

TESTIMONY OF DAVID TERRY, EXECUTIVE DIRECTOR, THE NATIONAL ASSOCIATION OF STATE ENERGY OFFICIALS, BEFORE THE U.S. SENATE ENERGY AND WATER DEVELOPMENT APPROPRIATIONS SUBCOMMITTEE IN SUPPORT OF FY'17 DEPARTMENT OF ENERGY FUNDING

March 10, 2016

Chair Alexander, Ranking Member Feinstein and members of the Subcommittee, I am David Terry, Executive Director of the National Association of State Energy Officials (NASEO). NASEO is submitting this testimony in support of funding for a variety of U.S. Department of Energy (DOE) programs. Specifically, we are testifying in support of not less than \$70 million for the U.S. State Energy Program (SEP). SEP is the most successful program supported by Congress and DOE. This request in support of SEP should be for the *base program formula funding* that allows states to set and target their energy opportunities, within program guidelines, rather than utilizing DOE-directed competitive awards focused primarily on DOE's internal priorities. States utilize SEP funds to work with local businesses to help facilitate direct energy project development and demonstrations that leverage local resources, spur private investment, and create jobs. For over 35 years, SEP has set the standard for state-federal-private cooperation and matching funds to achieve critical federal and state energy goals. We also support \$230 million for the Weatherization Assistance Program (WAP). Approximately half of the 56 State and Territory Energy Offices operate WAP and leverage private, utility, and other federal funds to deliver energy efficiency and associated cost savings to low-income citizens. Both SEP and WAP have a strong record of delivering savings to homeowners, businesses, and industry. In addition to SEP and WAP, we support FY'17 funding for the following DOE offices and programs: \$289 million for DOE-EERE's Buildings Technologies Office and \$469 million for DOE-EERE's Vehicle Technologies Office with strong support for the Outreach, Deployment and Analysis activities and the Clean Cities program. We strongly support \$131 million for the U.S. Energy Information Administration, and \$262 million for DOE Office of Electricity Delivery and Energy Reliability (DOE-OE). Within the DOE-OE account, NASEO stresses the importance of \$6.5 million for the National Electricity Delivery program; \$15 million for the State Energy Assurance pilot program; \$17.5 million for Infrastructure Security and Energy Restoration program; \$15 million for the State Distribution-Level Reform program; and strong support for the grid modernization and cybersecurity functions of DOE-OE.

With regard to NASEO support for funding of DOE-OE, we want to stress the importance of this office's Energy Assurance and Infrastructure Security and Energy Restoration actions. This work is essential to enabling state and private efforts to mitigate and avoid the threat to life, safety, and damaging economic impacts resulting from energy supply disruptions caused by natural disasters and man-made events. For example, resolution of the propane disruptions in the Midwest and New England during the winter of 2013-14 would have taken substantially longer and had an even greater impact on consumers and businesses without OE's leadership and partnership with the states and industry. NASEO strongly supports the request to provide \$15 million for a state-federal-private energy assurance pilot program aimed at modernizing energy emergency preparedness planning, mitigation and response. This pilot program will reinvigorate an integrated federal-state-private approach to energy assurance planning and speed the restoration of all energy supplies – electricity, natural gas, petroleum products – following an emergency. This ensures a more rapid return to normal economic activity and diminishes the health and safety risks to citizens' following major storms or man-made disasters. NASEO also supports DOE-OE's risk analysis and cybersecurity work.

EIA's state-by-state data is essential to a number of state and private energy efforts and has continuously improved over the years. For example, EIA's expertise is a critical piece of energy emergency preparedness and response. States and companies utilize EIA data to prepare for and respond to energy supply disruptions, such as those associated with Super Storm Sandy. Also, EIA's operation of the State Heating Oil and Propane Program, which partners with states and the private sector on the collection of weekly heating oil and propane prices during the heating season, was essential in responding to the 2013-2014 propane crisis and avoiding even more serious health, safety, and economic impacts.

I would like to return to and expand upon NASEO's support for funding of not less than \$70 million for SEP. This unique federal-state partnership program has a history of success, and is the only DOE program that provides funding directly to the states to target unique local needs and opportunities. Formula SEP funding provides states a flexible means to implement state-directed actions such as:

- Developing comprehensive state energy plans, on behalf of governors, which identify untapped local energy resources, leverage advances in energy technologies and services, expand private sector energy efficiency opportunities, promote energy-related economic development, and open new energy markets for businesses;
- Assisting small- and medium-sized manufacturers in increasing energy efficiency to improve competitiveness and support business incubators;
- Incentivizing private-sector businesses to work with consumers (e.g., home energy efficiency measures) and local governments (e.g., public facility retrofits) to implement energy efficiency measures that save money; and
- Establishing public-private energy financing programs (e.g., revolving loans, utility on-bill programs, energy savings performance contracting) that leverage private sector expertise and delivery capabilities. In every case, these financing programs are aimed at bridging market gaps and transitioning to private sector financing solutions that support new energy technology markets in such areas as grid modernization, high performance buildings, advanced materials for manufacturing, and new transportation technologies.

In 2005, Oak Ridge National Laboratory (ORNL) completed a second study of SEP and concluded, "The impressive savings and emissions reductions numbers, ratios of savings to funding, and payback periods . . . indicate that the State Energy Program is operating effectively and is having a substantial positive impact on the nation's energy situation." ORNL found that \$1 in SEP funding yields: 1) \$7.22 in annual energy cost savings; 2) \$10.71 in leveraged funding from the states and private sector in 18 types of project areas; 3) annual energy savings of 47,593,409 million source BTUs; and 4) annual cost savings of \$333,623,619. In 2015, another study of the program found similar energy and cost savings.

Examples of Successful U.S. State Energy Program Activities:

Alabama: The Alabama State Energy Office initiated an energy savings performance contract program (ESPC) leveraging SEP funds to implement a 20-year lease-purchase agreement for \$98 million of energy upgrades. All energy efficient measures have been completed and the state has produced significant annual savings from the new, reliable and energy-efficient equipment. In addition to the energy cost savings, the project created an estimated 1,677 jobs.

Alaska: The Alaska Energy Authority (AEA) leveraged SEP funds to implement a residential energy efficiency program. The Alaska Legislature provided \$350 million dollars to co-fund this program, which provides grants to homeowners for home energy audits. Based on the audit recommendations, homeowners can qualify for a direct cash rebate of up to \$10,000 for energy

efficiency upgrades performed on their home. As of January 2015, improvements have been made to approximately 16,000 Alaska homes. The average homeowner spent \$11,681 and qualified for a rebate of \$6,889. On average, the improvements have resulted in annual energy savings of 34 percent, or cash savings of \$1,464.

California: SEP contributes substantially to a number of energy efficiency initiatives in California. The State Property Revolving Loan Fund Program is supporting energy upgrades in more than 60 buildings located throughout the state. The Municipal and Commercial Building Targeted Measure Retrofit (MCR) program has provided energy audits and energy efficiency improvements at non-residential buildings in California. MCR installations at over 7,400 project sites in California are estimated to realize over 85.8 GWh in electricity savings, 8.6 MW in demand reductions, and 950,000 therms in natural gas savings.

Delaware: The Delaware State Energy Office utilized \$500,000 in SEP funding, for a new program to provide rebates for energy efficient heating and cooling systems and efficient lighting. Delaware has more than 290,000 central air conditioning systems throughout the state. Through this program, homeowners could collectively save enough energy to provide electrical power needs for over 18,000 homes and save more than \$30 million per year by upgrading to ENERGY STAR® cooling systems.

Illinois: The Illinois State Energy Office utilized \$480,000 of SEP funds to help schools in the City of Rantoul install geothermal heating and cooling systems. The project significantly reduced the district's energy usage and resulted in the hiring of approximately 145 local workers. The project will result in more than 118,000 therms of natural gas being saved.

Kentucky: The Kentucky Department of Energy Development and Independence, working with the Kentucky School Boards Association (KSBA)-School Energy Managers Project (SEMP), leveraged SEP funding to support a \$4.4 million project over a three-year period. SEMP supports 40 energy managers providing services to 81 of Kentucky's 173 K-12 public school districts. KSBA reports more than \$50 million in avoided utility costs between 2010 and 2015 have been redirected back into school budgets.

Maine: The Maine State Energy Office leveraged \$4.5 million in SEP funds to support a pilot project geared toward achieving energy efficiency investments in the multi-family sector. The pilot operated for nearly three years and focused on buildings with 5-20 units. Over 3,500 units were benchmarked, and 1,800 were successfully retrofitted. On average, 26 percent energy savings were realized. The pilot is now a self-sustaining program.

Mississippi: SEP funds were utilized to support several programs aimed at reducing energy consumption and costs in public buildings. The Energy Division helped implement a "Lead by Example" program which has conducted 278 building audits. Under the program, 149 public buildings, representing more than 3 million square feet of space, have been completed.

Montana: The State Energy Office, in coordination with the governor, launched a SMART Schools Challenge to encourage schools to develop programs to increase energy and resource efficiency. The program is a huge success, and in its inaugural year, 46 schools participated, producing \$100,000 in energy cost avoidance and 31 tons of waste diversion.

New Hampshire: The New Hampshire State Energy Office utilizes SEP funds for a diverse range of important energy programs and projects. One example is the support of a "retro-commissioning" analysis of the New Hampshire State Hospital, which resulted in many simple changes that were easy to implement and low cost. To date, New Hampshire has completed energy efficiency projects in over 100 buildings, producing annual savings of \$800,000.

New Mexico: The New Mexico State Energy Office used SEP funding to support the installation of solar photovoltaic (PV) systems in 15 school districts around the state. Each school system received up to \$300,000 to install a 50-kilowatt grid-tied PV system that generates significant electrical power for the school and community, saves money and energy for each school district, and provides educational opportunities about renewable energy for local students and the surrounding community. The installation of these 15 PV systems also helps generate jobs for local suppliers, installers and manufacturers of PV equipment.

North Dakota: \$2.4 million from SEP was allocated to the energy efficiency rebate program to provide assistance through utility partners for high efficiency furnaces, air conditioners, lighting retrofits, thermal storage, and insulation packages. The rebate is unrelated to the state's ENERGY STAR Appliance Rebate, which rebated \$615,000 in five weeks.

Oklahoma: The Oklahoma State Energy Office leveraged \$3.95 million of SEP funding and federal and state tax credits to help Tulsa Public Schools (TPS) convert its entire fleet of 140 diesel-powered buses to compressed natural gas (CNG). Once all buses are converted, the school district expects to save between \$750,000 and \$1 million annually on fuel costs.

Oregon: The Oregon State Energy Office used SEP funding to implement the Residential Energy Tax Credit Program (RETC). The goal of the RETC is to promote energy savings or energy displacement and market transformation by providing incentives that encourage the purchase of energy efficient and renewable energy devices for homes in Oregon. RETC helped save 129,180 million Btus, approved 21,365 tax credits for renewable energy and energy efficiency eligible systems, and leveraged SEP dollars with \$139.5 million in non-federal funding. The ratio of non-federal leveraged funds to SEP federal funds is \$100 to \$1.

Rhode Island: The Rhode Island State Energy Office partnered with the Rhode Island Department of Transportation and National Grid and leveraged SEP funding to support several projects to reduce energy use and costs. The state agencies worked together to implement a pilot project that replaced 154 existing light fixtures along a main highway with energy-efficient LED bulbs. By swapping out the lights, the state is expected to cut its energy usage by more than 71,000 kilowatt hours annually, an estimated savings of \$16,000. A second phase of the project will replace an additional 1,559 lights statewide through two separate projects.

South Carolina: The South Carolina State Energy Office used SEP funding to expand the Energy Efficiency Revolving Loan fund, which was started with an infusion of approximately \$1.5 million. Loans are for commercial and industrial borrowers. One example of a borrower is Love Chevrolet, a large family-owned car dealership that was provided a loan of \$230,000 to convert both parking lot and interior lighting to high efficiency LEDs.

Tennessee: The Tennessee State Energy Office leveraged SEP funding to provide assistance to local governments, K-12 schools, and public housing authorities to drive demand for energy efficiency investments. The goal is to serve at least 10 local governments and 8 public housing authorities, driving demand for energy improvements of \$20 million.

Washington: The Washington State Energy Office has leveraged SEP funding to develop the technical standards, economic analysis, and participation in the Washington State Energy Code's technical advisory group. The first two code cycles have resulted in an 18-25 percent reduction in energy use and are anticipated to save \$380 million in annual energy savings by 2030.

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