PMC-ND

(1.08.09.13)

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

RECIPIENT: Zanskar Geothermal & Minerals **STATE:** UT

PROJECT TITLE : GeoGym: A Multi-Site Benchmark Dataset to De-Risk and Optimize Geothermal Exploration

Notice of Funding Opportunity Number	Procurement Instrument Number	NEPA Control Number	CID Number
		GFO-GeoGym-001	

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:

B3.1 Site characterization and environmental monitoring	Site characterization and environmental monitoring (including, but not limited to, siting, construction, modification, operation, and dismantlement and removal or otherwise proper closure (such as of a well) of characterization and monitoring devices, and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis). Such activities would be designed in conformance with applicable requirements and use best management practices to limit the potential effects of any resultant ground disturbance. Covered activities include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. (This class of actions excludes activities in aquatic environments. See B3.16 of this appendix for such activities.) Specific activities include, but are not limited to: (a) Geological, geophysical (such as gravity, magnetic, electrical, seismic, radar, and temperature gradient), geochemical, and engineering surveys and mapping, and the establishment of survey marks. Seismic techniques would not include large-scale reflection or refraction testing; (b) Installation and operation of field instruments (such as stream-gauging stations or flow-measuring devices, telemetry systems, geochemical monitoring tools, and geophysical exploration tools); (c) Drilling of wells for sampling or monitoring of groundwater or the vadose (unsaturated) zone, well logging, and installation of water-level recording devices in wells; (d) Aquifer and underground reservoir response testing; (e) Installation and operation of ambient air monitoring equipment; (f) Sampling and characterization of water, soil, rock, or contaminants (such as drilling using truck- or mobile-scale equipment, and modification, use, and plugging of boreholes); (g) Sampling and characterization of water effluents, air emissions, or solid waste streams; (h) Installation and operation of meteorological towers and associated activities (such as assessment of potential wind energy resources); (i) Sampling of flora or fauna; and (j) Archeological, historic, and cultural resource identification in compliance with 36 CFR part 800 and 43 CFR part 7.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to Zanskar Geothermal & Minerals (ZGM) to compile, quality-check, standardize, and publish benchmark geothermal datasets from five operating geothermal fields in New Mexico, Nevada, and Utah. They would also develop an associated interactive geothermal exploration game (GeoGym) that uses the released datasets.

Office activities, including data compilation, quality assurance/quality control, modeling/integration, documentation, software/game development, and dataset publication as well as land administration would occur at ZGM's offices in Salt Lake City, UT. The compilation, standardization, and publishing of existing datasets, limited field verification and/or temporary, noninvasive surveys (e.g., passive seismic node deployment; geophysical surveys) to fill data gaps would occur at up to five potential Power Plants, including:

- Lightning Dock Geothermal Power Plant in Animas, NM.
- Thermo Number 1 Geothermal Power Plant in Minersville, UT
- Patua Geothermal Power Plant in Hazen, NV
- Soda Lake Geothermal Power Plant in Fallon, NV
- Blundell Geothermal Plant in Milford, UT.

Wetland and waterway areas would be avoided during field activities and no impacts to aquatic resources, including floodplains, are expected through project implementation. Project activities would not affect federally listed species, their respective habitats, or cultural resources.

No physical modifications, ground disturbance, or changes to the use, mission, or operation of existing facilities would be performed. None of the activities occurring at any of the listed facilities or activities anticipated to occur as part

the project would require any new permits, licenses, or authorizations.

Existing institutional health and safety policies, including mandatory employee training would be instituted. Compliance with federal, state, and local health and safety regulations would be maintained throughout the project to ensure the safety of all personnel. Additional policies and procedures would be implemented as new health and safety risks are identified.

DOE has considered the scale, duration, and nature of proposed activities to determine potential impacts on resources, including those of an ecological, historical, cultural, and socioeconomic nature. DOE does not anticipate impacts on these resources which would be considered significant or require DOE to consult with other agencies or stakeholders.

NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

The Office of Geothermal
NEPA review completed by Chris Akios, 7/16/2026

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 and C of 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.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Electronically Signed By: Kristin Kerwin Date: 7/17/2026

NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

- [x] 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: _____ Date: _____

Field Office Manager