



Shaping the Future of the West

July 11, 2016

Honorable Doug Lamborn, Chairman

Subcommittee on Energy and Mineral Resources
1324 Longworth House Office Building
Washington, D.C. 20515

Honorable Alan Lowenthal, Ranking Member

Subcommittee on Energy and Mineral Resources
1324 Longworth House Office Building
Washington, D.C. 20515

RE: The Public Land Renewable Energy Development Act of 2015, HR 2663

Dear Chairman Lamborn and Ranking Member Lowenthal,

It is our honor to submit these comments in advance of the July 13, 2016 hearing at the House Subcommittee on Energy and Mineral Resources regarding HR 2663, the Public Land Renewable Energy Development Act of 2015. We encourage Congress to continue to advance this legislation toward formal adoption in an effort to promote the development of essential energy resources in the West.

For the past quarter-century, the Sonoran Institute has been working closely with communities throughout the West in promoting solutions that balance the need for a robust and healthy economy with the conservation of the iconic natural resources that surround them. Our unique approach embraces the concept that enduring solutions require balance between protection and development and must provide outcomes that improve the quality of life of the communities with whom we work.

For the past decade, Sonoran Institute has been a leader in the West, and particularly in Arizona, at removing barriers for renewable energy development at the utility scale. Since 2010, our Solar Energy Working Group, composed of the state's major utility companies, conservation interests, and renewable energy representatives, has been convening regularly to address outstanding challenges that limit successful renewable energy development within Arizona. Among other things, the group has advised the Western Solar Plan, the Arizona Restoration Design Energy Project, and has been recently working to promote smartly-located regional transmission facilities that will effectively connect renewable resources to markets throughout the West.

The Importance of Renewable Energy Generation in the West

For generations, the West has largely imported energy resources including natural gas and gasoline in order to power our fast-growing communities. Though historic western communities relied on nearby renewable hydro-electric power and coal-fired plants that are fueled by nearby fuel deposits, the West has not been able to benefit from the large-scale exploitation of energy resources that are near-at-hand. The development of large nuclear generating facilities like the Palo Verde facility near to Phoenix has

allowed for states to meet their energy demands, yet these facilities present various drawbacks to the long-term sustainability of the region.

The West is an arid environment and is defined by periods of drought, extreme heat, and unpredictable weather patterns. For this reason, successful long-term energy generation should respond to the conditions of the region including: using nearby energy resources to reduce uncertainty and unnecessary transportation risks and costs, using few water resources in order to respect the decades-long drought conditions that prevail across the West, and providing opportunity to nearby communities for economic development including living-wage local jobs. In the arid West, renewable energy including solar, wind, and geothermal generation present the best possibility to meet these conditions.

Modern renewable energy development utilizes readily-available resources like wind, sunlight, and underground thermal energy and depending on technology, can use significantly less water than conventional fossil-fuel generation. The recent report titled *A Retrospective Analysis of the Benefits and Impacts of U.S. Renewable Portfolio Standards* stated the following with respect to the benefits of additional renewable energy (RE) generation on water use as facilitated by the Renewable Portfolio Standards (RPS) across the nation:

“National water withdrawals and consumption in 2013 were reduced by 830 billion gallons and 27 billion gallons, respectively, equivalent to savings of 8,420 gallons of withdrawal and 270 gallons of consumption per megawatt-hour (MWh) of new RE used for 2013 RPS compliance. 3 These reductions amount to 2% of both total 2013 power sector water withdrawals and consumption. Water use reductions vary seasonally and come predominantly from freshwater sources, with reductions varying regionally due to geographic differences in power plant fuel types and cooling system configurations. The largest withdrawal and consumption reductions were in California and Texas, respectively, demonstrating the benefits RPS policies can have in water-stressed regions.”¹

In terms of economic development, due to the wide distribution of renewable energy resources and transmission lines across the region, many rural communities that have few alternative industrial employment opportunities may benefit from the development and operation of renewable energy generation facilities. The West could benefit significantly if a robust RE industry is established, requiring the development and expansion of related manufacturing, logistics, engineering, and other related industries. Up until now, a cloud of uncertainty related to the commitment of federal and state energy policy-makers has stifled the robust expansion of utility-scale energy in many states. The Public Land Renewable Energy Development Act (PLREDA) will help to address some of these roadblocks that have thus-far prevented the implementation of utility-scale renewable energy projects across the region and provide an environment that will promote greater certainty in support of an enduring RE industry.

Planning: A Hedge Against Uncertainty

¹ Wiser, R., G. Barbose, J. Heeter, T. Mai, L. Bird, M. Bolinger, A. Carpenter, G. Heath, D. Keyser, J. Macknick, A. Mills, and D. Millstein. 2016. *A Retrospective Analysis of the Benefits and Impacts of U.S. Renewable Portfolio Standards*. Lawrence Berkeley National Laboratory and National Renewable Energy Laboratory. NREL/TP-6A20-65005. <http://www.nrel.gov/docs/fy16osti/65005.pdf>.

Arizona has benefitted from significant and robust planning activities around renewable energy. As a result of the Western Solar Plan that established two of the state's Solar Energy Zones (SEZs) and the Restoration Design Energy Project (RDEP) that established an additional SEZ and a subset of variance lands known as Renewable Energy Development Areas (REDAs) on 192,000 acres of land managed by the Bureau of Land Management, we have seen the environmental community in particular, much more comfortable in supporting the development of appropriately-sited projects. Furthermore, an additional 1.8 million acres of land was also screened through the RDEP process and was mapped for the benefit of the landowners including the Arizona State Land Department for use in identifying appropriate parcels for energy siting. This process, in addition to the Western Solar Plan, has been invaluable to providing greater certainty for solar developers, cities and counties, and the environmental community to embracing energy projects. In fact, recent proposals including the Marisol Maricopa Solar Park energy project received significant early support from the broader community once it was determined that the project occurred in screened REDA lands. While additional environmental reviews are still necessary when projects are sited on REDA variance lands, it is comparatively easy for the broader community to quickly engage in the project as there is some assurance that these lands contain minimal environmental conflicts.

While planning processes can be tedious and resource intensive, large-scale efforts like the RDEP can provide significant long-term benefits including a significant reduction in risk and uncertainty and the relatively rapid identification of appropriate parcels for solar development. Additionally, these planning processes should reduce the expense of future site-specific evaluations as data will have been collected and interpreted for use in future evaluations. For this reason, we feel that the PLREDA's provisions that require the establishment of wind and geothermal priority and variance areas to be an important aspect of this legislation and that additional certainty for local communities, stakeholders, and the energy industry will benefit the long-term implementation of energy resources throughout the West.

Revenue Distribution

Rural communities in the West have often sought sustainable economic development opportunities. In many cases, they have settled for the rapid and short-lived exploitation of available natural resources that prevented a successful and enduring economy. Renewable energy has the potential to provide much more long-term opportunity to largely rural communities in the West and to allow them to benefit from the use of federal lands nearby. The Sonoran Institute is very pleased with the proposed revenue distribution formula as outlined in the PLREDA of 2015 for the following reasons:

1. State revenue disbursements: Under this legislation, states like Arizona will benefit from supporting the implementation of a robust renewable energy economy by receiving 25% of the leasing and royalty revenues. We feel that this will incentivize states to embrace regional planning activities, promote the renewable energy industry, and to benefit from the use of public land.
2. County revenue disbursements: In Arizona, local rural counties have voiced concern about large-scale development on public lands as they feel that local resources including emergency services, water, and roadway infrastructure will be used without an offsetting return to the county coffers. In absence of significant other economic development opportunity, and with the prevalence of public lands in all western states, the 25% share of revenue for local counties as described in this legislation, should not only offset the burdens that development may bring but

it may also allow innovative rural counties to benefit from a new economic development opportunity.

3. In the PLREDA between 10 and 15% of revenues from leasing fees and royalties will be returned to the BLM and other agencies toward offsetting the cost of implementing this program. We feel that this is essential in order to allow resource-constrained agencies to effectively implement a robust and efficient renewable energy program.
4. The Renewable Energy Resource Conservation Fund (RERCF) is an excellent and badly needed mechanism to allow the conservation of important natural resources and recreation opportunities that may be impacted by renewable energy development. Even the most careful implementation of development activities on public land result in a loss of recreation opportunities, wildlife habitat, vegetation, and other ecological resources. With the establishment of a RERCF and the funding of it with 35% of the lease and royalty revenues, we expect that the full implementation of a robust renewable energy program will have a lower long-term impact on the precious resources in the West.

Support for the HR 2663

Sonoran Institute is honored to support the full passage and implementation of HR 2663, the Public Lands Renewable Energy Development Act, as we feel it will facilitate a more rapid and thoughtful implementation of a sustainable and robust renewable energy industry in the West. Among other benefits we are particularly pleased about the following aspects of the legislation:

1. The revenue distribution formula that provides economic value to states and counties to reward a thoughtful and robust renewable energy industry;
2. The establishment of the Renewable Energy Resource Conservation Fund that is funded by the development of energy resources on public lands;
3. The mandate for further planning for wind and geothermal energy that will establish priority development and variance areas similar to the Western Solar Plan;
4. The establishment of a royalty fee for energy generation that promotes more efficient and thoughtful generation of renewable energy;
5. And the requirement for periodic review of energy policy in order to track success and address challenges to the implementation of a renewable energy industry.

Thank you for the opportunity to share this perspective, we appreciate the thoughtfulness of the Committee and staff toward moving this legislation forward.

Sincerely,



Ian Dowdy, AICP
Director, Sun Corridor Program
Sonoran Institute [REDACTED]