

# Committee on Resources

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Statement of

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House Resources Subcommittee on Energy & Mineral Resources

Legislative Hearing on

HR 2772, "The John Rishel Geothermal Steam Act Amendments of 2003"

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Madam Chairman and members of the Subcommittee, I am pleased to appear before you this morning to discuss the Bureau of Land Management's (BLM's) geothermal leasing program and efforts the BLM is undertaking to enhance geothermal energy production from Federal lands.

The Department of the Interior generally believes that HR 2772 will provide support for these efforts. However, as the bill was introduced on July 17th, we have not had sufficient time to fully analyze the legislation and to develop a formal Administration position on the bill at this time. After we have had more time to review the bill, we would be happy to discuss its provisions with the Committee. Thus, I will be confining my remarks to a discussion of the BLM's existing geothermal program.

The President's National Energy Policy encourages a clean and diverse portfolio of domestic energy supplies. Renewable energy can help provide for our future energy needs by harnessing abundant, clean, naturally-occurring sources of energy - such as the heat of the Earth. Renewable energy supplies not only help diversify our energy portfolio, but they also do so with few adverse environmental impacts. Increased development of these domestic renewable resources also can help alleviate the Nation's problems associated with an over-reliance on foreign energy supplies.

The President's National Energy Policy further directs the Departments of the Interior and Energy to re-evaluate access limitations to Federal lands in order to increase renewable energy production, such as geothermal energy. It also directs the Department of the Interior to determine ways to reduce the delays in geothermal lease processing as part of the permitting review process.

## Geothermal Energy Background

Geothermal energy is heat derived from the earth. It is the thermal energy contained in the rock and fluid that fills the fractures and pores within the rocks of the Earth's crust. Geothermal resources, in localized underground areas of steam or hot water called reservoirs, are available in several western states. The highest temperature resources are generally used for electric power generation. Low and moderate temperature geothermal resources can be used for greenhouses, aquaculture, industrial processes, and heating of buildings, including municipal buildings and schools.

According to the U.S. Geological Survey, over 22,000 Megawatts of power could be generated from the geothermal resources of the United States. This would be enough power to satisfy the needs of over 22 million homes for more than 30 years. Existing geothermal power plants in the United States currently have a total capacity of 2700 Megawatts, 43% of which receives energy from geothermal resources on Federal lands.

## BLM's Geothermal Program

The BLM, pursuant to the Geothermal Steam Act of 1970, is responsible for leasing Federal lands for geothermal development and processing permit applications. This authority encompasses approximately 700 million acres of Federal minerals, including BLM lands, National Forest System lands, and other Federal lands, as well as private lands where the mineral rights have been retained by the Federal Government. For lease applications on Forest Service lands, the Geothermal Steam Act, as amended, requires Forest Service concurrence prior to BLM lease issuance.

The BLM currently administers 400 geothermal leases, encompassing over 520,000 acres of Federal minerals. The BLM's geothermal program has 56 producing leases. Much of the geothermal activity on Federal lands takes place in California and Nevada. California has 86 leases, 25 of which are producing. Nevada has 242 leases, 28 of which are producing. More than 80% of the electrical generation from Federal geothermal resources occurs in California. Other states with Federal geothermal leasing activity include Utah, New Mexico and Oregon. The BLM supervises 29 power plants using Federal resources in California, Utah and Nevada. These Federal resource power plants have a total capacity of 1,148 Megawatts, which can supply the needs of over one million homes. Annual royalties from geothermal production exceeded \$15 million in 2002, with 50% of that royalty income being returned to the states - and, at times, the counties - in which the energy was produced.

Over the last two years, both the Federal Government and industry have expressed renewed interest in geothermal energy development. The BLM received twice as many new geothermal leasing applications - approximately 100 - over the last four years than it received over the previous ten year period. During the last two years, the BLM has issued about 150 geothermal leases, covering almost 250,000 acres. There are currently approximately 230 pending Federal geothermal lease applications - about 125 of these are on Forest Service lands and about 105 are on BLM lands.

The BLM's 2003 geothermal program budget includes \$700,000 in base funding and an additional \$700,000 in targeted funding for environmental reviews related to geothermal lease processing in the State of Nevada. The President's 2004 Budget requests \$1.2 million in base funding for the BLM's geothermal program.

#### Ongoing BLM Efforts to Enhance the Geothermal Development

In November, 2001, Secretary of the Interior Gale Norton chaired a Renewable Energy Conference in Washington, DC, that brought government officials together with renewable energy and environmental leaders and other citizens to focus on the best ways to increase renewable energy development - including geothermal - on the public lands. Topics discussed at the conference included permitting, leasing, public lands access, the need for an updated national geothermal resource assessment, and other regulatory matters.

As a result of the conference, and in support of the President's National Energy Policy, the Departments of the Interior and Energy organized a National Geothermal Collaborative of Federal and non-Federal stakeholders. The Collaborative has been meeting to advance strategies to enhance geothermal production, including identifying and reducing impediments to development and establishing dialogue with key stakeholders. The Collaborative is in the process of completing reports analyzing the impediments to accessing geothermal resources on Federal lands; analyzing Renewable Portfolio Standards (whereby States mandate a certain percentage of renewable energy supply into power grids); as well as other geothermal energy reports.

In addition, in April of this year, the BLM and the Department of Energy, through its National Renewable Energy Laboratory in Colorado, released a report entitled "Opportunities for Near-Term Geothermal Development on Public Lands in the Western United States." The report identifies and provides information related to 18 BLM Planning Units with high, near-term geothermal power development potential, so that industry and the Federal Government can concentrate their efforts for geothermal leasing and exploration in these areas.

Finally, the BLM also recently completed a customer satisfaction survey of industry, government, and other interested non-governmental representatives who have shown an interest in the Federal geothermal program. The survey was intended to measure BLM's success at meeting the concerns and suggestions from the 2001 Renewable Energy Conference. The BLM is incorporating the information provided through this survey into its efforts to facilitate geothermal development and to improve its business practices.

## Conclusion

Madam Chairman, we look forward to continuing to work with the Subcommittee as the BLM continues its efforts to implement the President's National Energy Policy to promote renewable energy development from Federal lands. Thank you for the opportunity to testify before you today. I welcome any questions the Subcommittee may have.

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