

APPENDIX B

Categorical Exclusions Prepared for Phases 1 and 2A

Note: The Section 508 amendment of the Rehabilitation Act of 1973 requires that the information in federal documents be accessible to individuals with disabilities. The Agency has made every effort to ensure that the information in the *Frontier Observatory for Research into Geothermal Energy (FORGE), Milford, Utah* is accessible. However, this appendix is not fully compliant with Section 508, and readers with disabilities are encouraged to contact *Pierina Fayish* at (412) 386-5428 or Pierina.Fayish@NETL.DOE.GOV if they would like access to the information.

U.S. DEPARTMENT OF ENERGY - NETL

CATEGORICAL EXCLUSION (CX) DESIGNATION FORM

Project No.: DE-EE0007080 Recipient Name: University of Utah Project Location: Salt Lake City, UT

Sub-recipient(s) and Locations:

Barker, Windsor CA; Winkler, Pagosa Springs CO; HRM Services, Cedar City UT; Geothermal Resource Group, Palm Desert CA; Geothermal SS, Klamath Falls OR; Miller, Golden CO; SWCA, Salt Lake City UT; UGS, Salt Lake City UT

NETL Sponsoring Org.: FE/TDIC/OG/UOG Team NETL Contact: Adam Tew

Brief Title of Proposed Action: Milford Site for Frontier Observatory for Geothermal Energy (FORGE)

Brief Description of Activities:

Phase 2A activity consists of office and field work to provide baseline seismic monitoring at the proposed field site and to acquire needed permits & permissions for field activities in later phases.

THE PROPOSED ACTION FALLS WITHIN THE FOLLOWING CATEGORICAL EXCLUSION(S) FROM APPENDICES A AND B TO SUBPART D OF DOE NEPA IMPLEMENTING PROCEDURES (10 CFR 1021):

General Administration/Management

- A1 – Routine business actions
- A9 – Info gathering, analysis, documentation, dissemination, and training
- A11 – Technical advice and planning assistance

Facility Operations

- B1.3 – Routine maintenance and custodial services
- B1.7 – Communication system and data processing equipment acquisition, installation, operation, removal
- B1.15 – Support building or structure, non-waste storage, construction/operation

Safety and Health

- B2.1 – Modifications to enhance workplace habitability
- B2.2 – Installation/improvement of building/equipment instrumentation
- B2.3 – Installation of equipment for personnel safety and health

General Research

- B3.1 – Site characterization/environmental monitoring
- B3.6 – R&D or pilot facility construction/operation/decommissioning
- B3.7 – New infill exploratory, experimental oil/gas/geothermal well construction and/or operation
- B3.9 – Certain CCT demonstration activities, emissions unchanged
- B3.11 – Outdoor tests, experiments on materials and equipment components

Electrical Power and Transmission

- B4.4 – Power management activities (storage, load shaping, and balancing)
- B4.6 – Transmission support addition/modifications at developed facility site
- B4.11 – Construction of power substations and interconnection facilities
- B4.13 – Upgrading and rebuilding existing power lines (< 20 miles)

Conservation, Fossil, and Renewable Energy Activities

- B5.1 – Actions to conserve energy, no indoor air quality degradation
- B5.3 – Modification/abandonment of wells
- B5.5 – Short crude oil/gas/steam/geothermal/carbon dioxide pipeline const/oper within an existing right-of-way (< 20 miles) between existing facilities
- B5.13 – Experimental wells for injection of small quantities of carbon dioxide (< 500,000 tons)
- B5.15 – Small scale renewable energy research/development/pilot projects
- B5.22 – Alternative fuel vehicle fueling stations
- B5.23 – Electric vehicle charging stations

Other

- Specify category: [Yellow box]
- Specify category: [Yellow box]
- Specify category: [Yellow box]

This action (1) would not present any extraordinary circumstances such that the action might have a significant impact upon the human environment; (2) is not connected to other actions with potentially significant impacts; (3) is not related to other actions with cumulatively significant impacts; and (4) is not inconsistent with 10 CFR 1021.211 - Interim Actions or 40 CFR 1506.1 - Limitations during the NEPA process.

SELECT ONE OF THE FOLLOWING:

- This Categorical Exclusion includes all tasks and phases in the Statement of Work or Statement of Project Objectives for this project.
- This Categorical Exclusion is only valid for the following tasks/phases Phase 2A. The DOE initiator acknowledges the responsibility to obtain a NEPA determination prior to initiating any activities outside the scope of this Categorical Exclusion.

SELECT ONE OF THE FOLLOWING:

- This Categorical Exclusion includes all locations and activities for this project.
- Additional sites, sub-recipients, or activities cannot be identified at this time. The DOE initiator acknowledges the responsibility to obtain a NEPA determination prior to initiating any activities outside the scope of this Categorical Exclusion.

NOTE: ANY CHANGE(S) TO THE PROJECT SCOPE OR LOCATIONS MAY REQUIRE A NEW NEPA DETERMINATION.

DOE Initiator Signature: _____

Date: 9 / 15 / 2016
month day year

NEPA Compliance Officer: _____

Date: 09 / 20 / 2016
month day year

The following special condition is provided for the consideration of the Contracting Officer:

[Yellow box]

U.S. DEPARTMENT OF ENERGY - NETL

CATEGORICAL EXCLUSION (CX) DESIGNATION FORM

Project No.: DE-EE0007080 Recipient Name: University of Utah Project Location: Salt Lake City, UT

Sub-recipient(s) and Locations:

SWCA & UGS-Salt Lake City, UT; GRG-Palm Desert, CA; GSS-Klamath Falls, OR; J Miller-Golden, CO; HRM-Cedar City, UT; Golder-Lakewood, CO; Optim-Reno, NV; INL-Idaho Falls, ID; MEA-Calgary, CAN; SMS-Houston, TX; SM-Energy-Pagosa Springs, CO;

NETL Sponsoring Org.: FE/TDIC/OG/UOG Team NETL Contact: Adam Tew

Brief Title of Proposed Action: Enhanced Geothermal System Testing & Development at the Milford, UT FORGE Site

Brief Description of Activities:

Phase 2B of FORGE includes drilling, coring, and stress testing of an on-site geothermal exploration well and vibroseismic survey among other tasks as outlined in the SOPO.

THE PROPOSED ACTION FALLS WITHIN THE FOLLOWING CATEGORICAL EXCLUSION(S) FROM APPENDICES A AND B TO SUBPART D OF DOE NEPA IMPLEMENTING PROCEDURES (10 CFR 1021):

General Administration/Management

- A1 – Routine business actions
- A9 – Info gathering, analysis, documentation, dissemination, and training
- A11 – Technical advice and planning assistance

Facility Operations

- B1.3 – Routine maintenance and custodial services
- B1.7 – Communication system and data processing equipment acquisition, installation, operation, removal
- B1.15 – Support building or structure, non-waste storage, construction/operation

Safety and Health

- B2.1 – Modifications to enhance workplace habitability
- B2.2 – Installation/improvement of building/equipment instrumentation
- B2.3 – Installation of equipment for personnel safety and health

General Research

- B3.1 – Site characterization/environmental monitoring
- B3.6 – R&D or pilot facility construction/operation/decommissioning
- B3.7 – New infill exploratory, experimental oil/gas/geothermal well construction and/or operation
- B3.9 – Certain CCT demonstration activities, emissions unchanged
- B3.11 – Outdoor tests, experiments on materials and equipment components

Electrical Power and Transmission

- B4.4 – Power management activities (storage, load shaping, and balancing)
- B4.6 – Transmission support addition/modifications at developed facility site
- B4.11 – Construction of power substations and interconnection facilities
- B4.13 – Upgrading and rebuilding existing power lines (< 20 miles)

Conservation, Fossil, and Renewable Energy Activities

- B5.1 – Actions to conserve energy, no indoor air quality degradation
- B5.3 – Modification/abandonment of wells
- B5.5 – Short crude oil/gas/steam/geothermal/carbon dioxide pipeline const/oper within an existing right-of-way (< 20 miles) between existing facilities
- B5.13 – Experimental wells for injection of small quantities of carbon dioxide (< 500,000 tons)
- B5.15 – Small scale renewable energy research/development/pilot projects
- B5.22 – Alternative fuel vehicle fueling stations
- B5.23 – Electric vehicle charging stations

Other

- Specify category:
- Specify category:
- Specify category:

This action (1) would not present any extraordinary circumstances such that the action might have a significant impact upon the human environment; (2) is not connected to other actions with potentially significant impacts; (3) is not related to other actions with cumulatively significant impacts; and (4) is not inconsistent with 10 CFR 1021.211 - Interim Actions or 40 CFR 1506.1 - Limitations during the NEPA process.

SELECT ONE OF THE FOLLOWING:

- This Categorical Exclusion includes all tasks and phases in the Statement of Work or Statement of Project Objectives for this project.
- This Categorical Exclusion is only valid for the following tasks/phases Phase 2B (except 2B.7). The DOE initiator acknowledges the responsibility to obtain a NEPA determination prior to initiating any activities outside the scope of this Categorical Exclusion.

SELECT ONE OF THE FOLLOWING:

- This Categorical Exclusion includes all locations and activities for this project.
- Additional sites, sub-recipients, or activities cannot be identified at this time. The DOE initiator acknowledges the responsibility to obtain a NEPA determination prior to initiating any activities outside the scope of this Categorical Exclusion.

NOTE: ANY CHANGE(S) TO THE PROJECT SCOPE OR LOCATIONS MAY REQUIRE A NEW NEPA DETERMINATION.

DOE Initiator Signature: _____

Date: 02 / 23 / 2017
month day year

NEPA Compliance Officer: _____

Date: 03 / 03 / 2017
month day year

The following special condition is provided for the consideration of the Contracting Officer:

Task 2B.7 is excluded from this CX and included in a separate NEPA document.

Additional sites: U of NM-Albuquerque, NM; U of OK-Norman, OK; B Barker-Windsor, CA; AMEC FW-Oakland, CA