



April 28, 2015

TO: Members, Subcommittee on Energy and Power

FROM: Committee Majority Staff

RE: Hearing on “Strategic Petroleum Reserve Discussion Draft and Title IV Energy Efficiency”

I. INTRODUCTION

On Thursday, April 30, 2015, at 10:15 a.m. in 2322 Rayburn House Office Building, the Subcommittee on Energy and Power will hold a hearing on the “Strategic Petroleum Reserve Discussion Draft and Title IV Energy Efficiency.”

II. WITNESSES

Panel I

- Christopher A. Smith, Assistant Secretary for Fossil Energy, Department of Energy.

Panel II

- Christopher Peel, Corporate Senior Vice President and Chief Operation Officer, Rheem Manufacturing Company, on behalf of the Air-Conditioning, Heating, and Refrigeration Institute;
- Kateri Callahan, President, Alliance to Save Energy;
- Frank Thompson, President, Sweetwater Builders, Inc., on behalf of the National Association of Home Builders;
- Elizabeth Noll, Energy Efficiency Advocate, Natural Resources Defense Council;
- John W. Somerhalder II, Chairman, President and CEO, AGL Resources, on behalf of the American Gas Association;
- Rona Newmark, Vice President, Intelligent Efficiency Strategy, EMC Corp., on behalf of the Information Technology Industry Council; and,
- Mark Wagner, Vice President, U.S. Government Relations, Johnson Controls, Inc., on behalf of the Federal Performance Contracting Coalition.

III. BACKGROUND

A. Strategic Petroleum Reserve

The Strategic Petroleum Reserve (SPR) is a stockpile of government-owned petroleum managed by the Department of Energy (DOE) that Congress authorized as a response to the Organization of Arab Petroleum Exporting Countries (OAPEC) 1973-1974 oil trade embargo. The Energy Policy and Conservation Act of 1975 (EPCA) authorized the SPR to reduce the impact of disruptions in supplies of petroleum products and to carry out obligations of the U.S. under the Agreement on an International Energy Program.¹ EPCA authorizes the President to draw down the SPR upon finding that there is a “severe supply interruption.”

The SPR’s crude oil storage facilities are comprised of 62 underground caverns mined in naturally occurring salt domes. Two sites are located in Texas, and two in Louisiana. The sites offer access to marine terminals and pipeline systems to move crude oil to and from the SPR. The SPR currently holds 691 million barrels of crude oil, representing 137 days of net import protection.² The U.S. exceeds its obligation as a member of the International Energy Agency (IEA) under the International Energy Program to maintain at least 90 days of strategic stocks. U.S. On June 20, 2014, Secretary Moniz established a one million barrel gasoline component of the SPR in the Northeast,³ using funds collected from a test sale of crude oil that concluded in July 2014.⁴ The Committee, as part of its ongoing oversight of DOE’s management of the SPR, wrote to DOE on May 12, 2014, requesting information on the then-recently announced test sale and regional refined petroleum product reserve.⁵

The SPR’s crude oil storage facilities were designed to achieve a drawdown rate of roughly 4.4 million barrels per day for up to 90 days; however, an audit conducted by the DOE Office of Inspector General (OIG) in July 2014 revealed that the Reserve was “unable to achieve the maximum drawdown rate specified in its performance criteria, could not store oil to its full capacity, and had not ensured that its full inventory was available for drawdown.”⁶ The OIG also observed that DOE has not published a revised study on the optimal size of the SPR since 1990, and the last major assessment of the SPR’s mission readiness was the Life Extension Program initiated in 1995. A September 2014 report by the Government Accountability Office (GAO) confirmed the OIG’s findings, recommending that DOE “undertake a comprehensive reexamination of the appropriate size of the SPR in light of current and expected future market conditions.”⁷ DOE agreed with the findings, and in a letter to the Committee dated December 29, 2014, stated that it had initiated the process to conduct a comprehensive review.⁸

¹ See IEA, [Agreement on an International Energy Program](#), (as amended May 9, 2014).

² DOE, [SPR Quick Facts and FAQs](#). Based on 2014 U.S. net imports of crude oil and refined products.

³ DOE, [Northeast Gasoline Supply Reserve](#)

⁴ DOE, [Strategic Petroleum Reserve Test Sale 2014 Final Report](#) (November 2014).

⁵ [Letter](#) led by Rep. Fred Upton, Chairman, House Committee on Energy & Commerce to Ernest Moniz, Secretary, Department of Energy (May 12, 2014).

⁶ DOE, Office of Inspector General, [The Strategic Petroleum Reserve’s Drawdown Readiness](#) (July 2014).

⁷ GAO, [Changing Crude oil Markets](#) (September 2014).

⁸ On file with Committee.

In light of the recent OIG and GAO reports, the Chairman and Ranking Members of the Committee wrote to Secretary Moniz on March 18, 2015, requesting information concerning DOE's recent activity, including its planning for the future of the SPR.⁹ To date, the Committee has not received a response to this letter; however, the Department's Quadrennial Energy Review (QER) released on April 21, 2015, made new recommendations to optimize the SPR's emergency response capabilities, including "analyzing appropriate SPR size and configuration and carrying out detailed engineering studies" as part of a life extension program.¹⁰

B. Energy Efficiency

Energy efficiency is a simple, affordable way to help meet U.S. energy demands. The U.S. has steadily reduced its energy consumption and improved its energy productivity as a result of advances in technology and changes in economics and demographics. According to the Energy Information Administration (EIA), U.S. energy consumption per unit of gross domestic product (GDP) has decreased nearly 58 percent since 1950.¹¹ Further, EIA predicts that energy intensity, measured both as energy use per person and as energy use per dollar of GDP, will continue to decline through 2040 as a result of improved efficiency.¹²

The private sector has capitalized on the demand for greater energy efficiency, facilitating the development and deployment of innovative energy-efficient technologies and processes that better allow businesses and consumers to reduce waste, consume less, and save money. But significant energy efficiency opportunities remain, particularly within the Federal government, which is the nation's largest user of electricity and fuel, accounting for roughly 1.5 percent of annual U.S. energy consumption. Utilizing energy savings products and techniques can therefore reduce the amount of taxpayer dollars spent on Federal energy costs. For instance, improving the efficiency of government data centers and information technologies, as well as optimizing the use of energy savings performance contracts (ESPCs) to improve the energy efficiency of Federal buildings, could reduce Federal energy consumption significantly.

In 2014, the DOE issued ten new energy efficiency standards for various appliance and product categories. As part of the President's Climate Action Plan, DOE has committed itself to an even higher standard in 2015, requesting \$69 million in FY 2016 for appliance and equipment standards activities. In some instances, tighter Federal efficiency standards and compliance and testing requirements have not been technically feasible or economically justified, and yield only negligible energy savings. This has led to increased costs for manufacturers, which has stifled investment in innovation and led to more expensive products and reduced product choice for consumers. In such circumstances, providing targeted relief from efficiency standards and testing requirements that fail to adequately consider technical limitations or cost considerations may be an effective way to reduce the cost and regulatory burden on manufacturers, in addition to allowing for continued market driven improvements in energy use and efficiency.

⁹ [Letter](#) led by Rep. Fred Upton, Chairman and Rep. Frank Pallone, Ranking Member, House Committee on Energy & Commerce to Ernest Moniz, Secretary, Department of Energy (March 18, 2015).

¹⁰ DOE, [Quadrennial Energy Review](#) (April 2015).

¹¹ EIA, "Today in Energy: [U.S. energy intensity projected to continue its steady decline through 2040.](#)" (Mar. 1, 2013).

¹² EIA, Annual Energy Outlook 2015: [Market Trends—U.S. Energy Demand](#) (April 14, 2015).

IV. SECTION-BY-SECTION

A. Strategic Petroleum Reserve

Sec. XXXX Strategic Petroleum Reserve mission readiness plan: Seeks to ensure that our strategic stockpiles of petroleum are kept safely and readily accessible in times of national emergency by directing the DOE to conduct a long-range strategic review to specify the near and long-term roles of the Strategic Petroleum Reserve and recommend an action plan to achieve the optimal 1) capacity, location, and composition of petroleum products in the Reserve; and, 2) storage and distributional capabilities.

B. Energy Efficiency

TITLE IV—Energy Efficiency and Accountability

Subtitle A—Energy Efficiency

Chapter 1—Federal Agency Energy Efficiency

Sec. 4111. Energy-efficient and energy-saving information technologies: Requires Federal agencies to coordinate with the Office of Management and Budget (OMB), DOE and the Environmental Protection Agency (EPA) to develop an implementation strategy – that includes best practices and measurement and verification techniques – for the maintenance, purchase, and use of energy-efficient and energy saving information technologies. OMB would be required to track and report on each agency’s progress.

Sec. 4112. Energy efficient data centers: Seeks to improve the energy efficiency of Federal data centers by, among other items, requiring DOE to update a 2007 report on data center energy efficiency and maintain a data center energy practitioner certification program. DOE also would establish an open data initiative to help share best practices and support further innovation, and develop a metric that measures data center energy efficiency.

Sec. 4113. Report on energy and water savings potential from thermal insulation: Directs the DOE to submit a report within one year on the impact of thermal insulation on both energy and water use systems for potable hot and chilled water in Federal buildings and on the return on investment of installing the insulation. The report must include: (1) an analysis based on the cost of municipal or regional water for delivered water and the avoided cost of new water; and (2) a summary of energy and water savings, including short-term and long-term (twenty years) projections of such savings.

Sec. 4114. Federal purchase requirement: Expands the definition of “renewable energy” in section 203 of the Energy Policy Act of 2005 to include thermal energy and qualified waste heat resources. Also modifies the term “municipal solid waste” by excluding certain commonly recycled paper.

Sec. 4115. Repeal of fossil fuel consumption percentage reduction requirements for Federal buildings: Repeals a provision included in section 433 of the Energy Independence and Security

Act of 2007 that requires a 100 percent reduction in “fossil fuel-generated energy” in all new and modified Federal buildings by the year 2030.

Chapter 2—Energy Efficient Technology

Sec. 4121. No warranty for certain certified Energy Star products: Promotes continued development of energy efficient appliances through the Energy Star Program by deterring class action lawsuits that could undermine participation in the program.

Sec. 4122. Inclusion of Smart Grid capability on Energy Guide labels: Directs the Federal Trade Commission to initiate a rulemaking to develop Energy Guide labels that promote the smart grid capabilities of certain products.

Sec. 4123. Voluntary verification programs for air conditioning, furnace, boiler, heat pump, and water heater products: Requires the DOE to recognize voluntary verification programs for air conditioning, furnace, boiler, heat pump, and water heating products to demonstrate compliance with DOE energy efficiency and conservation standards and the Energy Star program.

Sec. 4124. Residential non-weatherized gas furnaces and mobile home furnaces: Prohibits DOE from promulgating a final rule amending efficiency standards for non-weatherized gas furnaces and mobile home furnaces until an advisory group consisting of representative industry and efficiency stakeholders complete an analysis of, and make a determination regarding, the technical feasibility and economic justification of a nationwide efficiency standard that would effectively require a transition to condensing furnaces.

Chapter 3—Building Energy Codes

Sec. 4131. Greater energy efficiency in building codes: Increases transparency and cost-effectiveness in the development of model energy codes, which set the baseline for energy efficiency in buildings, by ensuring that DOE code change proposals: 1) are made available to the public, including calculations on costs and savings; 2) are subject to the official rulemaking process, allowing for public comment; and 3) take into account small business concerns. This section also prohibits DOE from advocating for certain technologies, building materials or construction practices and requires that any code or proposal supported by the DOE has a payback of ten years or less.

Sec. 4132. Voluntary nature of building asset rating program: Clarifies that any DOE program that may enable the owner of a commercial building or a residential building to obtain a rating, score, or label regarding the actual or anticipated energy usage or performance of a building shall be made available on a voluntary, optional, and market-driven basis.

Chapter 4—Energy Performance Contracting

Sec. 4141. Use of energy and water efficiency measures in Federal buildings:

- Requires DOE to report on the status of each Federal agency's energy savings performance contracts and utility energy service contracts, the investment value of such contracts, the guaranteed energy savings for the previous year as compared to the actual energy savings for the previous year, the plan for entering into such contracts in the coming year, and information explaining why any previously submitted plans for such contracts were not implemented.
- Requires Federal energy managers to provide, as part of their compliance certifications, an explanation regarding any life-cycle cost-effective energy-saving or water-saving measures that have not been implemented.
- Prohibits Federal agencies from limiting the recognition of operation and maintenance savings associated with systems modernized or replaced with the implementation of energy conservation measures, water conservation measures, or any series of energy conservation measures and water conservation measures.
- Clarifies that Federal agency payments of energy, water and wastewater treatment expenses, pursuant to an energy savings performance contract or utility energy service contracts shall include related operation and maintenance expenses.
- Revises the definition of "energy savings" to include (1) the use, sale, or transfer of energy incentives, rebates, or credits (including renewable energy credits) from governments or utilities; and (2) any revenue generated from a reduction in energy or water use, more efficient waste recycling, or additional energy generated from more efficient equipment.

Sec. 4142. Utility energy service contracts: Provides guidance to Federal agencies so that when they enter into Utility Energy Service Contracts (UESCs), the term limit for these contracts may extend beyond a contract period of ten years, but not to exceed twenty-five years, provided certain requirements are met.

Chapter 5—School Buildings

Sec. 4151. Coordination of Energy Retrofitting Assistance for Schools: Amends the Energy Policy and Conservation Act to direct DOE to establish a clearinghouse to disseminate information regarding available programs and financing mechanisms that may be used to help initiate, develop, and finance energy efficiency, distributed generation, and energy retrofitting projects for schools. DOE must: (1) consult with appropriate agencies to develop a list of programs and financing mechanisms that are, or may be, used for the projects, and (2) coordinate with appropriate agencies to develop a collaborative education and outreach effort to streamline communications and promote the programs and financing mechanisms.

V. ISSUES

The following issues may be examined at the hearing:

- Changing crude oil markets and the need to modernize the SPR;
- Lessons learned related to the 2014 SPR test sale;
- Administration activities and plans to improve the SPR's mission readiness;
- Technological innovations in the energy efficiency sector;
- Improving the efficiency of the Federal government;
- Innovative energy efficiency financing structures, such as ESPCs; and,
- Regulatory costs and burdens on manufacturers of energy-efficient technologies.

VI. STAFF CONTACTS

If you have any questions regarding this hearing, please contact Brandon Mooney or Tom Hassenboehler regarding questions related to the SPR and Patrick Currier regarding questions related to energy efficiency.