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TESTIMONY BEFORE THE HOUSE ENERGY AND WATER DEVELOPMENT APPROPRIATIONS SUBCOMMITTEE

BY

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MARCH 16, 2006

Mr. Chairman, on behalf of the 10,000 plus members of the American Nuclear Society (ANS), I am pleased to provide our recommendations for the nuclear energy science and technology provisions of the FY 2007 Energy and Water Development Appropriations Bill.

Before delving into the details, I would like to commend you on your sustained efforts to promote the peaceful use of nuclear power and technology for the public good. You have maintained a steady voice on this issue, reminding us all to keep "pushing the ball forward."

This year promises to be a critical time for the future of nuclear energy, science and technology. The investments Congress makes in key nuclear programs in fiscal year 2007 will have a durable, decisive role in shaping the scope and nature of nuclear technology for decades to come.

Global Nuclear Energy Partnership

The ANS applauds the administration for stepping forward to articulate the Global Nuclear Energy Partnership (GNEP) – a broad vision of how the world can greatly expand the peaceful use of nuclear energy while minimizing the risks of proliferation. Since 1993 the ANS has organized biannual conferences at which global nuclear technology leaders have been challenged to develop such a vision. The emerging consensus has closely resembled GNEP, indicating a high likelihood of its future international acceptance. Creating the technological, political, regulatory and human infrastructure needed to realize this vision will

take decades. To realize the benefits of GNEP, the ANS believes it is essential to start building the foundation now. For the US to realize the benefits of nuclear expansion we must invest in new plant construction, establish the Yucca Mountain geologic repository, ensure the push for accelerated research on advanced fuel cycle technologies, and development of human capital. As such, the ANS strongly encourages the Subcommittee to provide a FY 2007 funding level sufficient to accelerate GNEP-related "proof-of-concept" research on UREX+ recycling, transmutation, pyroprocessing, and sodium cooled fast reactors.

DOE support for nuclear education programs

ANS was deeply troubled to learn that the President's FY 2007 budget request recommends terminating the University Reactor Infrastructure and Education Assistance Program. This program provides critical support to the nuclear education community, including scholarships for undergraduate students, fellowships for graduate students, funding basic research in nuclear science and engineering, and infrastructure support for the university research and training reactors. Without this support, the Nation's nuclear engineering departments and programs will not be able to sustain enrollment of graduate students and recruit top-notch undergraduates in fields related to nuclear energy production. Elimination of basic research and infrastructure support is certain to diminish nuclear engineering faculty support and graduate programs at the very time they will be expected to support national security needs as well as the rebirth of nuclear power in this country. Therefore, ANS strongly urges the Committee to maintain full funding for this program in the FY 2007 bill.

Next Generation Nuclear Plant

The Society was also disappointed to learn that the President's budget request does not include funding sufficient to move forward with development and construction of the Next Generation Nuclear Plant at the Idaho National Laboratory.

The NGNP, a first-of-a-kind high temperature gas-cooled nuclear system, has the potential to generate electrical power and produce large quantities of hydrogen on an economically-competitive basis. We believe that nuclear power, specifically through the development of high temperature gas reactors, can and should have a constructive role to play in meeting our mobile energy needs. Global demand for petroleum and natural gas is projected to rise significantly in the coming decades. As such, the supply of transportation fuels to the US market will continue to be strained and volatile until we can sufficiently diversify our supply base. Fuel cells, alternative fuels, and refinement of sour crude oil stocks all have an important role to play in expanding our portfolio of transportation energy sources. However, the common denominator in their success is hydrogen. The NGNP is our best hope for creating a new, large scale, economically feasible, and environmentally responsible source of hydrogen that can facilitate the transition to these new technologies.

We recognize that the Administration has chosen to focus its proposed investments in Generation IV reactor technology to the sodium cooled fast reactor, which will ultimately be central to closing the fuel cycle. However, Congress should provide sufficient funding to advance both technologies. Therefore, ANS urges the Subcommittee to appropriate such funds as necessary to move forward with an NGNP prototype at the Idaho National Laboratory.

In closing, we urge you to provide a robust package of funding for federal nuclear programs in fiscal year 2007. We appreciate your consideration of our views, and we look forward to working with you as the process moves forward.

Thank You.