Statement of
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Subcommittee on Energy and Mineral Resources
Oversight Hearing on Climate Change: Renewable Energy Development on Public Lands

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Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to appear here today to discuss renewable energy development on public lands.

Background

As steward of 258 million acres of this nation's lands, the Bureau of Land Management (BLM) has tremendous responsibility to ensure multiple-use management of these resources for all Americans. Today's testimony will focus on one aspect of that multiple-use mandate: renewable energy development.

In providing an appropriate mix of both renewable and conventional energy supplies from the public lands, the BLM contributes to a more secure and reliable energy future for our country. The BLM has supported the development of renewable energy projects on public lands for decades, but recent guidance through the Energy Policy Act of 2005 (EPAct) and increased interest in project development has provided impetus to improve our processes and increase our efforts in the area of renewable energy development.

While the quantity of domestic energy produced from renewable resources is relatively small in comparison to conventional resources, the Energy Information Administration projects that the use of renewable technologies for electricity generation will grow steadily through 2030, stimulated by improved technology, higher fossil fuel prices, State requirements to produce renewable energy, and extended tax credits in the EPAct.

Through the EPAct, Congress affirmed the critical role of the public lands in creating a balanced energy portfolio for the nation by providing a sense of the Congress that BLM should approve enough projects on public lands to generate at least 10,000 megawatts (MW) of electricity from non-hydropower renewable resources by 2015. The BLM continues to implement the EPAct, which requires the development of renewable energy resources as part of an overall strategy to develop a diverse portfolio of domestic energy supplies for our future.

Protecting the Environment

The BLM's land use planning process seeks to ensure that energy development on public lands is done in a way that protects the environment. Strict mitigation measures are employed to minimize impacts on wildlife from habitat fragmentation, ground disturbances, or noise resulting from renewable energy development. Increasingly, BLM is mitigating effects of energy production and other activities through available land use planning tools.

In August 2006, an environmental review was completed for the largest wind energy project on Federal land in the last 25 years. Approval of the Record of Decision and right-of-way grant for the Cotterel Wind Power Project on 4,500 acres of BLM-managed public land cleared the way for the installation of up to 98 turbines on a ridge in south-central Idaho. The right-of-way grant includes important measures for mitigating the effects of wind generation on wildlife resources. Best Management Practices, offsite mitigation, and adaptive management strategies were incorporated into the project to address impacts to sage-grouse, raptors, bats, and migratory birds. An interagency team of Federal and state biologists developed the mitigation plan and will continue to monitor wildlife impacts. In this case, the applicant has executed a letter of commitment for annual contributions to be in an amount equal to approximately one-half of one percent of the gross revenues received from the project's electricity sales. The 200 MW project will generate enough electricity to supply approximately 50,000 homes.

The Healthy Lands Initiative proposed in the FY 2008 budget is another example of taking aggressive steps now to help avoid the need for future restrictions on uses of public land that would directly affect the Nation's economy and quality of life. Land health is being affected by pressures such as community expansion, wildfires, unprecedented demands for energy resources, ever-expanding recreation uses, and weed invasion. These pressures often interact to affect large landscapes and ecosystems, particularly those in the growing wildlife-energy interface. The Healthy Lands Initiative represents a new concept for meeting emerging challenges in managing natural resources with flexible, landscape-level approaches for maintaining or improving land health where lands continue to be available for multiple uses.

Renewable Energy Development on Public Lands

The BLM is advancing the development of geothermal, wind, solar, and biomass energy from public lands. Recently, BLM began a collaborative effort with the Department of Energy's National Renewable Energy Laboratory (NREL) to focus on expediting the processing of renewable energy projects on public lands. NREL will be providing additional technical resources to assist BLM in the review of wind and solar projects. In addition, NREL will provide additional assessments to identify areas for possible future leasing.

Geothermal: Fully 90 percent of the existing and future geothermal resources in the United States are on Federal lands. The BLM currently manages 354 geothermal leases, 55 of which are producing and generate over 1,250 MW of electrical power (enough to power 1.2 million homes). In addition, the BLM manages a small number of direct-use leases, which provide an alternative source of energy for greenhouses, fish farms, and other commercial facilities. Demand for both electrical power and direct-use from Federal geothermal resources is increasing. Since 2001, the BLM has processed more than 200 geothermal lease applications, compared to 20 lease applications received from 1997-2001. Geothermal energy generates over $12 million in Federal revenues each year.

Title II of the EPAct made comprehensive changes to the Geothermal Steam Act – the authorizing statute for geothermal development on public lands – by requiring land nominated and made available for leasing to be leased on a competitive basis; restructuring royalties; and revising lease terms, conditions and rentals. As a result, the BLM and the Minerals Management

Service have rewritten their geothermal rules to conform to the statutory changes. The Final Rule will be published in the Federal Register in the near future, and is scheduled to take effect 30 days after publication.

The BLM and Forest Service signed an Interagency Memorandum of Understanding (MOU) in April 2006 in accordance with section 225 of the EPAct. The MOU sets the foundation for increasing the collaborative approach between the agencies. The BLM and Forest Service have decided to prepare a Programmatic Environmental Impact Statement for Geothermal Development to assist in geothermal leasing and permitting on BLM public lands and National Forest lands. A draft of the Programmatic EIS is tentatively scheduled for release in December 2007.

Wind Energy: Section 211 of the Energy Policy Act provides a sense of the Congress that the Secretary of the Interior should seek to approve at least 10,000 MW of non-hydropower renewable energy projects on BLM-managed public lands by the year 2015. There are 330 MW of installed wind energy projects on public lands, and another 599 MW proposed or recently approved, creating the potential to power nearly 300,000 homes. Responding to increasing demand for wind power, the BLM has granted over 100 authorizations associated with wind energy in the last five years, compared with fewer than five issued between 1997 and 2001.

A programmatic Environmental Impact Statement (EIS) relating to the authorization of wind energy projects was completed in 2005. This EIS amended 52 BLM land use plans and provides the foundation for environmental analysis of future wind proposals on BLM lands. The BLM has identified 20.6 million acres of public land in the West with wind energy potential. Because wind energy facilities require only small amounts of land, actual development will involve just a fraction of that acreage.

In 2006, the BLM updated internal policy that implemented Best Management Practices and other mitigation measures for wind energy projects to avoid impacts to sage-grouse, raptors, bats and migratory birds, and to minimize habitat fragmentation, ground disturbance, and noise. These measures, combined with advances in technology, are allowing increased capacity to generate wind energy on public lands while conserving other important resource values.

Solar: Recognizing the recent technological advancements in the production of solar energy, this month the BLM updated policy guidance for processing applications for solar energy projects on public lands. The latest policy guidance directs BLM field offices to provide adequate resources to review and process applications for solar energy projects in a timely manner. The guidance also requires the BLM to address solar development when revising or updating land use plans for areas shown to have potential for commercial solar energy development.

The policy requires appropriate stipulations in authorizations to mitigate environmental impacts of projects, as well as bonding to ensure compliance and site reclamation. The guidance also describes the level of environmental review required before an authorization can be issued.

The development and use of solar energy has significant potential in the Western states. The BLM is prepared to respond to industry interest in this renewable energy resource.

Biomass: Biomass from the public lands managed by the BLM is predominantly woody debris, the by-product of hazardous fuels removal projects undertaken to reduce the risk of wildland fire and projects to improve forest and rangeland health. Using stewardship contracting and other tools provided in the Healthy Forests Initiative, the Healthy Forest Restoration Act, and the Tribal Forest Protection Act, the BLM has been working with state, Tribal, and local government partners, as well as private interests, to develop strategies to increase the commercial utilization of woody biomass and expand economic opportunities for local communities to develop energy generation industries. Woody debris that used to go up in smoke may instead be converted to heat, light, and economic development. Since implementation of its biomass strategy, the BLM increased its biomass offering from 30,000 tons in FY 04 to 122,000 tons in FY 06.

BLM has undertaken biomass demonstration projects across the West, including Alaska, California, Colorado, Idaho, and Oregon, in which local field offices are working with nearby communities and entrepreneurs to develop strategies for using biomass to generate energy.

In 2006 in Lakeview, Oregon, the BLM, the Forest Service, and 20 others representing local government, business, and non-profit organizations signed a Declaration of Cooperation in support of a 10-15 MW Biomass Energy Facility with the potential to supply electricity to more than 14,000 homes. The proposed Biomass Energy Facility is expected to be operational in 2008.

In Central Oregon, the BLM and Forest Service have committed to offering 80,000 tons of woody biomass material annually to the Confederated Tribes of Warm Springs. In addition, the proposal will treat 10,000 acres per year of forest and grasslands hazardous fuels for the next ten years. The Tribe will use the agencies' long-term commitment to provide biomass material to expand its existing energy facility near Warm Springs, Oregon.

Section 210 of the Energy Policy Act authorizes Federal grants for biomass use. BLM assisted the Forest Service with reviews and selections of Forest Service Biomass Grants in FY 2006 and 2007. Eighteen small enterprises received $4.2 million in grants to develop innovative uses for wood biomass as sources of renewable energy and new products in 2006, and 26 small businesses and community groups received grants totaling $6.2 million in 2007. The grant recipients were selected based on their capacity to increase biomass use on Forest Service land; however, 14 of them have the potential to also increase biomass use on BLM lands. Together with the non-federal matches required by the grant program, a total of approximately $12 million will be spent on these biomass projects in FY 2007.

Walking the talk – use of renewable energy by BLM

In addition to its significant role in domestic energy production, BLM is taking a leadership role by working to advance the use of renewable energy resources at numerous facilities in the field. There is significant potential for the installation and use of renewable energy resources, such as solar, geothermal, and wind power at existing and new BLM facilities.

The BLM generates a total of 185 megawatt-hours of electricity from photovoltaic systems each year from over 600 installations. Varied uses of photovoltaic energy include water pumping, outdoor lighting, communication sites, weather and water monitoring, remote field station, and

visitor centers. Since 1995, the BLM has installed over 130 photovoltaic systems to replace fossil fuel powered generators. The seasonal nature of the remote facilities and long summer sun hours have made solar energy a cost effective approach to supplying power to these facilities.

The BLM's Campbell Creek Science Center in Anchorage, Alaska, recently completed a biomass demonstration project that provided environmental education opportunities to demonstrate an alternative to diesel fuel to many local villages. A newly installed biomass furnace, fired by beetle-killed spruce, was added to the existing natural gas system to provide dual-fuel capabilities to reduce heating costs at the facility.

The BLM is expanding on the success of these efforts by incorporating energy efficiency technologies and renewable energy into more of its installations and facilities. A Greening Workshop was held in March for BLM engineers, property and facility specialists, and environmental specialists. The purpose of the workshop was to refine the BLM Strategic Greening Plan and develop specific action plans for the integration of "greening" activities in BLM, consistent with Executive Order 13423 (Strengthening Federal Environmental, Energy and Transportation Management, January 24, 2007). Energy efficiency as well as installation of renewable energy generation (solar, wind and geothermal) will be a focus in future BLM facility improvement and construction projects.

BLM issued a Fleet Management Plan in 2005, establishing goals for general purpose fleet size, reduction in fuel consumption, and the acquisition of alternative fueled and more energy efficient vehicles. As a result of this process, the BLM fleet size has been reduced by 5 percent since 2005 and fuel consumption has also been reduced.

Conclusion

In conclusion, Mr. Chairman, thank you for the opportunity to highlight a few of the steps BLM has taken to encourage the development of renewable energy resources on public lands and its own efforts to employ renewable energy at its facilities. This concludes my testimony. I would be happy to answer any questions you may have.