

**Testimony by Eric P. Loewen Ph.D.**  
**President, American Nuclear Society**  
**House Appropriations Subcommittee on Energy and Water Development**  
**On the FY 2013 Energy and Water Development Appropriations Bill**  
**March 30, 2012**

Chairman Frelinghuysen, Ranking Member Visclosky, members of the Subcommittee, on behalf of the 12,000 members of the American Nuclear Society, I am pleased to provide testimony on FY 2013 appropriations for the U.S. Department of Energy and other relevant agencies under the Subcommittee's jurisdiction.

As you know, ANS represents a diverse cadre of nuclear professionals. As such, our members' opinions on nuclear issues are often wide-ranging, and perhaps sometimes different from the Subcommittee. The ANS, however, truly appreciates the thoughtful and deliberate manner in which the Subcommittee approaches issues related to nuclear energy, science, and technology.

ANS believes the United States must maintain its nuclear energy technology capabilities, both from an energy and national security perspective. While we recognize that US demand for new nuclear reactors has cooled recently because of our economic downturn and historically low natural gas prices, the ANS knows nuclear energy is still an indispensable part of our long-term energy policy in the US.

The administration has set forth a plan to address the current set of nuclear challenges: a targeted research and development program to promote sustainability of our current light water reactor fleet; a program to accelerate development and licensing of light water Small Modular Reactors (SMRs); research programs focused on the nuclear fuel cycle, advanced reactors, and developing simulation and modeling tools that have broad application across the nuclear sector.

We are puzzled however by the President's FY 2013 budget request for the Department of Energy Office of Nuclear Energy (DOE NE), which is clearly insufficient to maintain progress on the administration's own announced priorities.

Administration's budget documents show a net increase of 0.7% over FY 2012, which on the surface would seem to be a reasonable request given the current fiscal pressures. Upon closer inspection, however, the administration proposes moving \$95 million in funding for "Idaho Sitewide Safeguards and Security" into the main DOE NE budget from Other Defense Activities account. Without this clever piece of accounting, the actual FY 13 DOE NE budget would be cut by 11.7%, while the overall funding level for DOE would increase by 3.2%.

It is apparent that the president's budget request for DOE NE is more a product of internal budgetary "goal posting" than a deliberate attempt to reduce the scope of the administration's initiatives in nuclear energy science and technology.

**The ANS believes it is extremely important to maintain funding for the DOE NE at consistent levels, and urges the subcommittee to base its FY 2013 recommendations on FY 2012 enacted levels.** As such, our specific program recommendations for DOE-NE assume "flat funding" in FY 2013.

**We urge the Subcommittee to support the continuation of the Integrated University Program. Specifically, we request that the Subcommittee to restore the full \$15 million in funding for the Nuclear Regulatory Commission's portion of the IUP program and the \$5 million FY12 appropriated level for DOE-NE.** While we are pleased that the current leadership of the DOE NE has reestablished its commitment as the primary steward of university-based nuclear education programs, we believe it is critically important for NRC to continue its activities in this area. As you may recall, it was the House Energy and Water Subcommittee that originally precipitated the transfer in funding for universities from DOE to NRC several budget cycles ago. If these activities are not funded, several very important activities will be terminated, including support for younger faculty awards, and collaboration on curriculum between two-year and four-year institutions of higher learning.

**ANS recommends funding the SMR licensing technical program at \$95 million,** which represents an increase of \$30 million over the President's FY 2013 budget request level. Our recommended funding level would put the DOE SMR program on a sustainable trajectory to meet its budgetary milestones of \$452 million over a 5 year period. The subcommittee should recognize that the US is in a full scale race with other nations, such as Russia, China, Korea and India, to develop and deploy SMR technology. SMRs offer an opportunity for improving the attractiveness of the US nuclear export portfolio and create manufacturing jobs in the US. The president's budget request level is simply insufficient to meet the program's objectives.

**The Advanced Reactor Concepts program should be funded at the FY 2012 enacted levels.** ANS recognizes that the administration has de-prioritized the development of so-called Generation IV reactor designs. However, its proposed 43% cut in funding for the Advanced Reactor Concepts program will essentially relinquish US global leadership in an American technology and throw away previous US investments. Forgoing this leadership directly impacts our ability to promote US safety and nonproliferation standards around the world for these technologies.

**The Next Generation Nuclear Plant project should be funded at its authorized amount in EPAC of 2005 in FY 2013.** ANS believes that DOE should fund the NGNP project for success and near-term results rather than settle for a slower pace of licensing "framework" activities. Developing a licensing "framework" does not establish technology leadership, rather it concrete foundations of this first-of-kind project that will establish the US as technology leaders.

Sadly however, the 47% percent cut proposed by the administration would not allow DOE to even pursue its stated “framework” course, and would also continue to cause irreversible losses to a program established in EPAC 2005. For instance, several samples of advanced fuels currently being tested in the INL Advanced Test Reactor would have to be prematurely removed, thereby destroying valuable scientific data (that took years to create), and not keeping with Congresses vision of the project established by law in 2005.

**Finally, we urge the Subcommittee to provide such sums as may be necessary for the preservation of all scientific and technical documents and predictive modeling licensing codes related to the Yucca Mountain license application.** The ANS membership has been deeply disappointed that the administration has essentially chosen to value politics over sound science in withdrawing the license application. We recognize that the Administration efforts with the Blue Ribbon Commission (BRC), and their recommendations to Congress. ANS provided input to the BRC. Prudence dictates that the technical fruits of nearly \$10 billion worth of utility rate payer investments should be preserved for future repository efforts regardless of the location in the US.

In closing, our goals is to provide the Subcommittee with the views of our society as it assembles the FY 2013 Energy and Water Development Appropriations Bill, and we stand ready and willing to provide additional technical assistance based on this information. At this moment in the life of our industry, I call for more attention to the need for our nation to have the courage of commitment to live up to our historical leadership role in nuclear technology. Unless we step up, we will be left behind.

Thank you.