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## BEFORE THE SUBCOMMITTEE ON ENERGY AND MINERAL RESOURCES AND SUBCOMMITTEE ON WATER AND POWER COMMITTEE ON NATURAL RESOURCES U.S. HOUSE OF REPRESENTATIVES

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Chairman Costa, Chairwoman Napolitano and members of the subcommittees, thank you for the opportunity to testify today regarding the Department of Energy's efforts to facilitate modernization of the Nation's electricity infrastructure and support needed transmission expansion. Progress on both fronts is necessary to move the United States to the exciting new energy economy of the 21<sup>st</sup> Century, increase our national security and reduce greenhouse gas emissions to address climate change. It is exciting to have this opportunity to report real progress.

A fundamental goal of this Administration is to minimize the need to build new electricity generation and transmission by tapping into the cheapest and cleanest resource for electricity: energy efficiency. The American Recovery and Reinvestment Act funding devoted to energy efficiency across the residential, commercial and industrial sectors is making a significant contribution toward reducing growth in energy demand with local, clean energy technologies.

Efficiency alone, however, will not achieve our clean energy economy, national security and carbon-reduction goals. Accordingly, the Administration has made renewable energy power and other clean energy a top priority. Renewable energy resources are often generated in remote locations and require additional transmission infrastructure to deliver these resources directly to the American people. Importantly, both the clean energy generation and supporting transmission must be planned and sited such that our Nation's national parks, historic sites, wildlife areas and other natural and cultural resources are protected and preserved. In doing so we not only leave these national treasures as a legacy to future generations of Americans, but we also build confidence in the process.

This morning I'd like to address two major initiatives that the Department of Energy is undertaking to ensure that the transmission for renewable energy and low-carbon resources is effectively and efficiently planned, sited and built. Before I turn to these initiatives, I'd like to provide an update on recent and related Department Recovery Act activities.

Last week, the Department announced its \$3.4 billion investment in a smart energy grid to achieve a smarter, stronger and more secure electric grid. Among other things, a more sophisticated energy grid can promote money-saving choices for consumers, and better enable variable renewable energy sources like wind and solar to usefully support supply. A smarter grid, coupled with electricity storage capability and other measures taken at the bulk power level, can facilitate the integration of both large and small renewable energy projects and other clean energy projects into our dispatchable electricity supply. In addition, adding sophisticated communication, monitoring and control features will help to ensure the system reliability that consumers expect.

Over the past several months, the Department has announced numerous awards that distribute billions in Recovery Act funds for both private sector as well as state and local investments in renewable energy, energy efficiency and other clean energy efforts.

For example, two weeks ago, Energy Secretary Chu announced \$151 million in funding under the Department's Advanced Research Projects Agency-Energy program to pursue breakthroughs that could fundamentally change the way we use and produce energy – including some that could allow intermittent energy sources like wind and solar to provide a steady flow of power, or use bacteria to produce automotive fuel from sunlight, water and carbon dioxide.

And last month, Treasury Secretary Tim Geithner and Energy Secretary Chu announced \$550 million in new awards through the Recovery Act's 1603 program, bringing the total to more than \$1 billion awarded to date to companies committed to investing in domestic renewable energy production.

Another important Recovery Act initiative is \$6.5 billion in borrowing authority for the Bonneville and Western Area Power Administrations (BPA and Western). BPA received an increase in its existing borrowing authority that it will use to enhance transmission infrastructure, modernize the Columbia River federal hydro projects, implement energy efficiency programs, and enhance fish and wildlife. BPA's first project using additional authority is the 79-mile McNary-John Day transmission line that will relieve constraints and enable a higher percentage of renewables to be integrated into the BPA system. BPA already has constructed 22 miles of transmission towers at this time. Western's new borrowing authority is exclusively for the construction of transmission lines that will foster the delivery of renewable energy. I'm pleased to note that earlier this year Western finalized its Transmission Infrastructure Program to implement this new borrowing authority after receiving and incorporating public comment. Western recently announced its funding of the Montana - Alberta Tie Ltd. Transmission Project that will be nearly 100% allocated to new wind generation and is working to identify additional projects. Both BPA and Western's projects will help accomplish the Obama Administration's goals by fostering the development of clean, renewable generation while providing jobs for construction workers and those who will operate and maintain the lines and associated wind farms.

I'd now like to focus on two precedent-setting DOE initiatives to bring relevant stakeholders into one common forum to find renewable energy transmission solutions. In May of 2008, the Western Governors Association launched the Western Renewable Energy Zone (WREZ) Initiative, with the Department providing the funding support. The WREZ Initiative will provide resource and transmission planning decision-makers in the Western Interconnection with credible information that supports the cost-effective and environmentally sensitive development of renewable energy in specified zones, and conceptual transmission plans for delivering that remotely-located energy to population centers.

I'm pleased to report that in June 2009, WREZ Phase 1 was completed with the identification of over 30 locations in the West that contain high-quality renewable resources in areas where development could proceed with minimal impact on lands, wildlife and the environment. These locations contain approximately 200,000 MW of wind, solar, geothermal, biomass and small hydro capacity, more than the total 2008 peak load in the Western Interconnection. The WREZ model is achieving early successes by including diverse stakeholder groups in a professionally-facilitated setting to find consensus-based solutions. WREZ is working because utilities, state representatives, renewable energy industries, tribal interests, environmental organizations and Federal permitting agencies – the exact groups that need to be talking to each other – are all at the table finding common ground, and this will go a long way to preventing future conflict, gridlock and permitting delays.

I want to mention that WREZ Phase 2, which is the identification of conceptual transmission needs, is underway with FY 2009 funding from the Department. The Department looks forward to our continued partnership with WGA and the stakeholder groups in completing Phase 2.

Separately, under a Recovery Act solicitation on electric interconnection-wide transmission analysis and planning that closed on September 14, the Department asked for proposals in the Western Interconnection to include the support of western states in obtaining better and more consistent wildlife data that will lessen future conflicts. The need to more closely examine and mitigate wildlife conflicts surfaced in the WREZ Phase 1 work. In addition, the same solicitation asked for proposals to include completion of WREZ Phases 3 and 4. These phases will address coordination of regional renewable energy procurements by electric utilities and then have the Western states themselves coordinate consistent siting and cost recovery for any needed transmission projects that will cross state lines.

I've just touched on the second major DOE initiative I wish to highlight. That is the Recovery Act's \$80 million investment in supporting the development of interconnection-wide transmission analyses and plans throughout the country. Reviews are underway for applications received in response to the competitive Funding Opportunity Announcement that closed in Mid-September. Successful applicants in each of the Eastern, Western and Texas Interconnections will begin comprehensive transmission and electricity resource analyses on a regional basis so that transmission requirements under a broad range of alternative generation and demand-side future scenarios can be identified.

This new day of cooperative and broad transmission analyses and planning will embrace new approaches and incorporate important considerations such as: (1) robust and interconnection-

wide scenarios of future resource needs that account for non-transmission alternatives including generation not needing transmission, energy efficiency and demand response, and also considering technology advances for both remote and local clean energy that we will see in the coming decades; (2) similar to the successful WREZ model, states and other stakeholders will be heavily involved in an open, transparent and collaborative manner; and (3) the consensus development of "plans" to move the ball forward from "planning" in order to get needed projects built and steel in the ground. Using Recovery Act funding, this four-year investment will, among other things, produce consensus-based transmission plans in 2011 and 2013 that should improve the quality of future siting processes by engaging key stakeholders and identifying and addressing issues early on in the planning process. This type of inclusive and cooperative effort could lessen resource conflicts and potential litigation.

Finally, I want to stress that at the Federal level there are numerous other agencies whose coordination is critical to the successful planning, siting and cost recovery for any needed major new interstate transmission lines. Also today you will hear from the Department of the Interior on their important and key efforts on improving siting and permitting of transmission and clean energy generation on their lands. We intend to continue our own coordination with Interior on the efforts described here today.

In addition, just last week the President announced that nine Federal agencies, including the Department, entered into an Memorandum of Understanding to improve the process for permitting electric transmission on Federal lands – critically important for transmission expansion in the Western U.S. and other areas for renewable and clean energy generation. It is important to emphasize that improving the process doesn't change the standards to which projects will be held. Instead the process is being improved by having all environmental reviews coordinated by a lead agency which will serve as a single point of contact for applicants.

This concludes my statement. Thank you for the opportunity to speak, and I look forward to answering any questions you and your colleagues may have.