

FINDING OF NO SIGNIFICANT IMPACT

Apex Solar Project
Beaverhead County, Montana

RURAL UTILITIES SERVICE
United States Department of Agriculture

Apex Solar LLC

Prepared by:
Engineering and Environmental Staff
Rural Utilities Service

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A. INTRODUCTION

Apex Solar LLC (Apex) plans to submit a financing request to the U.S. Department of Agriculture (USDA) Rural Development's Rural Utilities Service (RUS) to construct the proposed Apex Solar Project (project) in Beaverhead County, Montana. 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 RUS's NEPA implementing regulations, Environmental Policies and Procedures (7 CFR Part 1970).

After completing an independent analysis of an environmental report prepared by Apex 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. Apex 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. PURPOSE AND NEED

The overall purpose of this project is to provide solar-generated energy to the existing electrical grid in Beaverhead County, Montana. In July 2021, Apex signed a power purchase agreement (PPA) with NorthWestern Energy. A PPA is an agreement under which a developer (in this case, Apex) owns and operates the photovoltaic (PV) system while a host customer (in this case, NorthWestern Energy) agrees to purchase the system's electric output from the developer for a certain period. Under the PPA between Apex and NorthWestern Energy for this project, the reliable, economical, and renewable solar energy provided would help western Montana meet the state's existing and future electricity needs. Project objectives include providing safe and reliable power to 30,000 households annually, reducing dependence on fossil fuels, improving system stability, and providing voltage support during contingencies.

RUS has reviewed the applicant's purpose and need for the project and determined that the proposal will meet the present and future needs of Apex.

C. ALTERNATIVES EVALUATED

No Action Alternative

Under the No Action Alternative, RUS would not provide financial assistance to Apex, and/or the proposed project would not be constructed. This alternative would not assist Apex in providing renewable energy sourced from the project area to meeting increasing demand for electricity and reduce the need for fossil fuels.

Action Alternative (Preferred Action)

Under the Action Alternative, RUS would consider financing the proposed project and Apex would construct and operate an 80-Megawatt (MW) utility-scale solar power-generating facility on private land

in Beaverhead County, approximately 5 miles west of Dillon, Montana. The facility would have a maximum footprint of 639 acres on private land owned by a single landowner. The project would utilize approximately 160,000 solar photovoltaic (PV) modules (Waaree 590W bifacial modules or a similar module) to convert energy from sunlight to direct current (DC) electricity. The modules would be dark blue or black with minimal light reflection and would individually cover approximately 130 acres of land.

The modules would be mounted on single-axis frames or “trackers” that rely on motors and actuators to rotate along a north-south axis with the sun’s movement from the east in the morning to the west in the evening. The modules would be grouped together in solar arrays. The arrays would generally be installed linearly in rows approximately 7 meters apart as allowed by topography and other environmental constraints. The solar panels would reach a maximum height of 15 feet during rotation. Current engineering and design for the proposed project includes fencing around the solar arrays and the roads between and around the arrays. This setup would accommodate NorthWestern’s existing power lines and allow employees of that company to access its lines and poles along its right-of-way (ROW) without breaching the proposed project area.

The solar modules would be connected to solar inverters that convert DC electricity to alternating current (AC) electricity. The inverters would then be joined in series and parallel and ultimately connect to the project substation. Within the project substation, a main power transformer would step up the voltage to 161 kV for interconnection to the existing NorthWestern Energy transmission system at the existing Dillon-Salmon Substation. The project substation would occupy approximately 5 acres and be located within a security fence. A large utility transformer would be required for the project. Additional equipment would include circuit breakers, metal-enclosed switchgear, a disconnect switch, a safety grounding system, and a transition structure to the overhead power line. The project substation would be adjacent to NorthWestern Energy’s Dillon-Salmon Substation, and an approximately 500-foot-long 161-kV gen-tie would span the area between the two substations.

Within the project site, new temporary roads and a lay down yard would be constructed to support project construction and operation; no permanent roads would be constructed. The number and length of the roads would be minimized to the extent possible to reduce surface disturbance. Apex anticipates that the new roads would cover approximately 75 acres total.

Alternatives Eliminated from Further Consideration

In addition to the No Action Alternative and Action Alternative, Apex considered other siting alternatives which are documented in Section 2.2 of the EA.

D. SUMMARY OF ENVIRONMENTAL IMPACTS

The analyses in the EA documented that the proposed project would have no adverse effects to land use, floodplains, wetlands, water resources, coastal resources, biological resources, cultural/historic resources, aesthetics, air quality, social impact and environmental justice, noise, transportation, human health and safety, corridors, and soils. A summary of anticipated impacts on the human environment is provided below, including any mitigation measures deemed necessary to avoid or minimize impacts, as summarized in Table 1. Apex is responsible for implementing these measures.

Floodplains. The FEMA Flood Insurance Rate Map (FIRM) of Beaverhead County, which is the currently effective FIRM map, revealed that FEMA has not mapped the analysis area. The Panel Number 30001CIND1A of the preliminary FEMA FIRM of Beaverhead County issued on January 15, 2020, shows the analysis area is in a minimal flood hazard area. The analysis area is not within any 100-year or 500-year floodplain, and consultation and coordination with Beaverhead County confirmed that the project site does not lie within a floodplain. Therefore, the proposed action would result in no direct or indirect impacts to any identified floodplains and no mitigation is proposed.

Wetlands. During the project's scoping period, the USACE indicated that the project area may contain jurisdictional waters of the U.S., including wetlands, and requested that the project area undergo evaluation for the presence of wetlands. Wetland delineations took place in the project area in June 2021 according to protocols in the USACE's 1987 Wetlands Delineation Manual and 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region. No wetlands were identified in the project area during the delineations (Appendix C of the EA). The June 2021 wetland delineations revealed that the areas represented by the NWI's polygons for the project area are actually upland swales with no wetlands or waterbodies with ordinary high-water marks (OHWMs). The proposed action alternative would not impact any wetlands because the analysis area does not contain any wetlands or other potentially jurisdictional waters of the U.S. and no mitigation is proposed.

Water resources. Under the proposed action, an estimated 750,000 gallons of water would be required for dust mitigation and soil compaction during construction. Personnel would discharge such water slowly and over a large area to minimize any potential for accumulation of surface runoff. Apex would determine the placement of structures within the project area during final project engineering and design. Apex intends to maintain and preserve natural drainage patterns to the extent possible. Workers would likely build panels over some of the upland swales within the project area. Trackers would be installed outside of the upland swales via pile driving, and panels would be installed 5 to 7 feet above the ground. Erosion, stormwater, and pollution control measures would be implemented in accordance with the project's Storm Water Pollution Prevention Plan (SWPPP) (Appendix A of the EA) prior to ground disturbing activities. These measures would minimize ground disturbance near upland swales to the extent practicable and impacts to existing drainage patterns in the Lower Rattlesnake Creek Watershed would not be anticipated. Therefore, the proposed action would not impact the existing water drainage within the Lower Rattlesnake Creek Watershed.

As a result of site preparation, including soil disturbance during grading, the proposed action may result in short-term, minor water quality impacts to surface water features within the Lower Rattlesnake Creek Watershed. These impacts could arise during precipitation events that mobilize and convey sediments exposed during project construction and/or on unpaved project roads. Rainfall and/or runoff events may convey sediments into Rattlesnake Creek via intermittent streams in or adjacent to the project area. Runoff may cause increased turbidity and localized sedimentation of the stream bottom. Construction methods such as grading along existing contours and leaving roots intact would minimize soil and vegetation disturbance during construction. For any large amount of sediment to reach Rattlesnake Creek, the sediment would have to travel approximately 3 miles south of the project area through the intermittent streams that drain the area into Rattlesnake Creek. Because the proposed action would involve more than 1 acre of ground disturbance, the Montana Department of Environmental Quality (MDEQ) would require coverage under the Montana Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction Activity. This would require the preparation of a SWPPP and implementation of Best Management Practices (BMPs) to reduce sediment-laden runoff from entering surface waters. The SWPPP would also serve as an erosion and sediment control plan. BMPs included in the SWPPP would minimize the potential impact of construction and operation of the project on the water quality of Rattlesnake Creek. Appendix A contains a draft of the SWPPP for the proposed project.

The SWPPP Apex prepares to meet MDEQ requirements for this project would also serve as an erosion and sediment control plan. The plan would provide the general contractor with the framework for reducing soil erosion and minimizing the potential impact of stormwater pollution from common activities and sources at construction sites. Specifically, the SWPPP would detail the structural and non-structural BMPs Apex selects to control erosion associated with surface stormwater discharges during construction, decrease the volume and rate of stormwater runoff, and increase pollution attenuation after construction.

Threatened and Endangered Species. A natural resources field survey was conducted in June 2021 to assess the proposed solar facility for the presence of suitable habitats for federally listed threatened and endangered species. No designated critical habitat was identified for Beaverhead County. An informal USFWS Information for Planning and Consultation (IPaC) project area review conducted in June 2021 listed only Canada lynx as potentially occurring in the county. However, for this EA, the four Endangered Species Act (ESA) species identified in the USFWS Section 7 consultation letter were assessed (Ute-ladies'-tresses, grizzly bears, Canada lynx, or whitebark pine). Surveys for these ESA-listed species and their habitat took place in June 2021. The field survey did not identify any suitable habitat in the project area for Ute-ladies'-tresses, grizzly bears, Canada lynx, or whitebark pine. No individuals were documented either. Since the proposed action would have no direct or indirect effects on any ESA-listed species, formal Section 7 consultation with USFWS and preparation of a biological assessment were not required for this analysis. A determination of no effect does not require USFWS concurrence.

The USFWS identified the potential for migratory bird habitat to occur in the project but mentioned no specific species in the agency's public scoping response for the project (see Appendix D of the EA). The results of the June 2021 IPaC review of the project area identified bald eagle, golden eagle, and long-billed curlew as migratory birds that may occur in the project area. A long-billed curlew nest containing two eggs was identified during the June 2021 natural resources surveys in the project area, specifically in the NE¼ NW¼ Section 18, T7S, R9W (Appendix C of the EA). The long-billed curlew is a Montana species of concern (MTSOC). A turkey vulture was also observed during the field surveys. No bald eagle or golden eagles or other migratory bird species or their nests were observed in the project area during the field surveys.

To avoid impacts to the long-billed curlew, Apex would not engage in ground-disturbing activities in undisturbed grassland areas within the project area from March 15 through July 15. Ground-disturbing activities may take place within the avoidance time frame if blading, mowing, or vegetation clearance renders the habitat unsuitable for nesting before March 15. If the habitat cannot be rendered unsuitable prior to March 15 and ground disturbing activities are scheduled to occur within the avoidance time frame, then long-billed curlew nesting surveys will be conducted no more than 1 week prior to the construction start date. If no active nests are observed during the survey, then the habitat will be bladed, mowed, or cleared within 1 week of the survey and ground disturbing activities may occur during the avoidance window. If an active nest is identified during the survey, then a 200-meter buffer will be placed around the nest and no activities will occur within this buffer until a biologist confirms that the nestlings have fledged and the nest has become inactive. Outside of that 200-meter buffer around the nest, the habitat may be bladed, mowed, or cleared to allow for ground disturbing activities.

Cultural and historic properties. The Montana State Historic Preservation Office (SHPO) was notified of the project on April 9, 2021. The SHPO determined that the proposed project will not affect any property listed or determined eligible for listing in the National Register and concurred with the findings of the project on July 21, 2021. The following Tribes were notified of the project on April 9, 2021: Apache Tribe of Oklahoma; Confederated Salish and Kootenai Tribes of the Flathead Reservation; Fort Belknap Indian Community of the Fort Belknap Reservation of Montana; Nez Perce Tribe; Shoshone Tribe of the Wind River Reservation, Wyoming; Shoshone-Bannock Tribes; and Shoshone-Bannock Tribes of the Fort Hall Reservation.

SWCA provided the Class III cultural resources inventory report to the Tribes on June 22, 2021. On behalf of RUS and consistent with applicable regulations and guidance of the NHPA, SWCA followed up through emails to solicit input and provide project updates to the Tribes throughout the NEPA process. All concerns were resolved through tribal consultation.

RUS submitted a finding letter of no historic properties affected on October 5, 2021, in accordance with 36 CFR § 800.4(d)(1) to the six Tribes consulted for the project. The letter included the Class III cultural resources inventory report and requested concurrence or objection from the Tribes within 30 days of their receipt of that letter. The comment period ended on November 4, 2021. No other responses from the Tribes have been received. Apex would consult with the SHPO and the consulting parties to develop an undertaking-specific inadvertent discovery plan. The plan would outline the process for addressing discoveries that may be exposed during ground-disturbing activities. Due to the interest in the project and area by the consulting parties, input from the consulting parties will be solicited in development and implementation of an inadvertent discovery plan. The Class III cultural resources inventory report was also provided to SHPO on November 18, 2021. SHPO concurred with the findings and report on December 7, 2021.

Table 1. Summary of Mitigation for the Proposed Action

Resource	Mitigation Measure
Water resources	The SWPPP Apex prepares to meet MDEQ requirements for this project would also serve as an erosion and sediment control plan. The plan would provide the general contractor with the framework for reducing soil erosion and minimizing the potential impact of stormwater pollution from common activities and sources at construction sites. Specifically, the SWPPP would detail the structural and non-structural BMPs Apex selects to control erosion associated with surface stormwater discharges during construction, decrease the volume and rate of stormwater runoff, and increase pollution attenuation after construction.
Biological resources	<p>To avoid impacts to the long-billed curlew, Apex would not engage in ground-disturbing activities in undisturbed grassland areas within the project area from March 15 through July 15. Ground-disturbing activities may take place within the avoidance time frame if blading, mowing, or vegetation clearance renders the habitat unsuitable for nesting before March 15. If the habitat cannot be rendered unsuitable prior to March 15 and ground disturbing activities are scheduled to occur within the avoidance time frame, then long-billed curlew nesting surveys will be conducted no more than 1 week prior to the construction start date. If no active nests are observed during the survey, then the habitat will be bladed, mowed, or cleared within 1 week of the survey and ground disturbing activities may occur during the avoidance window. If an active nest is identified during the survey, then a 200-meter buffer will be placed around the nest and no activities will occur within this buffer until a biologist confirms that the nestlings have fledged and the nest has become inactive. Outside of that 200-meter buffer around the nest, the habitat may be bladed, mowed, or cleared to allow for ground disturbing activities.</p> <p>Apex would develop a weed management plan for the project and would implement measures to manage noxious weeds.</p>
Cultural and historic resources	Apex would consult with the SHPO and other pertinent parties to develop an undertaking-specific inadvertent discovery plan. The plan would outline the process for addressing discoveries that may be exposed during ground-disturbing activities. Due to the interest in the project and area by the consulting parties, continued involvement and input from the consulting parties would be needed in development of a discovery plan.

Resource	Mitigation Measure
Aesthetics	<p>To reduce the degree of visual impact of the project, Apex will implement mitigation measures where visual disturbance associated with construction, O&M, and decommissioning is inevitable. This includes limiting soil and vegetation disturbance, applying appropriate color treatments and minimizing the use of lighting at night. Workers can reduce the primary visual impacts from construction (i.e., dust caused by grading, on-site traffic, and hundreds of workers present at the site during construction) by using dust-abatement measures, such as vehicle speed restriction and watering of active areas and roadways. Soils within and around the analysis area are sensitive to erosion; therefore, Apex will limit the amount of water used to manage the dust to avoid altering the form of the landscape.</p> <p>Apex will design the solar generation facility, substation, and O&M structures to blend in with the existing surrounding landscape (i.e., the Pioneer Mountains). This would require certain colors, lighting, and surface treatments.</p> <p>To reduce visual impacts from the proposed project, Apex will:</p> <ul style="list-style-type: none"> • minimize the extent of soil and vegetation disturbance to the extent practicable; • minimize lighting usage during construction and O&M; • restore the site to its original contours while minimizing disturbance to soils; and • re-seed and plant vegetation in disturbed areas in accordance with noxious weed management plan provided as part of project permitting process. <p>After approximately 30 years, when the operation of the proposed project would cease, Apex will restore the analysis area to a landscape that once again blends into the surrounding area's forms and textures. Because of the arid climate of the project location, planting and reseeding may need to occur over several seasons to ensure the success of native species. The decommissioning of the site would create new visual impacts, including the removal of all aboveground structures, fencing, and debris.</p>
Air quality	<p>Measures to minimize or eliminate impacts to air resources are described in the proposed action's project design features. Mainly, Apex has committed to control fugitive dust at the project site by applying water or soil binders at regular intervals to the project site, limiting vehicular speed, and avoiding soil-disturbing activities during periods of high winds. No additional mitigation measures are recommended.</p>
Transportation	<p>Apex and Beaverhead County would enter into an agreement for the maintenance and/or restoration of Ten Mile Road from the increased heavy truck usage during the construction period.</p>
Soils	<p>Apex would use BMP erosion control techniques to mitigate soil impacts. In those areas requiring topsoil salvage before construction, workers would segregate the topsoil from subsoils and would stockpile those soils separately. Apex would use some of the topsoil after construction to resurface areas disturbed by construction and would disk compacted soils before final stabilization. It is not anticipated that any subsoil removed would be spread in upland cropland or pastures.</p> <p>Apex will submit a SWPPP to the MDEQ as part of project permitting activities (Appendix A) and would implement, monitor, and maintain the BMPs described in the SWPPP to minimize erosion and sedimentation. The company would comply with the construction site stormwater discharge permit and adhere to the noxious weed plan.</p>

E. PUBLIC AND AGENCY INVOLVEMENT

Local newspaper notices, announcing the availability of the EA and participation under Section 106 of the National Historic Preservation Act were published on November 24, 2021 and December 1, 2021 in the weekly Dillon Tribune paper. A copy of the EA was available at the Dillon Public Library at 121 S. Idaho Street, Dillon Montana 59725 and on the RUS project website, <https://www.rd.usda.gov/resources/environmental-studies/assessments>.

The 14-day public review period began on November 24, 2021 and concluded on December 7, 2021. The RUS website included project information in an easily accessible format (e.g., Section 508-compliant portable document format file [PDF]). RUS received no comments from the public.

F. FINDING OF NO NEW SIGNIFICANT IMPACT

Based on its EA, RUS has concluded that the proposed project would have no significant effects to the human environment as disclosed in the EA. 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 NEPA, as amended (42 U.S.C. 4321 et seq.), the CEQ Regulations (40 CFR 1500–1508), and Rural Development’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 new 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’ 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 New Significant Impact is in effect upon signature.

Dated:

CHRISTOPHER A. McLEAN

Assistant Administrator

Electric Programs

Rural Utilities Service

Contact information

For additional information on this FONSI and EA, please contact Suzanne Kopich, Environmental Protection Specialist, Water and Environmental Programs, USDA, Rural Utilities Service, at (202) 961-8514, or email: suzanne.kopich@usda.gov.