

**STATEMENT OF KEN SALAZAR
SECRETARY OF THE INTERIOR
ON
DEPLOYMENT OF SOLAR TECHNOLOGY ON THE PUBLIC LANDS
JOINT HEARING BEFORE THE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
AND ITS
SUBCOMMITTEE ON GREEN JOBS AND THE NEW ECONOMY
UNITED STATES SENATE**

January 28, 2010

Chairmen Boxer and Sanders, Ranking Members Inhofe and Bond, and Members of the Committee, I am pleased to appear before you today to discuss deployment of solar technology on the public lands and the Department of the Interior's role in building a new energy future. Thank you for giving me the opportunity to speak with you about these important issues.

A New Energy Future

During the first year of his Administration, President Obama has led the United States toward a clean energy future. A primary reason for delivering this change is that the United States cannot afford to fall behind in the energy technologies that will shape this century. We spend hundreds of billions of dollars each year on imported oil – our oil dependence poses risks to our national security.

I see many reasons for hope. Renewable energy development is one of President Obama's highest priorities, and the United States has come far in development of renewable resources this past year under the President's leadership. As the President mentioned just last week in Ohio,

new jobs are being created and many more are coming in the clean energy sector. And I know that America's abundant natural resources will help us rise to meet the challenges we face.

The great promise of solar energy and other renewable resources has led us at the Department of the Interior to change how we do business. For the first time ever, environmentally responsible renewable energy development is a priority at this Department. Until now, our deserts, plains, forests, and oceans have been largely unexplored for their vast clean energy potential.

The possibilities are immense, and the opportunities are great. The Department oversees 20 percent of the Nation's lands and 1.7 billion offshore acres. The Department of Energy's National Renewable Energy Lab estimates the wind potential off the East Coast of the United States in the Atlantic Ocean to be more than 1,000 gigawatts, greater than our entire national electricity demand. Turbines are already springing up to capture the energy of the wind that blows so hard across the Great Plains. We have huge solar potential in the deserts of the Southwest containing an estimated 2,300 gigawatts of energy capacity, not far from the great cities of Los Angeles, Las Vegas, and Phoenix. Geothermal energy opportunities are bubbling up across the country. We have great opportunities to increase hydropower production through improvements in efficiency, by adding power generation units to existing facilities, and through pumped storage.

During the past year, we offered new areas for oil and gas development, but instituted reforms to ensure we are offering leases in the right places and in the right way. Importantly, and relevant to today's hearing, we have also opened the new renewable energy frontier – not just for solar

power, but also for wind, geothermal, and hydropower – on America’s lands and waters that will help power our clean energy economy.

As we open this new energy frontier, new development and new technology deployment on public lands will help solve key challenges in reliability, storage, and transmission of renewable energy and ultimately could mean lower costs to the private market in meeting energy demands.

The Promise of Solar Energy

Solar energy is the most widely available source of energy on earth.

There are two ways that solar energy can be converted to electricity. The first, known as “concentrated solar thermal,” uses the sun to heat fluid, producing steam that is used to power an electric generator. This technology generally uses mirrors arranged in an array that concentrates the sun’s rays to heat the fluid, and is often used for large, utility-scale projects. The second system uses photovoltaic cells – what most would identify as solar panels – that are made of special materials that change sunlight directly into electricity. Because of this property, they are available for many different uses, such as powering calculators and lights; small arrays can power a home; and large arrays make up large power plants. New and more efficient generations of these cells are being developed. It is a truly exciting technology that holds much promise.

The amount of sun available for the creation of solar energy depends on several variables, including the time of day, time of year, and the location. The Department manages a significant amount of the public land in the southwestern United States, and because of the amount of

sunlight that region receives it is an ideal location for the development of solar energy on a utility-level scale.

I mentioned that we cannot afford to fall behind. Over the past year, as we have worked to make the President's vision a reality, there has been much discussion in the media about the development of these technologies in other nations. We have heard that China is now the world leader in the manufacture of solar panels and wind turbines, and it has targeted the development of renewable and low-carbon energy as a priority. A number of European countries, including Spain and Germany, have developed aggressive policies that have led to expanded development of renewable, specifically solar, energy.

The Department's vast land ownership and the breadth of our management responsibilities over those lands has put us in a unique, and important, role with regard to the domestic development and transmission of solar energy. The possibility of capturing the sun's abundant energy and making it usable as a clean, non-polluting source of power; the potential of American ingenuity to drive more efficient applications; and the promise of additional jobs for the new energy economy are ensuring that we at the Department are moving quickly to responsibly develop this tremendous energy potential on our public lands.

DOI's Role in the Development of Solar and Renewable Energy

Renewable energy was the subject of my first Secretarial Order, back in March 2009. That Order made facilitating the production, development, and delivery of renewable energy, including solar energy, on public lands and the Outer Continental Shelf top priorities at the

Department. I have pledged that these goals will be accomplished in a manner that does not ignore, but protects our signature landscapes, natural resources, wildlife, and cultural resources.

I believe that actions speak louder than words.

We are redoubling our efforts to evaluate existing applications for renewable energy projects, including solar projects. The BLM is currently processing approximately:

- 128 applications for utility-scale solar projects that involve approximately 77,000 megawatts and 1.2 million acres of public land;
- 95 geothermal energy drilling applications;
- 257 applications for wind testing rights-of-way; and
- 24 applications for wind energy projects.

We have opened Renewable Energy Coordination Offices in California, Nevada, Wyoming and Arizona and established teams in six other states—Colorado, Idaho, Montana, New Mexico, Oregon/Washington and Utah—that are charged with expediting the required reviews of ready-to-go solar, wind, geothermal, and biomass projects and supporting the prompt permitting of appropriate transmission-related projects on our public lands.

We worked with the Federal Energy Regulatory Commission to develop and enter into a Memorandum of Understanding that resolved jurisdictional concerns that had resulted in the delay of renewable energy projects on the OCS. We have also put in place long-awaited offshore renewable energy rules, creating the first-ever framework for offshore renewable energy

development, which we expect to result in the development of significant offshore wind energy potential. We subsequently awarded four exploratory leases for wind energy production on the OCS offshore of New Jersey and Delaware.

Finally, just last month I announced that the Minerals Management Service will establish an Atlantic renewable energy regional office this year – this will be the first federal office specifically supporting renewable energy development on the OCS. I have invited the governors of Atlantic coast states that are considering the development of offshore wind energy projects to meet at Interior Headquarters next month to explore how to support and coordinate the development of this new industry. As the Department explores the potential for renewable energy in offshore areas, wind energy production in the Atlantic offers great promise and this meeting will allow us to exchange ideas and chart a coordinated path forward to advance further, appropriate development of the resource.

These and other accomplishments are moving us toward increased production and use of renewable energy and our goals of reduced dependence on oil and curbing greenhouse gas emissions.

Specifically with regard to solar energy, I have visited solar energy projects in both the East and the West, and met with the employees of innovative clean energy sector companies making necessary components like next-generation thin-film solar photovoltaic modules. We, along with these entrepreneurs, are ensuring that solar development remains at the forefront of the clean, renewable energy frontier.

Over the past year we have worked diligently to prioritize the development of renewable energy on our public lands and our offshore waters and, as a result last June I, along with Senate Majority Leader Harry Reid, announced the identification of 1,000 square miles, 24 tracts of Bureau of Land Management-administered land, in the West as Solar Energy Study Areas. We are fully evaluating these areas for their suitability – from both an environmental and resource perspective – for the large-scale production of electricity from solar energy.

And, along with DOE, we are preparing a Solar Energy Development Programmatic Environmental Impact Statement, due for public release in late 2010, that provides a landscape-scale plan for siting solar energy projects on our public lands in the Southwest that have been identified as having the best potential for utility-scale solar energy development. The BLM has identified approximately 23 million acres with solar energy potential, including the 24 Solar Energy Study Areas, which are being reviewed as part of this process to evaluate the environmental suitability of solar energy development across the West. The Solar Energy Study Areas alone have the technical potential to generate nearly 100,000 megawatts of solar electricity, enough to power millions of American homes. The public comment period on these solar study areas closed in September 2009, and we are evaluating the comments we received.

We believe that landscape-scale planning and zoning for solar projects on our public lands will provide a more efficient process for permitting and siting of this type of development.

To further make our goals a reality, we have announced 34 “fast track” renewable energy projects. Fast-track projects are those where the companies involved have made sufficient

progress in the environmental review and permitting process that they could potentially be cleared for approval by December 2010, thus making them eligible for economic stimulus funding under the American Recovery and Reinvestment Act of 2009.

Fourteen of the 34 fast-tracked projects are solar energy projects. These include several different types of concentrated solar thermal technologies – like solar engine, parabolic trough, and power tower – and photovoltaic cells, and are located in Arizona, California and Nevada. All are currently undergoing detailed environmental impact reviews, and if ultimately approved, some 5,000-6,000 megawatts of new capacity, in California, Arizona, and Nevada, could be permitted for construction by the end of this year. Moreover, our analysis indicates that tens of thousands of jobs could be created in the development of these projects alone.

In this same vein, California Governor Schwarzenegger and I announced last fall a Memorandum of Understanding between the State and the Department that will expedite the process of siting, reviewing, approving and permitting renewable energy projects on Department-managed lands in California.

Finally, we must recognize that the development of transmission capacity for this new energy production is a crucial element. Developing solar and other renewable energy resources, which are often located in remote areas, will require new transmission capacity to bring this clean energy to the population centers where it is needed. The Department has already identified and designated more than 5,000 miles of transmission corridors on the lands it manages to facilitate the siting and permitting of transmission lines in the right ways and in the right places, and we

are processing more than 30 applications for major transmission corridor rights-of-way on the lands we manage, with 7 applications in Idaho, California and Nevada that could add more than 1,000 miles of new transmission, on the “fast track” to potential permitting this year.

The Obama Administration also continues to cut through bureaucratic barriers. In October 2009 the Administration announced that nine federal agencies, including the Department, had signed a Memorandum of Understanding designed to expedite the siting and permitting of electric transmission projects on federal lands. This agreement commits the participating agencies to close coordination and a number of procedures to improve the federal process under existing authorities, including establishing a single point of contact for all required federal authorizations.

Conclusion

Renewable energy development presents tremendous opportunity, but meeting the potential of that opportunity requires tremendous work. I am proud of the work already underway at the Department of the Interior, and I look forward to continuing this work as it bears fruit. Thank you.