

**STATEMENT OF  
GENERAL BRENT SCOWCROFT, CO-CHAIRMAN  
AND  
DR. PHIL SHARP, COMMISSIONER  
BLUE RIBBON COMMISSION ON AMERICA'S NUCLEAR FUTURE  
MEETING WITH THE COMMISSIONERS OF  
THE U.S. NUCLEAR REGULATORY COMMISSION  
APRIL 10, 2012**

Chairman Jaczko, Commissioners, it is a pleasure to be here today to discuss the final recommendations of the Blue Ribbon Commission on America's Nuclear Future. We understand the challenge of the regulator's role, and we certainly appreciate the excellent job you are all doing to ensure the safety of our nation's fleet of commercial nuclear reactors.

Before we begin, I would like to pass along Co-Chairman Hamilton's regrets for not being here with us today, but both the Congressman and I are thankful that Dr. Phil Sharp could stand in his place. We would also like to thank the rest of the members of the Commission who worked so hard in creating our final report. Congressman Hamilton and I were delighted to work with such a talented and dedicated group of fellow Commissioners. Their professionalism led to our final report having unanimous approval from all of the BRC Commissioners, a fact which we believe speaks to the strength of our recommendations.

As I know you are all aware, the Blue Ribbon Commission was formed by the Secretary of Energy at the direction of the President. Our charge was to conduct a comprehensive review of policies for managing the back end of the nuclear fuel cycle and to recommend a new strategy. We delivered our report to Secretary Chu on January 26<sup>th</sup> of this year, and the DOE has begun their efforts to implement our recommendations. Today, instead of walking through these recommendations in great detail; we will briefly discuss the eight key elements of our recommendations, ensuring that we highlight areas in which we believe the NRC has an important role to play.

We are certain these key elements are necessary to establish a truly integrated national nuclear waste management system, to create the institutional leadership and wherewithal to get the job done, and to ensure that the United States remains at the forefront of technology developments and international responses to evolving nuclear safety, non-proliferation, and security concerns.

**1. A new, consent-based approach to siting future nuclear waste management facilities.**

Experience in the United States and in other nations suggests that any attempt to force a top-down, federally mandated solution over the objections of a state or community—far from being more efficient—will take longer, cost more, and have lower odds of ultimate success. By contrast, the approach we recommend is explicitly adaptive, staged, and consent-based. Based on activities in the United States and abroad—including most notably the siting of a disposal facility for transuranic radioactive waste, the Waste Isolation Pilot Plant (WIPP) in New Mexico, and recent positive outcomes in Spain, Finland and Sweden—we believe this type of approach can provide the flexibility and sustain the public trust and confidence needed to see controversial facilities through to completion.

**2. A new organization dedicated solely to implementing the waste management program and empowered with the authority and resources to succeed.**

The overall record of DOE and of the federal government as a whole has not inspired confidence or trust in our nation’s nuclear waste management program. For this and other reasons, the Commission concludes that new institutional leadership is needed. Specifically, we believe a single-purpose, Congressionally-chartered federal corporation is best suited to provide the stability, focus, and credibility needed to get the waste program back on track. For the new organization to succeed, a substantial degree of implementing authority and assured access to funds must be paired with rigorous financial, technical, and regulatory oversight by Congress and the appropriate government agencies.

Let me add that the presence of clearly independent, competent regulators is essential. We recommend the existing roles of the Nuclear Regulatory Commission in licensing and regulating waste management facilities and the U.S. Environmental Protection Agency in establishing standards be preserved, but that steps be taken to ensure ongoing cooperation and coordination between these agencies.

**3. Access to the funds nuclear utility ratepayers are providing for the purpose of nuclear waste management.**

Nuclear utilities are assessed a fee on every kilowatt-hour of nuclear-generated electricity in exchange for the federal government’s contractual commitment to begin accepting commercial spent fuel beginning by January 31, 1998. Fee revenues go to the government’s Nuclear Waste Fund, which was established for the sole purpose of covering the cost of disposing of civilian nuclear waste and ensuring that the waste

program would not have to compete with other funding priorities. Unfortunately, the Fund does not work as intended. A series of Executive Branch and Congressional actions has made annual fee revenues - approximately \$750 million per year - and the unspent \$27 billion balance in the Fund effectively inaccessible to the waste program. Instead, the waste program is subject to exactly the budget constraints and uncertainties that the Fund was created to avoid. This situation must be remedied immediately to allow the program to succeed.

#### **4. Prompt efforts to develop one or more geologic disposal facilities.**

The conclusion that disposal is needed and that deep geologic disposal is the scientifically preferred approach has been reached by every expert panel that has looked at the issue and by every other country that is pursuing a nuclear waste management program. Moreover, all spent fuel reprocessing or recycle options either already available or under active development at this time still generate waste streams that require a permanent disposal solution.

In support of this effort, we recommend that the Environmental Protection Agency and the Nuclear Regulatory Commission develop a generic disposal standard and supporting regulatory requirements early in the siting process. Generally applicable regulations are more likely to earn public confidence than site-specific standards. In addition, having a generic standard will support the efficient consideration and examination of multiple sites. Likewise, EPA and NRC should begin work on a regulatory framework for borehole disposal, in parallel with their development of a site-independent safety standard for mined geologic repositories, to support the RD&D effort leading to licensed demonstration of the borehole concept.

We also recommend that the administration and Congress ensure that NRC and EPA have sufficient resources to complete this process in a thorough and timely way. The cost of delays in being able to move ahead with finding new sites would certainly be far higher than the cost of a process to establish the necessary standards as soon as possible.

Regarding Yucca Mountain, we simply note that regardless of the project's fate, the U.S. inventory of spent nuclear fuel will soon exceed the amount that can be legally emplaced there until a second repository is in operation. So under current law, the United States will need to find a new disposal site even if Yucca Mountain goes forward. We believe the approach set forth here provides the best strategy for assuring continued progress, regardless of the fate of Yucca Mountain.

**5. Prompt efforts to develop one or more consolidated storage facilities.**

Developing consolidated storage capacity would allow the federal government to begin the orderly transfer of spent fuel from reactor sites to safe and secure centralized facilities independent of the schedule for operating a permanent repository. The arguments in favor of consolidated storage are strongest for “stranded” spent fuel from shutdown plant sites; of which there are ten across the country. Stranded fuel should be first in line for transfer to a consolidated facility so that these plant sites can be completely decommissioned and put to other beneficial uses. The availability of consolidated storage will also provide valuable flexibility in the nuclear waste management system that could achieve meaningful cost savings, can provide back-up storage in the event that spent fuel needs to be moved quickly from a reactor site, and would provide an excellent platform for ongoing R&D to better understand how the storage systems currently in use at both commercial and DOE sites perform over time.

Even with timely development of consolidated storage facilities, a large quantity of spent fuel will remain at reactor sites for many decades before it can be accepted by the federal waste management program. Current at-reactor storage practices and safeguards are being scrutinized in light of the lessons that are emerging from Fukushima. As you know, the Commission recommended that the National Academy of Sciences (NAS) conduct a thorough assessment of lessons learned from Fukushima and their implications for conclusions reached in earlier NAS studies on the safety and security of current storage arrangements for spent nuclear fuel and high level waste in the United States. We understand that Congress directed the NRC to establish a contract with the National Academy of Sciences for this study - and that this work is moving ahead. We certainly believe this effort will complement investigations already underway by the NRC and other organizations. More broadly, it will also be vital to continue vigorous public and private research and regulatory oversight efforts in areas such as spent fuel and storage system degradation phenomena, vulnerability to sabotage and terrorism, full-scale cask testing, and others. As part of this process, it is appropriate for the NRC to examine the advantages and disadvantages of options such as “hardened” onsite storage that have been proposed to enhance security at storage sites.

**6. Prompt efforts to prepare for the eventual large-scale transport of spent nuclear fuel and high-level waste to consolidated storage and disposal facilities when such facilities become available.**

The current system of standards and regulations governing the transport of spent fuel and other nuclear materials appears to have functioned well, and the safety record for past shipments of these types of materials is excellent. That being said, greater transport demands for nuclear materials are likely to raise new public concerns.

The Commission believes that state, tribal and local officials should be extensively involved in transportation planning and should be given the resources necessary to discharge their roles and obligations in this arena. Historically, some programs have treated transportation planning as an afterthought. No successful programs have done so.

#### **7. Support for advances in nuclear energy technology and for workforce development.**

Advances in nuclear energy technology have the potential to deliver an array of benefits across a wide range of energy policy goals. The Commission believes these benefits—in light of the environmental and energy security challenges the United States and the world will confront this century—justify sustained public- and private-sector support for RD&D on both existing light-water reactor technology and advanced reactor and fuel cycle technologies.

We believe the NRC should increase its efforts in developing regulatory frameworks for advanced nuclear energy systems. Such frameworks can help guide the design of new systems and lower barriers to commercial investment by increasing confidence that new systems can be successfully licensed. Specifically, the Commission recommends that adequate federal funding be provided to the NRC to support a robust effort in this area. We also support the NRC's risk-informed, performance-based approach to developing regulations for advanced nuclear energy systems, including NRC's ongoing review of the current waste classification system.

#### **8. Active U.S. leadership in international efforts to address safety, non-proliferation, and security concerns.**

As more nations consider pursuing nuclear energy or expanding their nuclear programs, U.S. leadership is urgently needed on issues of safety, non-proliferation, and security and counter-terrorism. From the U.S. perspective, two points are particularly important: First, with so many players in the international nuclear technology and policy arena, the United States will increasingly have to lead by engagement and by example. Second, the United States cannot exercise effective leadership on issues related to the back end of

the nuclear fuel cycle so long as its own program is in disarray; effective domestic policies are needed to support America's international agenda.

Domestically, evolving terrorism threats and security risks must be closely monitored by the NRC, the Department of Homeland Security, and other responsible agencies to ensure that any additional security measures needed to counter those threats are identified and promptly implemented. The events at Fukushima have – as they should – prompted the NRC and the industry to re-examine the adequacy of “mitigative strategies” for coping with large-scale events or catastrophic system failures, and we support the ongoing efforts the NRC is taking in its response to Fukushima.

In conclusion, the problem of nuclear waste may be unique in the sense that there is wide agreement about the outlines of the solution. Simply put, we know what we have to do, we know we have to do it, and we even know how to do it.

The national interest demands that our nuclear waste program be fixed. Complacency with a failed nuclear waste management system is not an option and the status quo is not acceptable. The need for a new strategy is urgent, and we urge the Administration and Congress to proceed without further delay.

We know that you, the dedicated and talented Commissioners and staff of the NRC, have an important role to play in supporting this new strategy, and hope that you move ahead with the same diligence and professionalism the NRC is known for worldwide.

Thank you for having us here today, and we look forward to your questions.