



Department of Commerce

Hearing on
States' Perspective on Energy Security Planning,
Emergency Preparedness, and State Energy Programs

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SUMMARY

USDOE State Energy Program (SEP) funds support Washington's integration of smart grid technology with emergency planning, policy development, and strategic infrastructure investment. The USDOE funding formula provides about \$710,000 annually to the state of Washington. We use these funds to support emergency preparedness, energy reliability, and economic resilience, enabling basic planning and preparedness activities and leveraging additional energy-related funding.

Reauthorization of SEP and Weatherization (WAP) allows states to continue this work, advancing public-private partnerships that deliver energy-related economic development, supporting grid modernization efforts, and improving energy emergency preparation and response. An FY 18 appropriation of \$70 million for SEP and \$230 million for the Weatherization Assistance Program builds on the necessary work the programs do in Washington State and nationwide.

In many cases, the linkage between SEP funds and energy resilience is clear. For example, SEP funds allow us to prepare for the energy-related consequences of a major earthquake and tsunami through the Cascadia Rising functional exercise. This exercise brought together a cadre of nationwide experts and taught us that there is a big difference between knowing what could happen and preparing for what could happen.

In addition to emergency planning, there are other examples where the role of SEP funds in energy resilience which are less obvious but equally important. A good example is the SEP-funded policy development work that helped create our state's Clean Energy Fund. This state-funded program supports and leverages outside investment for grid modernization and energy technology that will bring much-needed stability to our infrastructure and economy.

SEP funds help create a stable and prosperous future for the people of our state and will help save lives during a disaster. Your continued support for SEP and WAP allows us to deliver on that responsibility, providing the people of Washington State the safety and future they deserve.

INTRODUCTION

Good morning, Chairman Upton, Ranking Member Rush, and members of the Subcommittee. I am Michael Furze, Assistant Director of the Energy Division at the Washington State Department of Commerce. Thank you for the opportunity to appear today to discuss our perspective on energy assurance planning, emergency preparedness, and state energy programs.

OVERVIEW

The USDOE State Energy Program funding formula provides about \$710,000 per year to the state of Washington to support emergency preparedness, energy reliability, and economic resilience. These funds enable basic planning and preparedness activities and leverage a much larger amount of other energy-related funding.

Washington State shares a number of risk factors with our West Coast neighbors that require complex planning and preparation. These include: cyber-attack, drought, volcanoes, flooding, severe storms, tsunamis, and earthquakes. These are the potentially catastrophic scenarios that drive our work within Energy Assurance and Emergency Planning. This work has been funded in part through the State Energy Program of USDOE. Lately, we are seeing an increasing number of requests for additional work to plan for emergencies, disasters, catastrophic events, and cyber-attacks from both our state and federal counterparts. We support expanded state-federal cooperation to improve energy emergency planning, response and mitigation actions with the private sector.

Reauthorization of SEP and Weatherization allows states to continue advancing public-private partnerships that deliver energy-related economic development, support grid modernization efforts, and improve coordinated energy emergency preparation and response. An FY 18 appropriation of \$70 million for the U.S. State Energy Program (SEP) and \$230 million for the Weatherization Assistance Program builds on the necessary work the programs do in Washington and across the country. Directing USDOE to maximize the formula funding allows our governor and State Energy Office to

target Washington's energy emergency planning, response and mitigation needs and opportunities, as well as energy-related economic development.

CATASTROPHIC PLANNING

In many cases, the linkage between SEP funds and energy resilience is clear. For example, SEP funds allow us to prepare for the energy-related consequences of a major earthquake. Subcommittee members may be familiar with Cascadia Subduction Zone and the likelihood of a catastrophic earthquake and its devastating effect on critical infrastructure, including the electrical grid. The Cascadia Subduction Zone is an 684 mile long fault line, formed by the Juan de Fuca plate moving eastward and driving under the North American plate. When the stress formed by this subduction releases, earthquakes of magnitude 9.0 can occur with intense shaking lasting up to 10 minutes generating tsunamis. Research shows that a 9.0 earthquake lasting 5 minutes, could impact over 140,000 square miles, resulting in over 14,000 fatalities and 24,000 injuries. Our interstate highways and ports will be damaged or destroyed. Our citizens will be displaced. Our grid will go down. Fuel will be in short supply. Our economy will suffer. The long-term cost to our infrastructure will be in the billions.

This scenario drove Washington State to participate in our largest functional exercise, Cascadia Rising, where we worked with experts from around the nation. What we learned from this exercise is that there is a big difference between knowing what could happen and preparing for what could happen.

Preparing for a catastrophe requires continuous funding and support from many sources in order to develop the plans and sustain the capacity to execute them.

During the exercise, in addition to natural gas and electrical grid reliability, we focused on petroleum products and tested our fuel allocation plan. One of our biggest achievements in the Cascadia Rising exercise was the successful roll out of the Washington State Energy Disruption Tracker, which allows us to visually map outages, expected restoration times, and critical infrastructure on a statewide

platform. This program, funded in part through USDOE's Office of Electricity, will help us obtain and maintain situational awareness in during a disaster.

Part of the success of the Cascadia Rising exercise is recognizing that we are not fully prepared for a disaster of this magnitude. We have the people, and we have the knowledge, and need continued support to move forward. SEP funds are critical to our continued preparation for an event that we know is inevitable.

We are currently involved in a statewide inter-agency collaboration to address some of our most critical issues identified during Cascadia Rising. This effort, known as Resilient Washington, is currently designing a 50-year plan to bring Washington State to a higher level of readiness for catastrophic events. We aren't doing this alone. Washington's Energy Office is working to improve energy assurance efforts in collaboration with private industry and other state agencies that support Emergency Support Function-12, including the state Utilities and Transportation Commission, as well as the USDOE ESF12 representatives and the USDOE Office of Electricity.

LEVERAGED INVESTMENT

In addition to emergency planning, there are other examples where the role of SEP funds in energy resilience is less clear but equally important. A good example is the SEP-funded policy development work that helped create our state's Clean Energy Fund. This state-funded program supports and leverages outside investment for grid modernization that will bring much-needed stability to our infrastructure.

One such project is the Micro Transactive Grid project with Avista in Spokane, Washington. This project will control and optimize the use of shared distributed energy resources. This project will bring information management systems, solar panels, and energy storage assets onto an integrated loop feed that supports a shared model of energy economy. This project could also create a micro-grid powerful enough to be used as an island of refuge in the event of a large electrical outage. While this

project is funded with state capital funds, it demonstrates the supportive and integrated relationship among the states and the federal government. SEP-funded policy development and emergency planning, funded through USDOE, has allowed us to guide the future of grid improvement projects in Washington State.

CONCLUSION

In conclusion, USDOE funds have been critical to the success of the Washington State Department of Commerce Energy Division to integrate smart grid technology with emergency planning, policy development, and strategic infrastructure investment. SEP funds help create a stable and prosperous future for the people of our state and will help save lives during a disaster. Your continued support allows us to deliver on that responsibility, providing the people of Washington the safety and future they deserve.

I thank you again for the invitation to provide my thoughts on the State of Washington's perspective on energy security planning, emergency preparedness, and state energy programs and welcome any questions that you might have.

