



# WESTERN GEOTHERMAL GAZETTE

Western Geothermal Programmatic EIS  
Volume I, Number 1, June 2007

## Geothermal PEIS Kick-Off

The Energy Policy Act of 2005 mandates that the Bureau of Land Management (BLM) and U.S. Forest Service (FS) enhance the development of renewable energy, including geothermal, on public lands and national forest lands.

The National Environmental Policy Act requires government agencies to study the effects that their actions might have on the natural environment—air, water and soil, of course, and also on plants and animals and cultural resources. The BLM and FS will consult with Indian Tribes throughout the project. The BLM and FS will comply with all Federal laws while preparing a Programmatic Environmental Impact Statement (PEIS) for their geothermal land leasing project. The US Geological Survey is providing scientific support and the Department of Energy is providing technical support for this project.

### What is this Project About?

- The PEIS will analyze environmental impacts of leasing public lands and national forest land for geothermal exploration and development.
- This will allow the BLM and FS to identify areas of high geothermal potential available for leasing.
- Environmental analysis will also be conducted for unprocessed lease applications submitted to the BLM and FS before January 1, 2005, allowing decisions on these applications.

The PEIS covers geothermal leasing on Public Lands and National Forests in 12 states:

- |              |              |
|--------------|--------------|
| ◆ Alaska     | ◆ Nevada     |
| ◆ Arizona    | ◆ New Mexico |
| ◆ California | ◆ Oregon     |
| ◆ Colorado   | ◆ Utah       |
| ◆ Idaho      | ◆ Washington |
| ◆ Montana    | ◆ Wyoming    |

### Why is this Project Happening?

- The Energy Policy Act of 2005 calls for accelerated development of domestic energy sources, including renewable geothermal energy.
- The PEIS will allow for streamlined lease application processing, accelerating geothermal exploration and development in the West and increasing renewable energy sources in the US.

#### Dear Readers

This is the first of several newsletters that you will receive from the Bureau of Land Management and Forest Service about their Programmatic Environmental Impact Statement. This newsletter marks the beginning of the public outreach activities. Your input from this public outreach effort will be incorporated into the PEIS.



Scoping  
Meetings  
July 2007



Draft PEIS  
Winter  
2007/2008



Public  
Meetings  
Spring 2008



Final PEIS  
Summer  
2008



Record of  
Decision  
Fall 2008

# Geothermal 101

## What is Geothermal Energy?

*Geo* means *earth*, and *thermal* means *heat*.

Geothermal energy power plants extract energy from superheated water and steam deep in the earth's crust and convert it into electricity.

Even low-to-moderate temperature waters can be used for direct uses, including heating buildings, supplying water for aquaculture and processing food.

Geothermal energy is EARTH POWER!



This geothermal steam power plant in Steamboat Springs, Nevada, emits mostly water vapor.

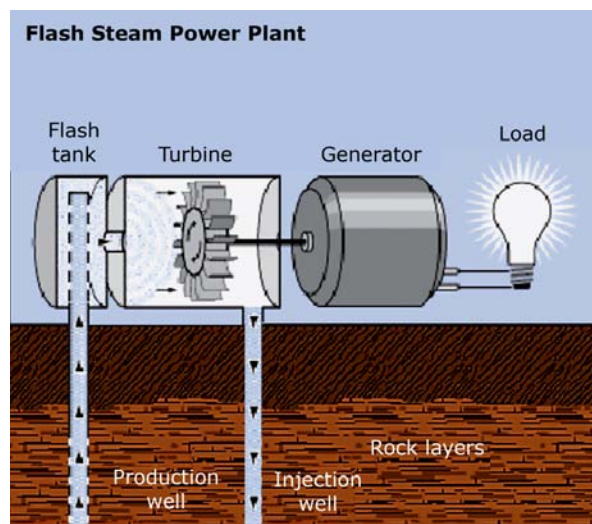
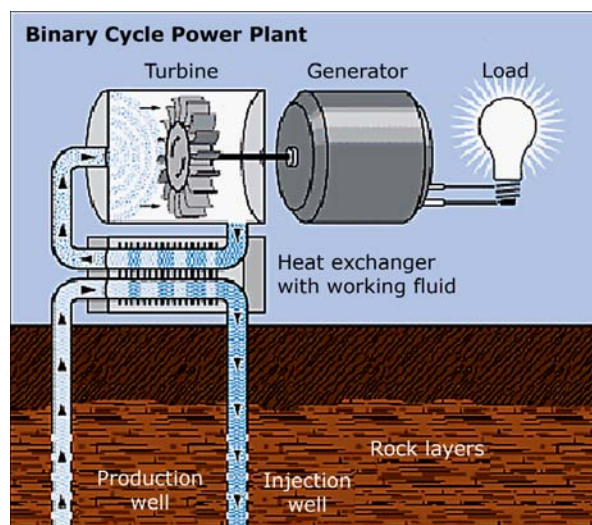
## How Does a Geothermal Power Plant Work?

Heated groundwater deep in the earth is brought to the surface via wells. The heat energy is extracted from the fluid and converted into electrical energy. After capturing the thermal energy, the water is re-injected back into the earth.

There are three kinds of power plants that can be used, depending on the temperature of the geothermal reservoir and if the reservoir is fluid, steam or hot rock. These are binary cycle, flash and dry steam plants.

Binary cycle and flash plants are the most common and their modes of operation are illustrated to the right. Information on dry steam plants is available via resources linked to on the "Guide and Links" page of the project website.

For a video explanation of a flash plant, go to [www.geothermal.org/virtualgeo.html](http://www.geothermal.org/virtualgeo.html).



The new BLM regulations for leasing geothermal resources on public lands went into effect on June 1st. You can view these regulations at [www.blm.gov/geothermal\\_eis](http://www.blm.gov/geothermal_eis)

# We Need Your Help!

## How Can I Get Involved and Stay Informed?

Visit the project Web site over the lifetime of the project at: [www.blm.gov/geothermal\\_eis](http://www.blm.gov/geothermal_eis)

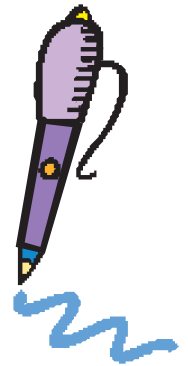
Add yourself to our mailing list by sending an e-mail to: [geothermal\\_eis@blm.gov](mailto:geothermal_eis@blm.gov)

**Attend pre-project public meetings:** Public scoping meetings will be held in 10 cities across the western US to provide you with information, to allow you to help identify areas to be included in the project for analysis and to let us know the issues of concern to you. See the meeting locations and dates in the table below.

**Submit your comments:** E-mail: [geothermal\\_eis@blm.gov](mailto:geothermal_eis@blm.gov) Fax: 1-866-625-0707

US Mail: Geothermal Programmatic EIS  
c/o EMPS Inc.  
182 Howard Street, Suite 110  
San Francisco, CA 94105-1611

**Share your thoughts with the national project manager.** Call Jack G. Peterson at 208-373-4048, or email at [jack\\_g\\_peterson@blm.gov](mailto:jack_g_peterson@blm.gov).



## Public Scoping Meetings Scheduled for July 2007

Come out to learn more and to help us identify:

- ◆ Areas of likely geothermal development to be included in our analysis
- ◆ Your environmental, social, cultural, health and any other concerns related to the project

All meetings will run from 4:30 pm to 7:30 pm, with dates and locations below. Meetings will be “open house” in format, with a 20-minute presentation by the BLM and FS at 6:00, followed by a question-and-answer period.

City	Date	Location
Anchorage AK	Wed 7/25	Main Lobby Alaska Energy Authority 813 W Northern Lights Blvd Anchorage, AK 99503
Boise ID	Tue 7/10	William F. Hayes Memorial Audit. Boise Public Library 715 S. Capitol Blvd. Boise, ID 83702
Denver CO	Mon 7/9	Evergreen A Room PPA Event Center 2105 Decatur Street Denver, CO 80211
Missoula MT	Mon 7/30	Russell/Lewis Room Doubletree Hotel 100 Madison Missoula, MT 59802
Phoenix AZ	Wed 7/11	Lecture Room Burton Barr Central Library 1221 N. Central Ave. Phoenix, AZ 85004

City	Date	Location
Portland OR	Mon 7/23	Lipman Wolfe B Room Hotel Monaco 506 S.W. Washington Street Portland, OR 97204
Reno NV	Tue 7/17	Manzanita Room Jot Travis Student Union University of Nevada, Reno N. Virginia St. Reno, NV 89511
Sacramento CA	Wed 7/18	Hearing Room A California Energy Commission 1516 Ninth Street Sacramento, CA 95814
Salt Lake City UT	Mon 7/16	Level 4 Conference Room Salt Lake City Public Library 210 East 400 South Salt Lake City UT 84111
Santa Fe NM	Thu 7/12	Main Bldg, Jemez Room I Santa Fe Community College 6401 Richards Avenue Santa Fe, NM 87508