

U.S. DEPARTMENT OF ENERGY
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY
NEPA DETERMINATION



RECIPIENT: County of Carlton

STATE: MN

PROJECT TITLE: Carlton County Justice Center Geothermal Heat and Solar Field

Notice of Funding Opportunity Number

Procurement Instrument Number

DE-EE0011435

NEPA Control Number

GFO-0011435-001

CID Number

GO11435

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Policy 451.1), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

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| B1.11 Fencing | Installation of fencing, including, but not limited to border marking, that would not have the potential to significantly impede wildlife population movement (including migration) or surface water flow. |
| B1.13 Pathways, short access roads, and rail lines | Construction, acquisition, and relocation, consistent with applicable right-of-way conditions and approved land use or transportation improvement plans, of pedestrian walkways and trails, bicycle paths, small outdoor fitness areas, and short access roads and rail lines (such as branch and spur lines). |
| B1.3 Routine maintenance | Routine maintenance activities and custodial services for buildings, structures, rights-of-way, infrastructures (including, but not limited to, pathways, roads, and railroads), vehicles and equipment, and localized vegetation and pest control, during which operations may be suspended and resumed, provided that the activities would be conducted in a manner in accordance with applicable requirements. Custodial services are activities to preserve facility appearance, working conditions, and sanitation (such as cleaning, window washing, lawn mowing, trash collection, painting, and snow removal). Routine maintenance activities, corrective (that is, repair), preventive, and predictive, are required to maintain and preserve buildings, structures, infrastructures, and equipment in a condition suitable for a facility to be used for its designated purpose. Such maintenance may occur as a result of severe weather (such as hurricanes, floods, and tornados), wildfires, and other such events. Routine maintenance may result in replacement to the extent that replacement is in-kind and is not a substantial upgrade or improvement. In-kind replacement includes installation of new components to replace outmoded components, provided that the replacement does not result in a significant change in the expected useful life, design capacity, or function of the facility. Routine maintenance does not include replacement of a major component that significantly extends the originally intended useful life of a facility (for example, it does not include the replacement of a reactor vessel near the end of its useful life). Routine maintenance activities include, but are not limited to: (a) Repair or replacement of facility equipment, such as lathes, mills, pumps, and presses; (b) Door and window repair or replacement; (c) Wall, ceiling, or floor repair or replacement; (d) Reroofing; (e) Plumbing, electrical utility, lighting, and telephone service repair or replacement; (f) Routine replacement of high-efficiency particulate air filters; (g) Inspection and/or treatment of currently installed utility poles; (h) Repair of road embankments; (i) Repair or replacement of fire protection sprinkler systems; (j) Road and parking area resurfacing, including construction of temporary access to facilitate resurfacing, and scraping and grading of unpaved surfaces; (k) Erosion control and soil stabilization measures (such as reseeding, gabions, grading, and revegetation); (l) Surveillance and maintenance of surplus facilities in accordance with DOE Order 435.1, "Radioactive Waste Management," or its successor; (m) Repair and maintenance of transmission facilities, such as replacement of conductors of the same nominal voltage, poles, circuit breakers, transformers, capacitors, crossarms, insulators, and downed powerlines, in accordance, where appropriate, with 40 CFR part 761 (Polychlorinated Biphenyls Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions) or its successor; (n) Routine testing and calibration of facility components, subsystems, or portable equipment (such as control valves, in-core monitoring devices, transformers, capacitors, monitoring wells, lysimeters, weather stations, and flumes); (o) Routine decontamination of the surfaces of equipment, rooms, hot cells, or other interior surfaces of buildings (by such activities as wiping with rags, using strippable latex, and minor vacuuming), and removal of contaminated intact equipment and other material (not including spent nuclear fuel or special nuclear material in nuclear reactors); and (p) Removal of debris. |
| B5.16 Solar photovoltaic systems | (a) The installation, modification, operation, or decommissioning of commercially available solar photovoltaic systems: |

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Located on a building or other structure (such as rooftop, parking lot or facility, or mounted to signage, lighting, gates, or fences); or

2. Located within a previously disturbed or developed area.

(b) Covered actions would be in accordance with applicable requirements (such as land use and zoning requirements) in the proposed project area and the integral elements listed at the start of appendix B of this part, and would be consistent with applicable plans for the management of wildlife and habitat, including plans to maintain habitat connectivity, and incorporate appropriate control technologies and best management practices.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to administer Congressionally Directed Spending to the County of Carlton to design, develop, and install a 1.26mW ground mounted photovoltaic (PV) solar array behind the new Carlton County Justice Center (Carlton, MN).

Award activities would include engineering and design, site preparation, deployment and field testing of PV array, fencing installation, construction of a service road, system testing, and pollinator habitat planting. Additionally, the site would undergo vegetation clearing, site leveling, perimeter fencing, trenching for conduits, laying gravel for the service road, and installation of the PV system and support rack.

Ground Disturbing Activities

The proposed 1.26 ground mounted PV solar array ("array") would be located approximately 1,000 feet southeast of the Carlton County Justice Center. Tree clearing would be necessary to install the array. The array would cover approximately a 630x730 foot area within the 3.4-acre parcel of land. The installation of the array would require the installation of up to 630 ground screws to attach the racking, installed with a drill attached to a skid steer. Each screw would measure approximately four inches in diameter. Boring holes for the ground screws would be approximately 79 inches deep and six inches in diameter. Four 120kW inverters would also be installed. The existing service road would be expanded to roughly 12 feet in width using poured gravel, and it would be approximately 1,000 feet long.

The solar array would be connected to the existing electrical grid by an underground conduit that would be installed using a skid steer with a boring head. The width of the directional bore would be about 14 inches and would occur 3-5 feet below the surface. The two areas where boring would surface would be backfilled.

Impacts Analysis

WETLANDS AND FLOODPLAINS

The proposed project location would be located adjacent to an area identified as Jurisdictional Waters of the United States that is regulated under the authority of the United States Army Corps of Engineers (USACE). Because the area of wetland affected by the award would be less than 1/10th of an acre, no USACE permit is needed at this time. Should the award activities change and have an anticipated impact greater than 1/10th of an acre, a new NEPA review would be required along with a consultation with the USACE.

The site is not within the 1% flood exceedance area (100-year floodplain).

THREATENED AND ENDANGERED SPECIES

The U.S. Fish and Wildlife Service Endangered Species Program website (IPaC) identifies five threatened or endangered species, the Canada Lynx, Northern Long-eared Bat, Tricolored Bat, Monarch Butterfly, and Suckley's Cuckoo Bumble Bee. Fifteen migratory bird species of conservation concern may be present seasonally within the project areas. No habitat for any of the federally listed species described above persists at the project location, and the location is outside of the critical habitat of all IPaC listed species.

Due to the presence of two bat species, tree clearing may only occur between November 15th and March 31st. Because Bald Eagles may be present seasonally in the area during this time, trees may not be cleared if there are signs of eagle activity or signs of nesting. The U.S. Fish and Wildlife Service must be notified if there are signs of eagle activity in the area.

Additionally, the proposed site has been heavily disturbed in the past as the location was formerly used for gravel and sand mining. The area has been reforested in the past five years but most trees in the immediate project area are less than six feet tall. Due to the previously disturbed nature of the site and adherence to the above conservation measures, DOE has determined there would be no adverse effects to species of concern or critical habitat. Further, DOE does not anticipate adverse impacts to migratory bird species.

CULTURAL RESOURCES

The Munger Trail has been identified as eligible for the National Register of Historic Places. Constructed in the mid- to late-1800s, the Munger Trail was originally part of the St. Paul and Duluth Railroad. It is currently used as a recreational trail and is visible from the proposed project site. Pursuant to Section 106 of the National Historic Preservation Act, DOE submitted a Request for Review to the Minnesota State Historic Preservation Officer and received concurrence with the determination that proposed project activities would have no adverse effect to historic properties. DOE also conducted a review of potential issues related to other resources of concern and found no effects that would be expected to result from the proposed project activities. However, if the array is visible from the Munger trail after construction, native evergreen trees would be planted as mitigation. If tree planting would occur on Minnesota Department of Natural Resources land, they would be notified.

The Tribal Historic Preservation Officer for the Fond du Lac Reservation, Mr. Evan Schroeder, was contacted for input on 10/15/2025 and a response was not received. While work is not being done on the Reservation, the project site is in close proximity to the Fond du Lac Reservation. If during project work cultural or archaeological artifacts are encountered, the recipient shall stop the site-based activities immediately and inform the DOE Project Officer of the finding.

OTHER IMPACTS

Individuals working on this project could be exposed to various physical and electrical hazards during construction and operation. Existing corporate health and safety policies and procedures would be followed including employee training, work/worker authorization, proper protective equipment, engineering controls, and monitoring. Additional policies and procedures would be implemented as necessary if new health and safety risks are identified.

DOE has considered the scale, duration, and nature of the proposed activities to determine potential impacts on sensitive resources, including those of an ecological, historical, cultural, and socioeconomic nature, and found no effects that would be expected to result from the proposed project activities.

For Categorical Exclusion Determinations:

- The proposal fits within a class of actions that is listed in Appendix B to 10 CFR Part 1021 or Appendix B DOE's NEPA Implementing Procedures (June 30, 2025). To fit within the classes of actions listed in Appendix B to 10CFR Part 1021, or Appendix B of DOE's NEPA Implementing Procedures, a proposal must satisfy the conditions that are integral elements of the classes of actions in Appendix B of both 10 CFR Part 1021 and DOE's NEPA Implementing Procedures.
- There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects of the proposal.
- The proposed action has not been segmented to meet the definition of a categorical exclusion.
- The proposed action is categorically excluded from further NEPA review.

NEPA PROVISION

DOE has made a final NEPA determination.

Include the following condition in the financial assistance agreement:

If during project work cultural or archaeological artifacts are encountered, the recipient shall stop the site-based activities immediately and inform the DOE Project Officer of the finding.

Should the award activities change and have an anticipated impact greater than 1/10th of an acre, additional NEPA review would be required along with a consultation with the USACE.

Tree clearing may only occur between November 15th and March 31st. Trees may not be cleared if there are signs of eagle activity or signs of nesting.

If the array is visible from the Munger Trail after construction, native evergreen trees would be planted as mitigation. If tree planting would occur on Minnesota Department of Natural Resources land, they would be notified.

Notes:

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:  **Electronically Signed By: Nicole Serio**
NEPA Compliance Officer

Date: 12/5/2025

FIELD OFFICE MANAGER DETERMINATION

- ☒ Field Office Manager review not required
☐ Field Office Manager review required

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____
Field Office Manager

Date: _____