

U.S. House of Representatives
Committee on Natural Resources
Subcommittee on Water and Power/Committee on Natural Resources
Grace Napolitano, Chairwoman

Hearing: Federal Power Marketing Administration Borrowing Authority: Defining Success

Name: Steve Ellenbecker

Affiliation: Energy Policy Advisor to Wyoming Governor Dave Freudenthal; Wyoming Infrastructure Authority - Director of Governmental & External Relations

Hearing Date: March 10, 2009

Introduction

Chairwoman, and distinguished members of the Subcommittee, thank you for this opportunity to provide testimony. I am here on behalf of Governor Freudenthal to thank the Congress for enacting legislation that provides the Western Area Power Administration (Western) with \$3.25 billion in borrowing authority under the American Recovery and Reinvestment Act of 2009 (ARRA). Moreover, to urge that this authority be used to assist in the construction and modernization of electric transmission facilities that are necessary to deliver renewable energy resources that meet our Nation's global climate goals in an environmentally responsible manner.

In recent years, I have had occasion to represent Wyoming and Western States in a wide range of public policy venues involving the energy and electricity industries. These include the representation of Governor Freudenthal in support of his recent tenure as Chairman of the Western Governors Association (WGA) as well as leadership roles in the Rocky Mountain Transmission Study (RMATS), the Committee on Regional Electric Power Cooperation (CREPC), the Frontier Transmission Line feasibility study, WGA's Clean and Diversified Energy Advisory Committee (CDEAC), and most recently, WGA's Western Renewable Energy Zone Initiative (WREZ). I also served as the Chairman of the Wyoming Public Service Commission, the state utility regulatory agency.

Wyoming in Context

Wyoming is the largest energy exporting state in the U. S. We produce in excess of 10% of the Nation's energy supplies. Wyoming is the largest producer of coal, the 3rd largest producer of natural gas and the largest producer of uranium. The vast majority of our energy resources are exported as commodities, and converted into value-added usable energy forms in distant markets. Our wind energy resource is just as prolific, but must be

converted to usable electric energy on site, entirely dependent on a new interstate transmission backbone system to move this vast and emission free energy resource to the markets where it can be utilized.

According to National Renewable Energy Lab data, Wyoming is home to more than two-thirds of the Class 7 developable wind resource in the U. S., and over one-half of the developable Class 6 wind resource. Wyoming has more developable Class 5, 6 and 7 wind resource than all the other western states combined. These potential resources have a capacity factor in excess of 40%.

While it's true that Wyoming has a vested interest in an environmentally compatible new high voltage transmission network, it should be equally true that the U. S. has a societal and national energy policy interest in the same grid, if we are to meet the collective renewable energy targets set by individual states and now envisioned in emerging federal energy policy.

Six high voltage transmission projects originating in Wyoming are in various stages of development. Together, they could have the capacity to move 8,500 –16,000 MW of new electric energy resources to load centers. Each of them is focused around wind energy in Wyoming at their core.

Several economic studies have shown that Wyoming Wind can be delivered to Arizona Colorado, Utah, Nevada, Idaho and California at a competitive price and in most cases at the lowest price of any other renewable energy. The ARRA specifically directs the Western Area Power Administration (WAPA) to support remote solar and wind generation projects. Since the transmission grid in the west is essentially at capacity, new transmission would pave the way for remote abundant, economically developable wind generation from Wyoming to satisfy the renewable energy demands that are growing across much of the West.

To protect natural resource values in our state, Governor Freudenthal believes it is in Wyoming's interest to minimize the number of transmission corridors that will be needed for these projects while maximizing the flow of electrons. This leads to an optimum use of corridor and line capacity.

The Governor also believes it is necessary to reevaluate the regulatory process for approving transmission in western states. The current model is too cumbersome and time-consuming. In the Governor's opinion, it is unsatisfactory to many of the landowners affected by transmission construction. It favors protection of resources on public lands to the detriment of private lands. There shouldn't be a difference. As currently implemented, the regulatory process lacks "teeth" to address and balance private land concerns. Governor Freudenthal believes it is time to consider a streamlined, regulatory model for transmission similar to that presently employed by FERC to approve natural gas pipelines. Landowners should not have their concerns unaddressed simply because the issue is associated with private lands.

Past Constraints on the Western Area Power Administration

Western has struggled for several years without sufficient funds or borrowing authority to do much beyond maintaining its spider web of transmission lines that cross much of the West and Midwest. Many of these lines date from the Depression Era and were installed to deliver power from Federal hydroelectric plants to rural electric customers and municipalities. After decades of under funding, Western is now positioned to help tap some of the nation's best renewable resources to meet the needs of its existing customers and the needs of the nation, by helping to provide a transmission outlet for high quality renewable energy resources begging to be developed in the Rocky Mountain, Southwest and Great Plains states.

Western's long-standing financial limitations have largely left it by the wayside in the expansion and modernization of the nation's transmission grid. While it has been a valuable partner to the utility industry by providing operating services for many of the industry's transmission lines, including several in Wyoming, it has not been a viable partner in grid expansion or modernization. Armed with financial resources from the stimulus package, Western is now positioned to play a leadership role in joining with other transmission companies to upgrade and expand the backbone transmission systems that are critical in order to connect remotely-located renewable resources with load centers.

New Era for Western and Private-Public Partnership

Western should not view the stimulus money as just a resource to meet the backlog of deferred incremental transmission upgrades to its system needed to provide service to its existing customers. The stimulus package enables Western to partner with the sponsors of major proposed high voltage, long distance transmission projects within its footprint. These transmission projects are designed to deliver to major metropolitan areas the nation's highest quality wind resources (and therefore most efficient for the ratepayers and taxpayers), which are located in the Rocky Mountain and Great Plains states, and the highest quality solar resources located in the Southwest.

As part of a comprehensive national energy strategy, Western must also have a responsibility to invest in transmission to meet national renewable energy and climate goals. Governor Freudenthal believes the role of the Federal Government is to stimulate private sector investment in transmission facilities, not to be the replacement for such investments. The Federal Government should be available as a partner to supplement and/or help finance the incremental cost of transmission that the private sector is either unable to provide or to obtain State regulatory commission approval to include in rates.

Wyoming envisions an opportunity through the federal stimulus funding to develop a strengthened public-private partnership with Western in support of high voltage transmission projects. Western is in a key position to help ensure that projects are "right sized", that is, built with a minimum of natural resource conflicts and a maximum of renewable energy transfer capacity. We believe that it is appropriate that western states and the federal government share the goal of fostering collaboration among transmission

developers to achieve the maximum transmission capacity with the least possible number of lines, and thus minimizing the number of required corridors.

In the West, we have an unprecedented number of proposed major transmission projects. Not all of these projects will get built. Unfortunately, under a business-as-usual approach, the lines that do get built will be undersized and inadequate to meet the nation's long-term demand for low carbon generation. As a result, the nation and electricity consumers will not benefit from the huge economies of scale in transmission construction. Equally important, building undersized lines to areas rich in renewable resources today will lead to future proposals for more lines to those same areas, creating an unnecessary increase in natural resource conflicts. Even in the wide-open spaces of the West we cannot afford to squander the limited number of potential transmission corridors by building undersized lines to rich renewable resource areas.

Only the federal government is positioned to pay to right-size transmission to renewable areas. By doing so, a public-private partnership can be formed around increasing the societal value of major transmission projects. To this end, Western (and the Bonneville Power Administration) should seek opportunities to partner with major proposed transmission projects. Western (and BPA) should specifically use the stimulus authority to:

- Buy capacity on major proposed transmission projects that will enable the project sponsor to increase and/or appropriately "size" its proposed line to renewable resource rich areas; and
- Pay the incremental cost to preserve the option to increase transfer capacity in a new transmission corridor to an area of large renewable resources. For example, Western could pay the incremental cost of the larger capacity transmission towers needed to accommodate additional conductors on the same towers in the future. This investment will capture the economies of scale in transmission construction, limit the proliferation of transmission corridors, and provide load-serving utilities an option to quickly access more renewable generation when demand increases.
- Leverage the deployment of private dollars by creating the mechanism whereby private companies will acquire the transfer capacity preserved above, then repay Western so that the original investment is recovered. Properly executed, these dollars will be recycled to the next project with similar leverage to attract private investment to build out the grid.

There are several situations in Wyoming where this example would apply including the Wyoming-Colorado Intertie project (under development by the Wyoming Infrastructure Authority, Trans-Elect, and Western), PacifiCorp's Gateway projects, Anschutz's TransWest Express project, TransCanada's Zephyr project, and the High Plains Express project (an unprecedented collaboration of 7 utilities including Western, three state transmission authorities, and Trans-Elect). Equally compelling examples exist throughout the Rocky Mountain West and the Upper Great Plains states.

The WGA's WREZ Initiative is a West-wide stakeholder effort to consider the benefits of multi-state transmission lines to tap the West's most prolific renewable resources areas including wind, solar, geothermal, biomass, and small hydro. We anticipate that WREZ

will show that a West-wide expansion of transmission, much of it located within Western's footprint, will help to fully develop markets for renewables, reduce customer costs, and reduce the nation's dependence on carbon-emitting resources.

Conclusion

In closing, I would leave you with three points to consider:

- Through its role in marketing hydroelectric power and the new transmission borrowing authority in the stimulus package, Western is strategically positioned to make a significant contribution to the nation's renewable energy and climate goal; and
- Adequately sized transmission to access the nation's best renewable resources is less likely to be developed without the financial participation of Western.
- Making investments in a manner to leverage Western resources to attract private sector dollars will accelerate the construction of a more robust grid.

With careful, but expeditious action in the Executive Branch and with Congressional oversight, the new borrowing authority granted to Federal Power Marketing Administrations will create jobs and contribute to meeting the nation's long-term renewable energy and climate goals.

Thank you for this opportunity to provide testimony.