

John F. Sullivan
Associate General Manager & Chief Resources Executive
Salt River Project Agricultural Improvement and Power District
Testimony before the House Committee on Natural Resources
Subcommittee on Water and Power
Oversight Field Hearing
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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Chairman McClintock and Members of the Subcommittee on Water and Power, thank you for the opportunity to submit testimony today. I also would like to thank Representative Gosar for his interest and involvement with the Committee on many issues important to water and power users in Arizona.

My name is John F. Sullivan. I am the Associate General Manager and Chief Resources Executive of the Salt River Project Agricultural Improvement and Power District (Salt River Project), a political subdivision of the State of Arizona that provides retail electric service to more than 950,000 residential, commercial, industrial, agricultural and mining customers in Arizona. Salt River Project operates or participates in a broad portfolio of generating resources, including nuclear, coal, natural gas, hydroelectric and renewable facilities. Salt River Project also operates a water delivery system providing the primary water supply for an area of approximately 250,000 acres that includes major portions of the Arizona cities of Phoenix, Glendale, Mesa, Tempe, Chandler, Gilbert, Peoria, Scottsdale, and Tolleson. Salt River Project appreciates the Committee’s steadfast interest in issues important to Arizona and the Southwest, including the issues being addressed today.

My comments today will address at least briefly a number of the issues identified by the Committee for today’s field hearing because SRP is impacted by many of them. Of most immediate concern to SRP due to significant timing constraints, however, is the continued operation of the Navajo Generating Station (NGS), so I will begin by addressing that subject.

Navajo Generating Station

Salt River Project is the operating agent and one of six participants in NGS, a 2,250 MW generating station located on the Navajo Nation just outside of Page, Arizona. As the Committee is aware, Salt River Project and the other participants are addressing and responding to numerous issues and challenges relating to the continued operation of

NGS. Last summer, Mr. Richard Silverman, then General Manager of Salt River Project, testified before this Committee. Mr. Silverman's testimony is attached for the Committee's reference. Although I will not repeat his testimony to this Committee today, I want to reiterate several key points that remain of significant to SRP, and to summarize new information that we recently developed regarding the economic benefit of NGS.

NGS provides critical baseload energy to meet each of its utility owners' customer needs year round, and plays a key role in Central Arizona Water Conservation District's (CAWCD) delivery of water to Native American communities, farmers, and cities in Arizona. NGS cannot be simply or easily replaced. Yet, the participants currently are faced with a set of complex issues that threaten the long-term viability of the plant. Those issues include the need for lease extension and rights-of-way renewals, and the negotiation of key agreements, including for coal. To address these challenges, Salt River Project has been working closely with Native American Tribes, water and power users, and other affected stakeholders to develop a resolution that will ensure the continued operation of this critical generating asset. We greatly appreciate our relationship with these stakeholders and their continued engagement in issues affecting NGS.

Unfortunately, while Salt River Project has been working diligently to secure the necessary agreements to keep NGS in operation, the U.S. Environmental Protection Agency (EPA) has been working to develop a regulation that could put the future of NGS in jeopardy. This regulation, called the Best Available Retrofit Technology (BART) rule, could require costly additional emission control technologies for the purpose of improving visibility in nearby national parks.

Emissions from NGS currently are controlled by hot-side electrostatic precipitators (ESPs), wet limestone scrubbers, and Low-NOx Burners and Separated Overfire Air (LNB/SOFA). The ESPs and scrubbers reduce particulate matter by 99% and the scrubbers reduce sulfur dioxide emissions by more than 95%. LNB/SOFA, which were voluntarily installed by the NGS owners at a cost of \$45 million, have reduced nitrogen oxide emissions by approximately 40%.

The total cost of the additional controls under consideration by EPA as part of the BART rule is estimated to be between \$550 million and \$1.1 billion. However, SRP's modeling results suggest that the visibility improvement that would be achieved from installing such controls would be imperceptible to the human eye. As a result, SRP believes that LNB/SOFA is BART for NGS.

In addition to EPA's BART rule, several other Federal actions also could put the future viability of NGS at substantial risk:

- The initial term of the plant site lease expires in 2019. The extension of the lease and related agreements will trigger a review under the National Environmental

Policy Act (NEPA) and the Endangered Species Act (ESA). NEPA could require the preparation of an Environmental Impact Statement (EIS). The development of an EIS could take several years to complete and the outcome of that process is uncertain.

- Recently issued regulations and potential future rules that are yet to be developed or finalized also could impact the future economic viability of NGS. These include the recently issued Mercury and Air Toxic Standards (MATS), as well as potential future regulations on coal ash, ozone, and greenhouse gases.

Although the NGS participants are committed to securing all of the agreements and completing the reviews necessary to ensure the continued operation of NGS, it would be difficult for the participants to justify an investment of potentially more than \$1 billion for emission controls given the uncertainties that the plant currently faces. As several of the NGS participants articulated to EPA in a March 12, 2012 letter, if the EPA imposes a requirement to install the most costly additional emission controls as BART before the lease is extended, other agreements are reached, and the NEPA and ESA processes are complete, the continuing viability of the plant is at substantial risk. A copy of the participants' letter to EPA is attached.

Given the significance of this issue, SRP and the other NGS participants have more recently been engaged in several studies to quantify the overall economic benefit of NGS to the state of Arizona, and to evaluate the potential economic impacts of the EPA's pending BART rule.

The economic contribution of NGS is substantial. NGS has over 500 employees, more than 80% of whom are Navajo. NGS and the Kayenta Mine, which supplies the plant with coal, employ almost 1,000 people, with a combined annual operating budget of approximately \$500 million. The plant and the mine provide significant economic benefit to the Navajo Nation and the Hopi Tribe through employment, scholarships, lease payments, and coal royalties.

NGS and the mine also provide far reaching economic benefits to the state of Arizona as a whole. Arizona State University's Seidman Institute recently conducted a study that found that NGS and the mine will contribute over \$20 billion to Arizona's economy between 2011 and 2044, and contribute over 3,000 jobs each year throughout the state.

In addition to providing electricity for millions of customers in the Southwest, NGS also provides 95% of the power used by CAWCD to pump water from the Colorado River to central Arizona. It provides funds for the repayment of the cost of constructing the Central Arizona Project (CAP), and for water rights settlements with multiple central Arizona Indian Tribes.

A study conducted by Harvey Economics, a consulting firm specializing in water resource economics, estimated that the shutdown of NGS could result in a loss of over

\$3.5 billion between 2012 and 2044 to the economies of the Central Arizona Tribes that depend on the affordable water received through the CAP.

Clearly, the closure of NGS would have far-reaching adverse economic impacts to the State of Arizona as a whole, and more particularly to Arizona's Indian Tribes. SRP continues to strongly believe that LNB/SOFA is BART for NGS and that a prompt decision by EPA is critical for the NGS participants to make appropriate plans moving forward.

Forest Health

We are pleased that the Committee also is looking at forest health, which is important in ensuring we are able to deliver a dependable and reliable water and power supply. Salt River Project has a long-standing commitment to forest health and restoration, and I would like to compliment the Forest Service for its commitment to the Four Forest Restoration Initiative (4FRI or Initiative), an endeavor that is sorely needed to prevent further catastrophic destruction of Arizona's forests, in particular those forests that are part of Salt River Project's 13,000 square mile watershed. 4FRI provides the framework for implementing forest management actions that will result in a "natural" ecological regime less likely to be devastated by wildfires to ensure the forests continue to provide recreational, economical, hydrological and biological value into the future.

An important step in moving the Initiative forward was the Forest Service's recent award of a contract to begin mechanized treatments on the thinning of 300,000 acres of forest land in the Coconino and Kaibab National Forests. That action, which also supports job creation in the area, is welcomed by SRP and we hope is a step towards continued sustainable forest management practices.

Yet, despite the proactive actions by U.S Congress, fire suppression and other management practices on the National Forest lands over the past one hundred years or so ultimately have resulted in unnaturally dense forest conditions. Such dense conditions result in unhealthy trees that are increasingly vulnerable to insect attack and diseases, which further increases the threat of catastrophic wildfires.

Poor forest health and catastrophic wildfires impact the hydrologic characteristics of the watershed. Specifically, runoff and water yield, peak flows and low flows, erosion and sedimentation, and water temperature and chemistry are adversely impacted by unnatural forest conditions and severe wildfires.

Northern Arizona University's Ecological Research Institute has partnered with Salt River Project to conduct field work, data collection and modeling to better understand the effects of the restoration program by comparing hydrologic and natural resource responses under alternative forest treatments. The effort will include in the field

measurements and management analysis to provide empirical evidence and modeling data to compare control watersheds to those treated.

Healthy forests correspond to healthy ecosystems and water resources, and are components of the public good that directly compliment Salt River Project's watershed stewardship responsibility. In addition to improving watershed health, forest restoration actions also protect Salt River Project investments in facilities and infrastructure, including C.C. Cragin reservoir, power lines and rights of way, and communication sites. We reiterate our commitment to working with this Committee, federal agencies and other stakeholders to work toward long-term forest health through active management.

Western Area Power Administration (Western) Issues

Finally, I would like to briefly address two policies impacting Western operations and power customers. Salt River Project and numerous consumer-owned utilities in Arizona are Western customers and receive an allocation of power generated at Hoover Dam, the Colorado River Storage Project, and the Parker-Davis Project. These resources produce important clean and renewable power that benefits millions of customers throughout the west.

Secretary Chu Memo to PMAs

On March 16, 2012, Department of Energy Secretary Chu sent a memo outlining a number of new policy goals for the Power Marketing Agencies (PMAs), including Western. Let me begin by 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.

Like the municipal and cooperative associations represented by Mr. Jones, Salt River Project would be directly impacted by the policy changes Secretary Chu is pursuing.

Our primary concerns relate to the proposal that Western participate in the creation of an automated Energy Imbalance Market (EIM) proposed for the Western Interconnection. An EIM is a sub-hourly, real-time, centrally-dispatched energy market intended to improve the integration of variable generation from renewable resources such as wind and solar. Salt River Project fully supports the development of renewable resources. We have a robust portfolio of renewable resources that includes solar, wind, biomass, geothermal and energy efficiency programs. Like Secretary Chu we want to see these resources reliably and efficiently integrated in to the grid. In fact, as a public power entity, we are obligated to ensure that our limited resources are spent wisely to ensure the efficient integration of these resources. It is this obligation that drives our concern about the desire to include Western as a participant in an EIM when the value of this approach is still in question. The economic studies to date do not make the case for the implementation of EIM across the west right now.

The industry is developing and implementing a number of other lower cost initiatives to help with the integration of variable generation - tools such as inter hour scheduling, dynamic scheduling service, area control error diversity exchange and implementation of low cost energy efficiency and demand-side management programs. We think a better approach is also studying the implementation and improvement of these tools while continuing to study the potential of an EIM. We are concerned that the approach advocated in the Secretary's memo is a rush to judgment that will increase costs for consumers without the commensurate benefits.

Glen Canyon Dam Operations

Salt River Project also is affected by several recent actions and ongoing processes impacting power generation at Glen Canyon Dam. Last week, the Department of the Interior (DOI) announced that it may begin high-flow releases from the Dam beginning next fall and continuing periodically through 2020. Salt River Project and other beneficiaries of power from Glen Canyon Dam remain committed to improving habitat of native species on the Colorado River.

In fact, power customers have agreements in place to fund a significant portion of the \$626 million (in 2003 dollars) Lower Colorado Multi-Species Conservation Program.

However, we are concerned that if the releases require moving water so that it is unavailable during a month when energy demand is high, and depending on the volume and frequency, it could cost power customers as much as \$120 million over 10 years. As a not-for-profit utility, any increase in costs is passed through directly to our customers. In addition, the impacts of releases are highly complex and concerns have been raised about the revised operations benefiting non-native species, which could in turn negatively affect endangered native species.

Furthermore, Salt River Project is a cooperating agency in DOI's Long-Term Experimental Management Plan Environmental Impact Statement process. Launched in February of this year, this process will dictate the long-term operation of Glen Canyon Dam. Recognizing that power customers bear the economic consequences associated with major operational changes at Glen Canyon, Salt River Project believes that a balance evaluation of alternatives should be conducted. To date, however, Salt River Project and other cooperating agencies have not been included in meaningful participation, and we urge the Committee to continue oversight on this issue.

Summary

In summary I would like to again thank Chairman McClintock, Representative Gosar and the Committee for your continuing support and interest on all of these issues. Because others also have addressed the other issues we discussed, I will close by emphasizing that complex and critical issues must be addressed, and resolved, in a timely manner to ensure that NGS continues to serve as an important economic driver for multiple stakeholders:

- For the state of Arizona, NGS and the mine that supplies it with coal are expected to provide more than \$20 billion in economic benefit for the state between 2011 and 2044 and to contribute more than 3,000 jobs each year throughout the state;
- For the Navajo Nation and the Hopi Tribe, NGS and the mine generate revenues that support government operations and further economic development; and
- For the Central Arizona Tribes, NGS provides assurance of affordable water received through the CAP, the loss of which could result in a loss to their economies of over \$3.5 billion between 2012 and 2044.

Salt River Project is working diligently with the NGS participants, the Navajo Tribe and a host of others to seek solutions to the complex issues faced by NGS, and we have reached consensus with stakeholders on many issues. Salt River Project is committed to continuing those efforts and to working with the multiple federal agencies that will play a role in the future of NGS.

Chairmen McClintock and Members of the Subcommittee, Salt River Project appreciates your support and interest. Thank you again for the opportunity to testify before you today on these important issues. I would be happy to answer any questions.