

JUMPSTARTING GEOTHERMAL ENERGY: OUTREACH TO 12 WESTERN STATES, FEDERAL AGENCIES AND THE PUBLIC

A post-action briefing on implementing
the Geothermal Programmatic EIS for Federal Lands in the West.

The BLM conducted 30 geothermal leasing outreach sessions across 12 western states from early April to mid June 2009. The outreach sessions were the culmination of an extensive outreach program that was conducted throughout the NEPA process. Outreach began with scoping meetings across the project area in June 2007 and continued throughout the 18 month Programmatic EIS (PEIS) process, including public meetings in 12 western states on the Draft PEIS in July 2008. The sessions presented a new approach to geothermal leasing for Field Office and National Forest personnel who administer geothermal leases at the local level, State agencies, industry, and the public. The PEIS, which was born of the Energy Policy Act of 2005, was intended to create a more effective leasing process. Thirty sessions were held in 16 cities across 12 states over a 10-week period (a list of locations and dates is attached as Appendix A). Attendees across all locations and sectors voiced interest for continued energy-related Federal outreach.

The Outreach Effort

The outreach effort continued the spirit of communication and collaboration that began in the early phases of the PEIS process, targeting Federal agencies, State agencies, local-level BLM and Forest Service (FS) personnel, and representatives of geothermal industry and stakeholder groups (tribal governments, environmental groups, and the public).

Very close coordination was maintained with key Federal agencies from the outset of the PEIS. These agencies included the Environmental Protection Agency, National Park Service, Fish and Wildlife Service, and Bureau of Indian Affairs.

Building bridges between Federal and State agencies was a primary focus in both the planning and implementation of the outreach sessions. With many of the Western States working to meet State-level renewable portfolio standards, and with Federal agencies managing the majority of lands in those states, the development of renewable energy on Federal lands makes for a natural partnership. A targeted series of sessions was held for State agencies and attracted Energy Offices, Geological Surveys, Governor's Offices, Departments of Water, Lands, Game and Fish, and Historic Preservation, universities, and research institutions.

As the intent of the Energy Policy Act of 2005 and the PEIS was to increase the efficiency and effectiveness of geothermal leasing, it was recognized that the key people to make this happen are those BLM and FS personnel on the front lines at the local Field Office and National Forest levels, respectively. Thus, BLM and FS personnel were invited to full-day outreach sessions, which provided the greatest amount of detail on the PEIS and on geothermal leasing and development in general.

Representatives from the public, the geothermal industry, environmental groups, and Native American tribes were seen as the final key piece in the outreach strategy. Educating geothermal industry staff about the new leasing paradigm brought the outreach efforts full-circle by giving project proponents the same understanding moving forward as BLM and FS personnel who make the leasing decisions and issue the permits. An educated industry will help ensure that the local Field Office and National Forest personnel are implementing leasing decisions in accordance with the intent of the PEIS.

The outreach team recognized that the geothermal industry is the group that makes projects happen, and the public, environmental groups, and Native American tribes are the groups that ensure projects are implemented in a manner consistent with contemporary environmental and cultural values. Bringing industry together with environmental groups, the public and Native American tribes at the regional level gave industry a greater awareness of sensitive areas and sensitive topics, while giving stakeholders a greater understanding of the benefits,

impacts, and flexibility of geothermal projects. Stakeholders were notified of these meetings through geothermal industry publications such as the Geothermal Energy Association, the Geothermal Resources Council, and through selected sectors of the PEIS project mailing list.

How Outreach is Expediting Geothermal Leasing

The outreach sessions were well received and have been effective in promoting geothermal leasing. In states with little to no history of geothermal activity (Wyoming, Montana, Washington, Arizona), the outreach sessions served as a valuable teaching tool, both on the basics of geothermal principles, as well as on the leasing process. In many cases, the outreach sessions were the beginning of a ripple effect of education and awareness of geothermal energy, as attendees requested copies of the presentations to share with others, indicated interest in subsequent training sessions for their colleagues, and discussed setting up power plant tours.

Lessons Learned

There is a huge appetite for outreach from states, tribes, industry, and the public when a major Programmatic EIS is completed. Key to this outreach is communicating the meaning, value, and implications of the completed project. The continuity of contact with the core project team that prepared the PEIS is essential in communicating the outreach message.

Outreach Session Presentation and Support

Outreach sessions were conducted by a key team of BLM and contractor personnel, with support from a wider team. Table 1 displays the key team members involved in the geothermal outreach sessions.

Table 1
Outreach Core Team

Team Member & Role	Organization & Address	Phone & Email
Jack Peterson National BLM Project Manager	Bureau of Land Management Idaho State Office 1387 S. Vinnell Way Boise, ID 83719-1657	208.287.4804 jack_g_peterson@blm.gov
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Appendix A – Outreach Session Schedule

BLM/FS Grand Junction, CO	April 7, 2009
State Agencies Denver, CO	April 8, 2009
Public/Industry Denver, CO	April 9, 2009
State Agencies Cheyenne, WY	April 13, 2009
BLM/FS Cheyenne, WY	April 14, 2009
BLM/FS Helena, MT	April 16, 2009
State Agencies Helena, MT	April 17, 2009
State Agencies Olympia, WA	April 20, 2009
Public/Industry Portland, OR	April 21, 2009
State Agencies Portland, OR	April 21, 2009
BLM/FS Portland, OR	April 22, 2009
BLM/FS Boise, ID	April 28, 2009
State Agencies Boise, ID	April 29, 2009
Public/Industry Boise, ID	April 29, 2009
BLM/FS Grand Junction, CO	April 7, 2009
State Agencies Denver, CO	April 8, 2009
Public/Industry Denver, CO	April 9, 2009
State Agencies Cheyenne, WY	April 13, 2009
BLM/FS Cheyenne, WY	April 14, 2009
BLM/FS Helena, MT	April 16, 2009
State Agencies Helena, MT	April 17, 2009
State Agencies Olympia, WA	April 20, 2009
Public/Industry Portland, OR	April 21, 2009
State Agencies Portland, OR	April 22, 2009
BLM/FS Portland, OR	April 28, 2009
BLM/FS Boise, ID	April 29, 2009
State Agencies Boise, ID	April 29, 2009
State Agencies Reno, NV	May 5, 2009
Public/Industry Reno, NV	May 5, 2009
BLM/FS Reno, NV	May 6, 2009
State Agencies Sacramento, CA	May 13, 2009
Public/Industry Sacramento, CA	May 13, 2009
BLM/FS El Centro, CA	May 19, 2009
State Agencies Phoenix, AZ	May 20, 2009
BLM/FS Phoenix, AZ	May 21, 2009
State Agencies Santa Fe, NM	May 27, 2009
BLM/FS Las Cruces, NM	May 28, 2009
State Agencies, Anchorage, AK	June 3, 2009
Public/Industry Anchorage, AK	June 3, 2009
BLM/FS Anchorage, AK	June 4, 2009
BLM/FS Cedar City, UT	June 9, 2009
State Agencies Salt Lake City, UT	June 11, 2009
Public/Industry Salt Lake City, UT	June 11, 2009

Appendix B – Outreach Sessions Content

The three outreach session streams covered common topics related to the PEIS, with the BLM/FS outreach sessions receiving more detail on this topic and also including a Geothermal 101 series. The breakdown of topics covered in each of the outreach session streams is described below.

BLM/FS Outreach Sessions (full day)

- **Geology and Geothermal Resources**
 - Forms and Temperatures
 - Direct and Indirect Uses
 - Co-production, Enhanced Geothermal Systems (EGS)
 - Geothermal vs. Other Renewables
 - Economics of Geothermal Development and Production
 - Future Outlook
- **Geothermal Leasing**
 - Overview
 - Laws, Regulations, and Policy
 - Land Use Planning
 - Leasing
- **Operations**
 - Exploration
 - Drilling, Permitting, Well Testing
 - Bonding, Drilling Plan
 - Abandonment
 - Reporting and Documentation
 - Inspection and Enforcement
- **Programmatic EIS**
 - Purpose and Need for the PEIS
 - PEIS and BLM Record of Decision overview
 - How the Forest Service can use the PEIS
 - Reasonably Foreseeable Development (RFD)
 - Geothermal Potential Map and Decision Area
 - Proposed Action
 - Allocations (Areas Closed to Leasing)
 - Stipulations and BMPs
 - Management Procedures
 - Leasing Process
 - GIS Availability
 - Pending Lease Applications
 - BLM Plan Amendments
 - State-specific Open and Closed Lands
 - Tiering Analysis off the PEIS
 - Section 7 and Section 106 Consultation
 - State Agency Coordination
 - Tribal Consultation
 - Benefits of the PEIS

State Agency Outreach Sessions (half day)

- The PEIS and the Role of the State
 - Purpose and Need for the PEIS
 - Proposed Action
 - Areas closed to leasing
 - Review of the stipulations and Best Management Practices provided in the PEIS
 - GIS availability and disclaimers
 - Role of and coordination with State Agencies
 - How the FS can use the document to amend their Land and Resource Management Plans

Industry and Other Stakeholder Outreach Sessions (half day)

- The PEIS and Identifying Lands Available for Leasing
 - Purpose and Need for the PEIS
 - Proposed Action
 - Areas closed to leasing
 - Review of the stipulations and Best Management Practices provided in the PEIS
 - GIS availability and disclaimers
 - How the FS can use the document to amend their Land and Resource Management Plans
 - How to identify a specific area as open or closed
 - How to determine which areas within a larger area are open or closed

Project Web Site

The project web site (www.blm.gov/geothermal_eis) was used as a resource throughout the outreach sessions and continues to serve as a valuable resource. All PowerPoint presentations and handouts were available on the web site throughout the outreach sessions.

Materials Used at Outreach Sessions

Materials used at the outreach sessions included PowerPoint presentations, handouts, and maps, as described below:

- PowerPoint presentations:
 - Geothermal PEIS
 - Geothermal 101
 - Geology and Geothermal Resources
 - Geothermal Leasing
 - Geothermal Operations
- Handouts
 - Commercially Viable Geothermal Capacity for Electrical Generation by High Potential Area and Associated BLM Field Office and National Forest (extracted from the PEIS)
 - Resource Management Plans Amended by the PEIS (extracted from the Record of Decision)
- State-by-State Maps of Open and Closed Public and National Forest System Lands (developed from the GIS used to produce maps in the PEIS)