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Testimony on “Evaporating Prosperity: How Federal Actions Are Driving Up Water and Power Costs, Threatening Jobs and Leaving Arizonans High and Dry”

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Mr. Chairman and members of the Subcommittee, thank you for holding this hearing and for providing me the opportunity to testify. My testimony will mainly focus on the March 16, 2012 memorandum (Memo) from Secretary of Energy Steven Chu to the administrators of the four Power Marketing Administrations (PMAs) and on the U.S. Environmental Protection Agency (EPA) proposed federal regulations governing the disposal of Coal Combustion Residuals (CCRs) under the Resource Conservation and Recovery Act.

The Grand Canyon State Electric Cooperative Association (GCSECA) is a regional service organization representing the interests of cooperative electric utilities and their consumers. Electric cooperatives are not-for-profit, private businesses governed by their consumers who are members of their cooperative. There are more than 900 electric cooperatives which serve more than 42 million consumers in 47 states. In Arizona, 10 electric cooperatives serve more than 220,000 consumers in 10 of Arizona’s 15 counties and employ nearly 900 people. Electric cooperatives in Arizona average just 12 customers per mile of electrical distribution line, by far the lowest density in the industry. These low population densities, the challenge of traversing vast, remote stretches of often rugged topography, and the increasing uncertainty in the electric marketplace pose a daily challenge to our mission: to provide a stable, reliable supply of affordable power to our members, your constituents.

#### Power Marketing Administrations

Electric cooperatives were some of the first purchasers of federal hydropower, and today more than 600 rural electric cooperatives in 34 states are PMA power customers. In Arizona, six distribution cooperatives, a generation cooperative and a transmission cooperative serving more than 220,000 homes, farms, ranches and businesses are PMA customers in the Desert Southwest Region of the Western Area Power Administration (WAPA).

Secretary Chu's Memo directs the administrators of the PMAs to begin a process to fundamentally change the way they do business which will increase electricity rates for millions of rural Americans and may not provide meaningful benefits.

The Memo's general policy guideline to "modernize" PMA operations will needlessly undermine their historic partnership with not-for-profit electric cooperatives and others in providing affordable and reliable electricity that benefits consumers and taxpayers. This longstanding partnership in providing access to power produced at federal dams is guided by a statutory requirement that electricity is sold at "the lowest possible cost to consumers."

The Energy Department acknowledges that changes in its Memo will likely be costly. Rising electric bills hurt American families and businesses. Since incomes of electric co-op customers in Arizona lag 21 percent below the national average and 17 percent behind the state average, electric cooperatives work to keep rates affordable for their consumer-members at all times. Each time input costs increase for an electric co-op, their consumer-members electric bills must also increase to make up the difference. If changes are made that increase the costs of PMA-marketed electricity, customers' cost-based rates will also increase.

While the Memo suggests that increased costs will be "phased in" to minimize disruption, phasing in expenses does not address the issue of increasing costs to consumers with no associated benefits. The Energy Department sought no input from PMA customers before initiating this effort and many important questions remain to be answered.

In addition to providing consumers across the country with reliable, affordable electricity, the PMA-customer partnership is also a good deal to taxpayers. The federal power program pays its own way. It provides a mechanism through which dam operation costs are covered by federal power customers, including:

- Capital investment costs, including renewals and replacements, with interest;
- Power-related annual operating and dam maintenance costs;
- Transmission and marketing of federal power;
- Financial support of some non-power related authorized project purposes.

In the Memo, Secretary Chu states PMAs will become involved in a wide range of businesses including test beds for cyber security, advancing electric car deployment, and energy efficiency. These are valid policy goals, and in fact they are ones that many electric cooperatives are pursuing. However, asking current consumers and taxpayers to foot the bill for these pursuits is stepping well outside the PMAs' mission. It would be bad public policy to use the PMAs as technology laboratories, forgetting their primary mission of marketing federal power.

It is relevant to note that the PMAs control just six (6) percent of all transmission. The Secretary's effort to spur innovation in the transmission field, using such a small percentage of the transmission sector, is misplaced at best. The agency with direct jurisdiction over the majority of transmission facilities in the United States, the Federal Energy Regulatory Commission, is better equipped to give policy leadership in this context.

The Energy Department proposal also overlooks the widely-recognized leadership of electric cooperatives across the country in smart grid technology efforts. Electric co-ops are also actively incorporating demand response and reducing load through energy efficiency programs. Electric co-ops are both developing renewable energy projects and purchasing renewable energy that totals more than 4,000 MW of wind, solar, geothermal, biomass and clean renewable hydropower capacity.

Arizona electric co-ops support increasing energy efficiency, demand response and renewable generation. Arizona has one of the strongest energy efficiency standards in the nation.

The Secretary's direction to the PMA's to participate in an Energy Imbalance Market (EIM), presumably as a tool to help with the integration of renewable/variable energy resources, is not necessary at this time. An EIM may be a beneficial tool but it is just one option among many to help efficiently integrate these resources. To impose an EIM on WAPA while a number of parties are still studying the costs and benefits is premature. The costs associated with implementing an EIM are significant. We are very concerned about the impact of those costs on the rates of PMA customers.

Transmission owners and operators in the west are currently implementing a number of tools to effectively incorporate variable generation and increase coordination and cooperation among industry players, including the PMAs. We believe that further development of these mechanisms, while continuing to study the complexities and costs associated with an EIM, is a better approach than hastily creating an EIM without sufficient analysis of need or assessment of benefits. Such an approach will also aid the PMAs in continuing to provide federal hydropower and transmission service at the lowest possible rates.

Here is a brief description of the mechanisms in use today in the west. A more detailed description of these initiatives is included as an attachment.

- Intra-hour transmission scheduling – Currently generation is scheduled hourly. However, variable energy resources do not have level production throughout an entire hour. Intra-hour scheduling beginning with thirty-minute schedules has been implemented as a tool to help address this problem.
- Dynamic Scheduling System (DSS) – The output of variable energy resources varies throughout the hour. Schedules must be tracked in real time to know what has actually been purchased. DSS utilizes advanced communications to facilitate intra-hour schedules and dynamic schedules.
- Area Control Error (ACE) Diversity Interchange and Reliability Based Controls (RBC) – Variable generation can increase frequency within an electrical system. ACE and RBC allow operators to balance multiple generating units over a broader electrical area to maintain reliable system frequency.
- Intra-hour transaction scheduling platform - Allows for buyers and sellers to consummate bilateral trades of variable generation from renewable resources within the operating hour.
- Implementation of lower cost local energy efficiency and demand response programs.

We believe that further development of these mechanisms, while continuing to study the complexities and costs associated with an EIM, is a better approach than hastily creating an EIM without sufficient analysis of need or assessment of benefits. Such an approach will also aid the PMAs in continuing to provide federal hydropower and transmission service at the lowest possible rates.

Any changes to the PMAs' strategic planning processes should be carefully considered, and new capital expenditures should be specifically discussed with the customers who will pay those expenses. There should be a full and open public process with opportunities for PMA customers to provide input before any changes in existing policy and direction are undertaken. Congress should exercise its oversight of any proposals that alter the statutory mission of the PMAs. The Energy Department should remember three simple principles in its management of the PMAs: affordability; fairness; and upholding the PMAs' core mission.

Congress and the Administration could make a significant impact in our nation's energy security by working with PMA customers to improve federal hydropower resources. These efforts should include:

- Using existing authorities to prudently integrate newly developed resources into federal transmission systems, while improving reliability;
- Improving access to federal lands to speed construction of transmission and distribution lines;
- Recognizing the importance of clean, renewable, affordable hydropower as an important part of our nation's energy policy;
- Making a greater federal commitment to our hydropower resources. The President's budget request and congressional appropriations must prioritize the safety and efficiency of federal dams and power-related resources as a priority.

The federal power program pays its own way. Unlike most other federal programs, appropriations for the federal power program are repaid to the U.S. Treasury by federal power customers. Some years ago, Congress recognized this fact and decided to change the scoring for the PMAs purchased power and wheeling and direct program expenses. Indeed, the Congressional Budget Committees, the Congressional Budget Office, and the Office of Management and Budget all agreed to change the scoring for the PMAs because they recover their expenses in the year in which they are incurred.

From a budget scoring perspective, the PMAs are considered neutral and not a draw on the Treasury which means the Secretary's proposals in the Memo would hide the true expense of these new initiatives by rolling them into the PMAs budget. If the Secretary was to propose these initiatives as stand-alone measures, they would have scoring impacts which would have to be paid for through spending reductions in other programs.

Historically, deficit reduction measures have curtailed appropriations for the federal power program, despite the fact that all of the costs of the federal power program are repaid. These curtailments threaten the reliability and efficiency of federal hydropower assets. However, the federal power customers, in partnership with the PMAs and generating agencies, have contributed funds to reduce this threat. Continued federal appropriations must remain the

primary support for sustaining the federal power program, but should not preclude alternative funding methods to complement these appropriations.

By working together, Congress, the Administration, and the federal power customers can address the multiple goals of the federal hydropower resource and the PMAs, and maximize the benefit of the system for all.

Let me conclude this portion of my testimony regarding the PMAs by joining Mr. Sullivan in thanking the members of the Committee for their support regarding this issue, especially Congressmen Gosar and Matheson for their leadership in the House on the forthcoming Congressional letter to Secretary Chu. This has truly been a bi-partisan effort.

### Coal Combustion Residuals

Another issue which threatens to profoundly impact electric bills of our member-owners is the regulation of Coal Combustion Residuals (CCRs). CCRs are materials produced when coal is burned to generate electricity. These materials are used beneficially in a variety of applications including sustainable construction practices. For example, CCRs are used to enhance the strength and durability of concrete. The volume of CCRs being recycled and put to beneficial use amounts to about 43 percent of all CCRs produced nationally.

The U.S. Environmental Protection Agency (EPA) has proposed federal regulations governing the disposal of CCRs under the Resource Conservation and Recovery Act (RCRA). Whether to regulate CCRs as hazardous has been researched for nearly three decades and the overwhelming conclusion is that CCRs do not warrant hazardous regulatory treatment. EPA itself, in two prior reports to Congress and two related regulatory determinations, confirmed that regulating CCRs under RCRA Subtitle C is not necessary to protect public health and the environment.

Adding to the regulatory uncertainty is a lawsuit filed against EPA on April 5, 2012 by a coalition of environmental groups advocating for hazardous regulation of CCRs. The lawsuit is designed to force a hard legal deadline for release of the rule which could limit EPA's ability to fully and carefully select the proper regulatory path forward for CCRs.

In order to resolve the regulatory uncertainty associated with this issue, electric co-ops actively support the Coal Residuals Reuse and Management Act (H.R. 2273/S. 1751). The legislation would establish a federal regulatory program to ensure the safe management of CCRs as a non-hazardous material. H.R. 2273 was passed by the U.S. House of Representatives on October 14, 2011 on a strong bipartisan vote. S. 1751, was introduced with bipartisan backing in the U.S. Senate on October 20, 2011 but has since stalled in the Senate Environment & Public Works Committee.

Prospects for this legislation improved when the House recently voted to include its CCR bill (H.R. 2273) as an amendment to the Surface Transportation bill. H.R. 2273 would have the states administer a performance-based Subtitle D regulatory program for CCR patterned after the criteria for municipal solid waste landfills. In circumstances where a state does not implement a CCR permit program, or where EPA finds a particular state program to be deficient under a defined set of criteria, EPA would administer and enforce the non-hazardous waste permit

program using the same defined set of criteria. The bill does not authorize EPA to establish new federal regulations for CCR.

Arizona's electric co-ops agree that regulating CCRs under the RCRA hazardous waste rules is not warranted and we oppose the hazardous regulatory option set forth in EPA's proposed rule. In addition to reducing the rate of beneficial use, hazardous regulatory treatment of CCRs will create significant compliance costs at coal-based generation facilities. These costs could be sufficiently high to render some units uneconomic with plant closure the only viable option.

Arizona Electric Power Cooperative, Inc. (AEPCO) is the owner/operator of Apache Generating Station. Approximately 90 percent of the 180,000 tons of CCRs produced annually at Apache Station are sold for beneficial use. The unsold portion is stored at the plant site in a lined facility that became operational in 1995 with a projected life expectancy of 20 years. Due to the high demand for beneficial reuse of CCRs, AEPCO has been able to extend the life expectancy of the waste disposal facility.

The waste disposal facility was designed and constructed in accordance with strict regulatory standards under the direction of a registered professional civil engineering firm. Safety inspections and monitoring of the waste disposal facilities are performed by AEPCO internally under the supervision of a registered professional engineer on a weekly, monthly and quarterly basis.

If EPA were to classify CCRs as hazardous waste, AEPCO would be forced to close its existing waste disposal facility at a cost of approximately \$14.5 million. Then, at an estimated initial capital cost of \$20 million (these costs are without complete detailed engineering), AEPCO would have to shift from wet management of CCRs to dry management.

Under Subtitle C, AEPCO would be forced to ship its CCRs to an approved off-site landfill for final disposal. Because of AEPCO's remote location in southeast Arizona, the costs of trucking and disposal of such material would be a significant increase of approximately \$18.1 million in AEPCO's annual operational cost. This figure does not include the cost that will result from the shortage of off-site disposal facilities that is likely to occur from a dramatic increase in need by AEPCO and many other electric generators.

The CCRs disposal facility also provides the benefit of wastewater compliance for the facility. In order to replace this benefit, which will no longer exist if the waste disposal facility was to be closed under Subtitle C, AEPCO would need to construct a new evaporation surface area to support plant operations. Preliminary estimates indicate the new evaporation surface area will need to be approximately 200 acres for a total estimated capital cost of \$20 million.

All of these costs would flow to customers who would see dramatic increases in their electric bills.

I want to conclude by thanking the Chairman and Committee Members for holding this hearing and for the opportunity to address the significant impacts these proposals could have on the electric cooperative members in Arizona.