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The Nuclear Waste Administration Act of 2012
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Chairman Bingaman, Ranking Member Murkowski, and Members of the Committee, thank you for the opportunity to appear before you today to discuss nuclear waste management issues and S. 3469, The Nuclear Waste Administration Act of 2012. Thank you for your leadership on this important issue.

Nuclear power is an integral part of our "all-of-the-above" energy strategy. It provides twenty percent of our nation's electricity supply, and the Administration is working to expand the safe use of nuclear power through support for new nuclear power plants incorporating state-of-the-art passive safety features as well as cost-shared technical support for licensing two designs for small modular reactors. Nuclear energy is an important contributor to our nation's energy security, and promotes clean-energy jobs. Nuclear energy production also provides important environmental benefits by producing little carbon dioxide or conventional air pollutant emissions.

The United States must develop a sustainable fuel cycle and used fuel management strategy to ensure that nuclear power continues to be a safe, reliable resource for our nation's long-term energy supply and security. Because acceptance of waste did not begin in 1998, as mandated by the Nuclear Waste Policy Act, a substantial cost has been presented to the taxpayers to reimburse utilities for the cost of ongoing storage and will continue to grow until the government fulfills its obligations.

The Blue Ribbon Commission on America's Nuclear Future (BRC) released its final report on January 26, 2012. The Commissioners worked collaboratively and constructively – through a public, open and transparent process – on recommendations to support a new strategy for the back end of the nuclear fuel cycle. The Nuclear Waste Administration Act of 2012 addresses many of the BRC's recommendations, and while the Administration is still finalizing its framework for the management of nuclear waste, there are key elements that any strategy must address.

Organization

The BRC recommended the establishment of a new, single-purpose organization charged with the management and disposal of high level waste and the associated interface with the waste generators. The Administration agrees that a new waste management and disposal organization could have advantages in terms of stability, focus, and other characteristics that will be important to future success. At the same time, it is evident that the success of any future waste management organization will be

driven by many factors and unforeseen circumstances. The organizational form is only one of these factors. Of equal or greater importance are decisions about other organizational characteristics to ensure that the organization has adequate authority and leadership to execute its mission, and balances the need for independence of the organization with appropriate oversight mechanisms. Whatever form the new organization takes, organizational stability, leadership continuity, oversight and accountability, and public credibility are critical attributes for future success. The Administration looks forward to working with Congress to design a governance structure that meets these objectives.

Funding

Following the Nuclear Waste Policy Act of 1982 (NWPA), utilities entered into contracts with the federal government, which agreed to accept and permanently dispose of utilities' used nuclear fuel in exchange for a fee that would be paid by ratepayers using nuclear generated electricity. All NWF spending is subject to annual appropriations and is required to compete with other priorities within the budget, even though the funds collected can only be used for purposes authorized under the NWPA. Since the enactment of the NWPA, $8 billion has been appropriated from the NWF to date. The current balance of the NWF is estimated at $27 billion. Fee collections of more than $750 million annually combined with accrued interest will continue to grow the Fund.

For any organization to be effective in the performance of this complex mission, it needs timely access to funds in the amounts necessary to execute its mission. The BRC highlighted this need noting, "…the success of a revitalized nuclear waste management program will depend on making the revenues generated by the nuclear waste fee and the balance in the NWF available when needed and in the amounts needed to implement the program."

Any new funding structure for this program will need to balance increased funding flexibility and rigorous spending oversight to help assure that the program is implemented in the most cost-effective manner possible, while still holding the organization accountable to the President and Congress. The Administration looks forward to working with Congress to find a solution that meets these objectives.

Disposal and Storage

The Administration supports the broad scientific and international consensus that a geologic repository is the most effective *permanent* solution to dispose of high level waste. While this does not preclude any decision about future fuel cycle options, it is evident that a once-through cycle is appropriate for the foreseeable future. Cost, proliferation risks, environmental concerns, economics, and technology limitations are some of the issues associated with closing the fuel cycle in the U.S. through use of recycling. The Administration agrees with the BRC that any new organization should focus on the development and operation of storage and repository facilities while the Department continues R&D on possible future fuel cycle options.

The BRC recommended that the U.S. develop one or more consolidated storage facilities. Building consolidated storage capacity could enable the government to move more rapidly to fulfill its

contractual responsibilities and thus reduce future liability costs. While consolidated storage can add security and flexibility to a system for permanent waste disposal, some form of linkage between opening a consolidated storage facility and progress toward a permanent repository is necessary so that potential host states and communities for consolidated storage facilities are not saddled with a *de facto* permanent facility. The Administration supports exploring this issue with Congress.

Consent-Based Siting

No matter what organization, funding, and storage decisions are made moving forward, a consent-based approach to siting is critical to success. The Administration supports working with Congress to develop a consent- based process that is transparent, adaptive, and technically sound. The BRC emphasized that flexibility, patience, responsiveness and a heavy emphasis on consultation and cooperation will all be necessary in the siting process and in all aspects of implementation. Experiences in other countries indicate that a consent-based process -- developed through engagement with states, tribes, local governments, key stakeholders, and the public-- offers a greater probability of success. DOE is currently evaluating critical success factors in the siting of nuclear facilities in the U.S. and abroad to facilitate the development of a siting process.

Activities in FY 2012 and Proposed in FY 2013

There are a number of key R&D areas that the Administration has recognized as foundational to the nation's nuclear waste management program, and was pursuing even prior to the release of the Commission's recommendations. Planned activities in the areas of transportation, storage, and disposal align with the BRC suggestions and in the near term, the Department will move forward with R&D in these areas, within the constraints of existing legislation.

Transportation

The Department is evaluating the inventory, transportation interface, and shipping status of used nuclear fuel at nuclear power sites. The Department is re-engaging the regional transportation groups to understand stakeholder issues as we work to finalize the policy and procedures for providing technical assistance and funds. The Administration will also draw from the successful transportation approaches used to support shipments to the Waste Isolation Pilot Plant (WIPP) in New Mexico.

Storage

The Department is evaluating the possibility of direct disposal of existing storage containers in various geologic media; understanding material degradation in storage and transportation systems over extended periods of time; and the development of standardized canister concepts for transportation, storage, and disposal.

Disposal

The Department is conducting R&D related to disposal in the following areas: evaluating back-filled engineered barriers systems and materials; evaluating geologic media for their impacts on waste isolation; evaluating thermal management options for various geologic media; and developing a R&D plan for deep borehole disposal. The role of retrievability in the geologic disposal of nuclear waste remains an important issue that may need further consideration.

Closing

The Administration would like to thank the BRC Commissioners for their dedicated work in developing a path forward in nuclear waste management. The BRC highlighted the need for changes in current law and the Administration thanks Chairman Bingaman for his important contribution to moving the discussion forward with this new legislation. The Nuclear Waste Administration Act of 2012 provides a base from which our dialogue can continue and the Administration remains committed to working with Congress to define a responsible and achievable path forward to manage our nation's used nuclear fuel and nuclear waste.