

NEWS

Congress Shows Interest in Nuclear Power and Personnel Required to Make it Go

One of the provisions of the Senate energy legislation currently being considered would provide federally-backed loan guarantees for up to half the construction costs of six or seven nuclear power plants. The nuclear plant loan guarantee provision was very controversial, and survived an attempt to remove it from the energy bill on a close vote of 48 to 50. "No matter how narrow and how hard-fought, it is a victory, and it won't get undone," said Senator Pete Domenici (R-NM), who has worked diligently to promote greater use of nuclear energy. No nuclear plant has been ordered since the Three Mile Island accident in the late 1970s, and the Senate vote was seen as a major victory for nuclear energy proponents. Besides the loan guarantees, S. 14 has other incentives to promote nuclear energy.

There was far less controversy at a House Science Committee hearing on university nuclear research programs. Energy Subcommittee Chair Judy Biggert (R-IL) opened this hearing by declaring, "... even as there is renewed interest in nuclear energy as one of the solutions to the nation's energy problems, there has been a growing concern that fewer Americans are entering the nuclear science and engineering field, and even fewer institutions are left with the capacity to train them." The number of four-year trained nuclear engineers is at a 35-year low, she said. Up to 30% of the current nuclear engineering work force could retire in the next five years. Biggert successfully incorporated a number of provisions in the House energy bill, H.R. 6, to strengthen university-based nuclear engineering programs.

There was general agreement that university programs are important and should be strengthened, primarily through the support of DOE. A witness commented that electrical generation from nuclear power could grow from its current national share of 20% to as much as 60%, and said that the role of university training is "critical." An industry spokesperson explained that there had been a 50% reduction in four-year programs since 1970, with more than a 50% decline in operating university research and training reactors since 1980.

Rep. Vern Ehlers (R-MI), a Fellow of this Forum, spoke of how he has fought to maintain funding for the nuclear reactor at the University of Michigan, "without a great deal of success, frankly. There is just not a lot of public support." Market concerns are also a formidable obstacle. Ehlers asked the witnesses if any corporation was likely to invest \$2 billion or more in a new nuclear plant. While interest was expressed in the Domenici provisions in S. 14, the witnesses were divided over how likely it would be for private industry to move forward.

Excerpted by AMS from the American Institute of Physics Bulletin of Science Policy News, Number 97: July 23, 2003, by Richard M. Jones, AIP Media and Government Relations Division

House Challenges DoD on Need to Speed Up Capabilities for Nuclear Weapons Testing

The House Appropriators Committee denied the Administration's request for funding to reduce the current 24-36 month test readiness posture at the Nevada test site to the proposed 18 months. Their report, 108-212, excerpted below, provides important insights about the Defense Department.

"... The Committee is concerned with the open-ended commitment to increase significantly funding for the purpose of Enhanced Test Readiness without any budget analysis or program plan to evaluate the efficiency or effectiveness of this funding increase. Recent reports done by

the DOE Inspector General and two NNSA management studies done at the Committee's request all identified significant problems with the current test readiness program, but the Department's proposal does not address the fundamental difficulties in maintaining test readiness during a testing moratorium.

"The September 2002 Office of Inspector General audit (DOE/IG-0566) identified several problem areas impacting the ability to resume testing within the existing 24 to 36 month requirement: decline in the number of employees with testing experience; the deterioration of necessary systems and equipment; the inability to keep pace with new technology; and a delay in conducting required safety studies. ...Neither past performance nor any program or planning documentation provided to the Committee supports the Department's contention that an additional \$100 million over three years and a \$45 million increment every year thereafter is likely to result in a consistent 6 to 12 month improvement in test readiness posture when the current requirement has not been successfully maintained.

"The Department's rationale for the change to an 18-month posture was included in the April 2003 Report to Congress on Nuclear Test Readiness, 'An 18 month posture is appropriate because this is the minimum time we would expect it would take, once a problem was identified, to assess the problem, develop and implement a solution, and plan and execute a test that would provide the information needed to certify the fix.' The NNSA's July 2002 Enhanced Test Readiness Cost Study stated that even during the Cold War era of routine testing, the national labs required 18-24 months to design and field a nuclear test with full diagnostics. The Committee questions a proposal to move to and attempt to indefinitely maintain a test readiness state that is the absolute minimum amount of time necessary to conduct a test designed to produce meaningful diagnostic results. The proposal reflects a disturbing 'cost is no object' perspective in the Department's decision making process.

" The Committee supports the continued maintenance of the Nevada Test Site as a valuable resource for the NNSA nuclear weapons complex. Indeed, the Committee provides significant resources every year to fund a wide variety of activities at NTS that support the overall Stockpile Stewardship program. However, the Committee will not spend money on a perceived problem when the Department has not provided a rationale or a plan that addresses the underlying problems inherent in maintaining a testing capability during a testing moratorium. The Department's report states, 'The NNSA has made a deliberate decision, in consultation with DOD and other agencies with the Administration, to move to an 18-month nuclear test readiness posture by the end of fiscal year 2005.' The Committee does not recognize the NNSA declaring a revised test readiness posture as a new requirement nor is it convinced that the decision can be successfully implemented based on the planning information provided to date. The Committee challenges the NNSA to work within the significant funding provided each year for its site readiness activities to demonstrate the ability to meet its current requirements before additional funds are added to meet a more problematic goal."

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House Complains About DoD Process for Determining Need for Nuclear Weapons

Relevant selections, critical of the relationship between the Defense Department and Energy Department, from House Report 108-212 follow.

"Nuclear weapons budget requirements- This Committee continues to believe that our nation's nuclear arsenal provides a vital deterrent to potential aggressors. In order to maintain a modern nuclear stockpile, the Nation needs to have a modern, efficient, and flexible nuclear weapons complex with the necessary design, production, testing, refurbishment, and dismantlement capabilities.

Unfortunately, the country possesses neither a modern stockpile nor a modern nuclear weapons complex. Instead, both are largely carryovers from the Cold War era. After careful consideration, the Committee has concluded that much of the current situation results from a flawed budget process. Under the current process, the Department of Defense (DoD) establishes the military requirements for Nation's nuclear weapons stockpile (i.e., numbers and types of warheads), which in turn dictates the requirements that DOE must meet to ensure the safety, security, and reliability of those weapons. The size, capability and cost of DOE's weapons complex is a direct result of the specific requirements established by DoD for warhead refurbishments, design modifications, testing, and dismantlement. However, when DoD develops their requirements their decision process is not constrained by the normal types of budget trade-offs that an agency confronts in the process of formulating a budget request. In effect, DoD sets the requirements and leaves it up to DOE to come up with the budget to support the nuclear weapons complex each year. If these costs were funded directly by DoD, the nuclear weapons activities would be considered against other national defense priorities, such as developing improved conventional weapons, procuring more of existing weapon systems, paying ever-increasing operational and training costs, and providing a better quality of life for our soldiers, sailors, and airmen. Similarly, if the costs of the nuclear weapons complex were solely determined by the DOE, they would be balanced against other DOE priorities, such as nonproliferation, science research, improving the Nation's energy supply, or accelerating the cleanup of contaminated sites. Instead, the weapons activities portion of the NNSA budget is effectively insulated from any such tradeoffs - DoD sets requirements that another agency has to fund, and DOE treats the weapons activities budget as untouchable because DoD set the requirements.

"There needs to be a serious debate about whether the approximately \$6 billion spent annually on DOE's nuclear weapons complex is a sound national security investment. Until that debate occurs and the DOE weapons budget request is subject to meaningful budget trade-offs, this Committee will not assume that all of the proposed nuclear weapons requests are legitimate requirements."

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Graduate Research Student Rejected on Non-Academic Grounds

From the British newspaper THE TELEGRAPH: Outrage as Oxford bans student for being Israeli By Julie Henry, Education Correspondent (Filed: 29/06/2003). Excerpted by AMS

Andrew Wilkie, the Nuffield professor of pathology [at Oxford] and a fellow of Pembroke College, is under investigation after telling Amit Duvshani, a student at Tel Aviv university, that he and many other British academics were not prepared to take on Israelis because of the "gross human rights abuses" he claims that they inflict on Palestinians.

A series of attempts have been made to isolate Israeli scholars in protest at their country's operations in the West Bank and Gaza Strip. In Britain, calls for an academic boycott have been led by Steven Rose, an Open University professor.

Last year the University of Manchester Institute of Science and Technology was forced to hold an inquiry after The Sunday Telegraph revealed that Mona Baker, a professor, had sacked two Israeli academics from the editorial boards of two journals because of their nationality. A Umist inquiry found that Prof Baker had not acted improperly under its rules because the journals she owns were not connected to the university.

Giles Henderson, the master of Pembroke College, said of Prof Wilkie's case: "The college will await the outcome of the university's investigation."