FY 2026 Recommendations:

U.S. Senate Appropriations Subcommittee on Energy and Water Development

Craig H. Piercy
Executive Director/CEO
American Nuclear Society[1]
May 30, 2025

On behalf of the 11,000 members of the American Nuclear Society (ANS), I am pleased to provide FY26 appropriations recommendations for programs under the Subcommittee's jurisdiction. ANS continues to be grateful to the Chair, Ranking Member, and Subcommittee members for their strong and consistent support for the advancement of U.S. nuclear energy, science, and technology.

While our specific recommendations are outlined later in this document, our overarching request is for the Subcommittee to provide a balanced approach to funding the federal government's portfolio of investments in nuclear technology. There is no doubt the Trump administration is supportive of advancing nuclear energy as part of its stated policy of energy dominance. However, the White House Office of Management and Budget in its "skinny budget" has proposed cutting $408 million in so-called "non-essential" programs from the Office of Nuclear Energy's budget in FY26. While OMB has not yet provided Congress with its specific recommendations, we are concerned its approach may be to prioritize near-term deployment of new reactors without sufficiently supporting the nuclear RD&D and associated workforce development needed to support a robust domestic nuclear sector. Make no mistake, ANS is committed to enabling the near-term deployment of advanced fission and fusion reactors; however, true U.S. nuclear technology "dominance" requires a healthy research and education component, which can only be achieved through strong and stable federal funding and stewardship.

Overall, we believe that the top line FY25 appropriated level for DOE civil nuclear programs, along with the judicious use of reallocated balances remaining in the Civil Nuclear Credit program and the Loan Programs Office, are sufficient to support all of the pillars of a strong and growing U.S. nuclear enterprise. The Subcommittee pursued this approach in its FY25 Appropriations Bill, and we encourage it to stay the course in FY26. For further information or questions on the ANS recommendations called out below please contact John Starkey, ANS Director of Public Policy, jstarkey@ans.org.

[1] The American Nuclear Society is the premier organization for those who embrace nuclear science and technology for their vital contributions to improving people's lives and preserving the planet. ANS membership is open to all, and current membership consists of individuals from all walks of life; including engineers, doctors, students, educators, scientists, soldiers, advocates, government employees, and others. ANS is committed to advancing, fostering, and promoting the development and application of nuclear sciences and technologies to benefit society.

DOE Office of Nuclear Energy

NEUP, SBIR/STTR and TCF (FY26 Recommendation: $140 million) ANS strongly supports continued investment and DOE facilitation for this program at FY24/25 funding levels. Specifically, the Nuclear Engineering University Program (NEUP); for over a decade, NEUP has served as the primary vehicle through which DOE supports nuclear energy related R&D at America's college and universities. These awards have created numerous collaborations between universities, national labs, and industry partners. They have also led to some of the most innovative advanced reactor designs being developed today. NEUP continuance is crucial for the development and scale up of our future nuclear workforce. Within this research specific account line ANS recommends no less than $64.7 million for NEUP in FY26.

DOE OCED; Advanced Reactor Demonstration Program (FY26 Recommendation: $595 million) Demonstrating the next generation of advanced reactors will support both domestic deployment and export of U.S. technology and enable broad U.S. leadership in new and innovative advanced nuclear technologies. ANS recommends full funding necessary to complete the two ARDP demonstration projects from uncosted OCED balances, $150 million for risk-reduction projects, and $65 million for the National Reactor Innovation Center (NRIC) to bridge the gap between concept, demonstration, and commercialization.

Fuel Cyle R&D; Next Generation Fuels (FY26 Recommendation: $45 million) ANS recommends continued funding to support the development of high-performance fuels for advanced reactors and light water reactors. Within this line item ANS recommends no less than $20 million for metallic fuels.

Fuel Cycle R&D; Accident Tolerant Fuels (FY26 Recommendation: $98 million) ANS supports continued cost-shared R&D and commercialization efforts by industry-led teams.

Fuel Cycle R&D; TRISO and Graphite Qualification (FY26 Recommendation: $22 million) Within this line item ANS recommends no less than $17 million for TRISO fuels.

Fuel Cycle R&D; Used Nuclear Fuel Disposition and Integrated Waste Management (FY26 Recommendation: $110 million) DOE should be directed to re-establish an organization to manage the program and begin implementing an integrated waste management system. This system should specifically include the creation of an International Center for Research on Spent Nuclear Fuel and High-Level Waste to enable completion of the High-Burnup Storage Demonstration Project and conduct follow on studies related to storage aging management. A more integrated program will also support the extension of existing storage licenses for longer time periods and prepare DOE for the eventual establishment of permanent disposal capability. DOE should also assist the EPA Office of Radiation and Indoor Air (ORIA) on the development of a new generic repository standard for the disposal of high-level radioactive waste.

Fuel Cycle R&D; Advanced Nuclear Fuel Availability Program, EBR-II Allocation (FY26 Recommendation: $28.5 million) ANS supports the Committee moving EBR-II acceleration activities from Materials Recovery and Waste Form Development to the Advanced Nuclear Fuel Availability Program with no less than $28.5 million provided for EBR-II processing for HALEU.

Nuclear Energy Enabling Technologies (FY26 Recommendation: $100 million) ANS requests up to $100 million for NEET subprograms. This request includes $45 million for National Science User Facilities and no less than $18 million for Computational Support, and $20 million for AI use in nuclear energy deployment acceleration.

Reactor Concepts RD&D; Light Water Reactor Sustainability (FY26 Recommendation: $45 million) ANS supports increased funding to accelerate LWR modernization efforts while continuing to support hydrogen demonstrations and rising electricity demand, and initiating activities to support isotope production in existing reactors as authorized by the CHIPS and Science Act.

DOE-NE; DOE MESC – Advanced Nuclear Supply Chain (FY26 Recommendation: $30 million) Congress should direct DOE to establish a program supporting the development of supply chain capacity for advanced reactors.

DOE-NE; DOE MESC – Advanced Methods for Manufacturing (FY26 Recommendation: $10 million) ANS recommends $10 million for advanced manufacturing methods be included within the $45 million crosscutting technology development program.

International Nuclear Energy Cooperation (FY26 Recommendation: $13 million) Working hand in hand with the DOE International Affairs office to help bolster U.S. nuclear competitiveness on a global scale.

International Affairs (FY26 Recommendation: $39 million)

Advanced Nuclear Licensing Energy Cost-Share Program (FY26 Recommendation: $10 million) ANS supports funding which would offset NRC licensing fees during pre-application and application phases, reducing risk as projects near demonstration.

Additional Programs

CHIPS Act Provisions (FY26 Recommendation: $190 million) In Subtitle L of the CHIPS and Science Act, ANS supports FY26 authorization levels of $55 million for Section 10743, $45 million for section 10744, and $15 million for section 10745. ANS also recommends an additional $75 million for the CHIPS and Science Act Fission for the Future provision (Subtitle P – Section 10781).

Nuclear Regulatory Commission (FY26 Recommendations: $40 million for Advanced Reactor Regulatory Infrastructure, $20 million for University Leadership Program, and $20 million for the Office of International Programs) Congress should fully fund the agency and direct it to continue implementation of the ADVANCE Act with urgency – streamlining its processes and ensuring clear, efficient, and risk-informed regulation.

Low-Dose Radiation Program (FY25 Recommendation: $20 million to support low-dose radiation research activities) Consistent with enacted legislation, ANS recommends $20 million for this program in FY26.

Fusion Energy Sciences

Milestone-Based Fusion Development Program (FY26 Recommendation: $280 million)
ANS recommends funding of $280 million for the milestone program, which is the minimum requirement to complete the goal of achieving multiple preliminary design reviews of a fusion pilot plant.

FIRE (Fusion Innovation and Research Engine) (FY26 Recommendation: $180 million)
First announced in 2023, these research bodies are anticipated to coordinate commercially relevant research in areas of commercially applied science critical to deploying commercial fusion. Focus areas include: 1) Structural and plasma-facing materials and internal components, (2) Blanket and fuel cycles, (3) Enabling technologies, and (4) Advanced simulation for design/optimization. This research is central to the work of the DOE Fusion program in support of the Bold Decadal Vision and builds on the recommendations of the Community Planning Process, FESAC Long Range Plan, and the National Academies of Sciences report.