# Frequently Asked Questions Publication of Final Programmatic EIS for Geothermal Resources

## Why did the BLM and the Forest Service complete the geothermal Programmatic Environment Impact Statement?

The BLM and the Forest Service are preparing the Programmatic Environment Impact Statement (PEIS) to implement congressional direction in sections of the Energy Policy Act of 2005.

#### Which geothermal resources does the analysis in the PEIS relate to?

The Final PEIS addresses potential geothermal resources found on public lands (managed by the BLM) and National Forest System lands (managed by the Forest Service) in the 11 contiguous western states (Arizona, California, Colorado, Idaho, Montana, New Mexico, Nevada, Oregon, Utah, Washington, and Wyoming) and Alaska.

This encompasses about 530 million acres of Federal lands, approximately 247 million of which have geothermal potential (143 million acres of BLM-managed lands and 104 million acres of National Forest lands).

#### How many acres does the Final PEIS propose to make available for leasing?

The preferred Alternative proposes to make available approximately 118 million acres of public lands and 79 million acres of National Forest lands to potential geothermal leasing.

Are any areas with high geothermal potential excluded from consideration and if so, why? Yes. Some units or portions of areas identified as having geothermal resource potential would not be available for leasing and development because they have been withdrawn by statute, regulation, or administrative authority. These include, but are not limited to, lands where the Secretary has determined that issuing a lease would cause unnecessary or undue degradation to public lands and resources; lands within a unit of the National Park System (for example, geothermal features in and around Yellowstone National Park); wilderness areas, wilderness study areas (WSAs), fish hatcheries, wildlife management areas; Indian trust lands; and other areas described in 43 CFR 3201.11

Examples of other areas that would be subject to discretionary closure under the Proposed Action include Areas of Critical Environmental Concern (ACECs), where the BLM determines that geothermal leasing and development would be incompatible with the purposes for which an ACEC was designated or those ACECs whose management plans expressly preclude new leasing; National Conservation Areas (except the California Desert CA) and other lands in the BLM National Landscape Conservation System (NLCS) such as historic and scenic trails; and military reservations where geothermal development would conflict with mission.



## Will the forthcoming decision on this EIS have any effect on any existing land use plans, or land use plans underway?

Yes. The ROD on the Final PEIS would amend BLM resource management plans (RMPs) to allocate identified lands as available for leasing. Although the PEIS would not amend Forest Plans, it would provide information to the Forest Service suited for facilitating subsequent consent decisions for leasing on National Forest System lands.

#### Which other agencies or entities were involved with this process?

The BLM and the Forest Service are co-lead agencies in preparing the PEIS. The Department of Energy (DOE) is a cooperating agency. The US Geological Survey, Idaho National Laboratory, Southern Methodists University Geothermal Laboratory, University of Utah Energy and Geophysical Institute, University of Nevada Great Basin Geothermal Institute, and several state geological surveys and state energy offices provided valuable technical assistance and information.

#### How does the Final PEIS relate to new regulations implemented by BLM in 2007?

Completion of the PEIS and signing of the ROD would amend BLM land use plans to identify public lands that would be available for leasing under the 2007 regulations.

#### How will the PEIS support development of geothermal energy resources on Federal lands?

The ROD on the Final PEIS would amend BLM land use plans to allow for available lands to be nominated for geothermal leasing and, where appropriate, offered for sale with lease stipulations to protect other resources should the land be developed. The Forest Service would use the Final PEIS to facilitate future leasing decisions when leases nominated are on NFS lands.

In addition, the Final PEIS includes site-specific environmental analysis of seven geographical areas with 19 pending lease applications. In each case where the alternative of issuing leases is chosen, leaseholders can proceed to apply for the necessary permits to explore and develop geothermal resources on lands leased.

#### How did the agencies develop and choose the Proposed Action?

The Proposed Action in the Final PEIS is the result of an extensive collaborative public process. The Final PEIS identifies the agencies' preferred Alternative from the Draft PEIS as the Proposed Action. This Alternative makes the greatest number of acres available for geothermal development, as compared with the other alternatives analyzed in the Draft PEIS. This would give the surface managing agency more flexibility in administering leasing and development, while complying fully with Congress's direction on geothermal development in the 2005 Energy Policy Act. The Proposed Action was chosen after analysis of and response to public comments received during a 90-day comment period that includes 13 public meetings.



### What kinds of comments were submitted during the public comment period on the Draft PEIS?

About 63 individuals or organizations participated in the public comment process. These individuals or organizations provided approximately 500 individual comments on the Draft PEIS. In addition, two form letters were received. One form letter generated 700 copies pertaining to development in areas with sensitive resources. The second form letter generated 20 letters about development in California's Medicine Lake area.

The public provided input on a wide variety of issues. The most prevalent comment pertained to geothermal development in areas with sensitive resources, followed by water resources, and compatibility with other resource uses, such as recreation and grazing.

#### How much geothermal development is currently operating on Federal lands?

The BLM currently administers 29 geothermal power plants that use Federal resources, in California, Nevada and Utah. These plants have a total capacity of 1250 megawatts and supply the needs of 1.2 million homes.

### How much additional energy could be developed under the leasing program proposed in the PEIS?

The RFD scenario in the Final PEIS estimates a potential for 5,540 megawatts (MW) of new electric generation capacity from resources in the project area (12 western states, including Alaska) by 2015 through 111 new geothermal power plants. It also estimates an additional 6,600 MW from another 133 plants by 2025.

This translates into more than five times the current generation capacity of geothermal power plants on Federal lands by 2015 and more than 10 times the current capacity by 2025.

The RFD scenario also recognizes great potential for direct uses, including as many as 270 communities being able to use geothermal energy to heat buildings, offsetting the need for conventional energy sources.

#### How does the Final PEIS propose to handle pending lease applications?

In addition to programmatic analysis that can be used to analyze future leasing and permit applications, the Final PEIS provides site-specific environmental analysis for seven areas in Alaska, California, Nevada, Oregon, and Washington where lease applications are pending. The alternatives for each of these analyses are issuing a lease or denying the application. In each case where the alternative of issuing leases is chosen, leaseholders can proceed to apply for the necessary permits to explore and develop geothermal resources on lands leased.



What about the other pending lease applications? Will the BLM and Forest Service meet the congressional mandate to have 90% of pending applications processed by January 1, 2010?

There were 198 lease applications pending (64 on BLM, 134 on Forest Service) as of January 1, 2005. The agencies expect to have issued decisions on 97% (192) of these leases by January 1, 2010.

Why does the BLM administer geothermal resources under its Fluid Minerals program?

Geothermal energy is a renewable, alternative energy source, but because the technologies used to access geothermal resources are similar to those used to access oil and gas, the BLM has historically administered geothermal leasing and development under through its Fluid Minerals division.

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