



Sustainable Fuel Cycle TASK FORCE

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May 13, 2009

Office of Science and Technology Policy
Attn: Scientific Integrity Recommendations
725 17th St NW
Washington, DC 20502

Subject: Sustainable Fuel Cycle comments on the March 9, 2009 Presidential Memo on Scientific Integrity (74 Fed. Reg. 18596) dated April 23, 2009

The Sustainable Fuel Cycle Task Force fully supports the intent of the March 9, 2009, Presidential Memo on Scientific Integrity and the guiding principles outlined in that memorandum. The Task Force is a grassroots effort supportive of forging a fresh consensus on key open issues related to a sustainable nuclear fuel cycle for the United States, and strongly supports the continuation of the Yucca Mountain project as well as closing the nuclear fuel cycle by recycling of spent nuclear fuel.

We fully believe that decisions that involve scientific issues should be based on and appropriately consider relevant scientific information. Such decisions should not be driven by or biased by political considerations. The President and the Office of Science and Technology Policy are to be commended for addressing this issue and concisely outlining the administration's policy and approach to this most important issue.

Therefore, it is most concerning that in one of the most important scientific issues before the administration, the disposal of spent nuclear fuel and defense high-level waste at Yucca Mountain, this administration has taken steps clearly at odds with the President's own stated principles regarding scientific integrity.

Not only is the administration position not consistent with the principles it espouses in the March 9, 2009, Presidential Memo on Scientific Integrity, it is disappointing to the many scientists involved in both evaluation and oversight of the Yucca Mountain program, some of whom are among the leading scientists in the world in their scientific disciplines.

The administration position that “Yucca is no longer an option” appears to simply mask a politically driven decision to impede the consideration of the DOE’s Yucca Mountain License Application. The fact that the Nuclear Regulatory Commission (NRC) has accepted the License Application for review alone should be an indicator of the quality of the science at Yucca Mountain. The NRC is the sole federal agency tasked by Congress to evaluate nuclear safety and authorize the use of nuclear materials,

Specific comments on the principles of the Presidential Memo on Scientific Integrity are presented below and illustrate how the Administration’s position on Yucca Mountain fails a test of consistency with these principles.

Principle (b) of the Presidential Memo on Scientific Integrity states that: “[e]ach agency should have appropriate rules and procedures to ensure the integrity of the scientific process within the agency.” In the Nuclear Waste Policy Act (NWPA), Congress provided explicit direction for developing repositories for spent nuclear fuel and high-level radioactive waste to the Department of Energy (DOE), the Environmental Protection Agency (EPA), and the NRC. In public rulemakings, those agencies presented and received comments on the technical bases for evaluating sites for development of repositories, and ultimately, specifically for Yucca Mountain. Those rules and regulations were followed in the evaluations of Yucca Mountain, and with one exception, since remedied, even withstood lawsuits against the federal government.

Principle (c) of the Presidential Memo on Scientific Integrity states that: “[w]hen scientific or technological information is considered in policy decisions, the information should be subject to well-established scientific processes, including peer review where appropriate, and each agency should appropriately and accurately reflect that information in complying with and applying relevant statutory standards”.

More than 30 years were spent studying and evaluating Yucca Mountain before the License Application was submitted to the NRC. These evaluations included review, by the NRC, of formal plans for site characterization to obtain the data needed to evaluate the suitability of the Yucca Mountain site, review of publicly available semi-annual reports on progress in ongoing scientific studies, a Congressionally mandated assessment of the viability of the site, and a technical assessment of the suitability of the Yucca Mountain site, which included public meetings to receive comments, Environmental Impact Statements, and reports summarizing the science, and the basis for the suitability evaluations. All of these evaluations were done with opportunity for public involvement, review, and comment. Multiple independent peer reviews of the technical information supporting the assessment of whether or not the Yucca Mountain site would be able to meet the EPA standards and protect worker and public health and safety were undertaken and documented. Not only has the information been technically reviewed, but the basis for the compliance evaluation, the Total System Performance Assessment, has been peer reviewed by international experts.

Congress created the Nuclear Waste Technical Review Board in 1987 to provide an independent check of the soundness of the science that the Yucca Mountain project is based on. Board members are nominated by the National Academies of Science and appointed by the President. The Board holds public meetings as it pursues its investigations of the science supporting the Yucca Mountain License Application, and reports to Congress twice each year. The long term safety studies of the repository included in the license application were led by Sandia National Laboratories, with significant direct input from Lawrence Berkeley, Lawrence Livermore, and Los Alamos National Laboratories, the U.S. Geological Survey, and various DOE scientific and engineering contractors. In August 2008, the National Laboratory directors signed a letter addressing the role of nuclear energy, and which supported the continuation of licensing of the geologic repository at Yucca Mountain. These directors included, in his previous role as the head of Lawrence Berkeley National Laboratory, Secretary of Energy Chu,

Principle (d) of the Presidential Memo on Scientific Integrity states that: “[e]xcept for information that is properly restricted from disclosure under procedures established in accordance with statute, regulation, Executive Order, or Presidential Memorandum, each agency should make available to the public the scientific or technological findings or conclusions considered or relied on in policy decisions.”

As previously stated, it does not appear that the administration has a credible, scientific basis for its decision that Yucca Mountain “is no longer an option”. Based on the principles of the President’s own policy, it is incumbent upon the administration to set forth publically the specific scientific bases for its position on Yucca Mountain.

Principle (e) of the Presidential Memo on Scientific Integrity states that: “[e]ach agency should have in place procedures to identify and address instances in which the scientific process or the integrity of scientific and technological information may be compromised,” and Principle (f) of the Presidential Memo on Scientific Integrity states that: “[e]ach agency should adopt such additional procedures, including any appropriate whistleblower protections, as are necessary to ensure the integrity of scientific and technological information and processes on which the agency relies in its decision-making or otherwise uses or prepares.”

NRC regulations require DOE to have in place a Quality Assurance (QA) Program that outlines the details of the scientific processes designed to ensure the integrity of the results, including provisions for whistleblowers. DOE’s Yucca Mountain program operated under such a program. In fact, many of the criticisms of the science at Yucca Mountain arise from audits performed under the QA program. What does not seem to be reported with the same enthusiasm, however, were the strenuous efforts by the DOE to address and the remediate any weaknesses in the program.

Under existing law and regulation, it is the role and responsibility of the Nuclear Regulatory Commission to review the DOE license application and to determine whether the proposed Yucca Mountain repository protects public health and safety and the environment. The administration should allow the NRC to perform its statutorily mandated duties and to conduct its scientific and technical review.

To do otherwise would significantly and irreparably undermine the trust and confidence in the administration's commitment to ensure scientific integrity in other federal agency decision making – the very goal of the administration's stated policy.

Edward M. Davis

A handwritten signature in black ink that reads "Edward M. Davis". The signature is written in a cursive, flowing style.

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c: The Honorable Carole Browner, Climate and Energy Adviser to the President
The Honorable Steven Chu, Secretary, U.S. Department of Energy
The Honorable Dale E. Klein, Chairman, U.S. Nuclear Regulatory Commission
The Honorable Lisa Jackson, Administrator, U.S. Environmental Protection Agency