive noise receptor.

Traffic and Transportation

During construction of the Proposed Action, additional traffic is anticipated associated with construction worker commutes and equipment being brought on and off site. There are businesses adjacent to the project area and interference with access to businesses near the site will be avoided. No street closures are anticipated and areas adjacent to and in the vicinity of the proposed project should remain accessible to property owners and visitors. If applicable, the contractor would obtain an Oversize/Overweight Truck Permit from NDOT and/or Cheyenne County to comply with local and state transportation regulations. Post-construction, there would not be any notable increases in traffic from current conditions since the project area will not be staffed. Traffic associated with the operation of the facility should be limited to occasional maintenance and repair which would require passenger and light-duty vehicles, and if needed a larger vehicle (oversize/overweight) if larger portions of the system need to be replaced. No short- or long-term significant impacts to transportation are anticipated.

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 July 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 Sidney Times Herald on February 8 and 15, 2024. A 14-day comment period was announced in the newspaper notices which ended on February 22, 2024. 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 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 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
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Contact Person

For additional information on this FONSI and EA, please contact
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