Testimony for the Record

Marvin S. Fertel
President and Chief Executive Officer
Nuclear Energy Institute
Appropriations Subcommittee on Energy and Water Development
U.S. Senate
April 1, 2010

The Nuclear Energy Institute\(^1\) (NEI) supports Fiscal Year 2011 (FY11) funding for the following Department of Energy programs and the Nuclear Regulatory Commission:

- Innovative Technology Loan Guarantee Program Office—$38 million for administrative expenses and $36 billion in new loan guarantee authority for nuclear power projects
- Fuel Cycle Research and Development—$201 million
- Reactor Concepts Research, Development and Demonstration—$195 million
- Nuclear Energy Enabling Technologies—$99.3 million
- Integrated University Program—$45 million
- Advanced Test Reactor User Facility—$20 million
- Idaho Facilities Management—$177.5 million
- Radiological Facilities Management—$66.8 million
- Environmental cleanup at DOE sites—$6 billion
- Nuclear Regulatory Commission budget—$1 billion

America’s nuclear energy facilities in 2009 continued a decade of exemplary performance. Nuclear energy continues to surpass all other electricity sources with an industry average capacity factor of 90.5 percent. This reliability enabled the nation’s 104 reactors to produce approximately 800 billion kilowatt-hours of electricity—enough for about 80 million homes—at production costs lower than coal and natural gas-fired power plants. Nuclear power plants in 31 states generate more than 70 percent of the U.S. electricity that comes from carbon-free sources. NEI believes the budget proposed for DOE’s Office of Nuclear Energy is indicative of the administration’s belief that nuclear energy is essential to America’s future electricity supply, energy security and greenhouse gas emission reduction goals.

**Uranium Enrichment D&D Fund Tax Undue Burden on Utility Ratepayers**

NEI opposes the proposed $200 million annual tax on utilities to pay yet again for the decommissioning and decontamination fund at DOE uranium enrichment facilities.

---
\(^1\) The Nuclear Energy Institute is the industry’s policy organization, whose broad mission is to foster the beneficial uses of nuclear technology in its many commercial forms. Its membership, more than 350 corporate members in 17 countries, includes every U.S. utility that operates a nuclear power plant as well as international utilities, plant designers, architect and engineering firms, uranium mining and milling companies, nuclear service providers, universities, manufacturers of radiopharmaceuticals, universities, labor unions and law firms.
The Obama administration is seeking reinstatement of the uranium enrichment decontamination and decommissioning fund, with a proposed tax on electric utilities of $200 million a year through 2026. Electric utilities have already paid twice for decommissioning and decontamination at uranium enrichment plants that originally were operated by DOE—first as part of the price for uranium enrichment services from the facilities and again under provisions of the Energy Policy Act of 1992. Under the 1992 law, the tax on utilities generated $2.25 billion, adjusted for inflation. The president’s FY11 budget would impose the tax yet a third time for cleanup at these sites, representing a new tax on all Americans. This proposal is unnecessary given the federal fund for this cleanup program has a balance of $4.6 billion. A proposal to reinstate the fund in the FY10 budget was defeated by Congress.

**Industry Supports $36 Billion for Innovative Technologies Loan Guarantee Program**

The nuclear industry appreciates the support provided by the subcommittee for the DOE loan guarantee program for nuclear energy plants and uranium fuel cycle facilities. NEI urges the subcommittee to approve the administration’s proposal to add $36 billion in loan volume for nuclear energy plants. The industry has demonstrated the need for this new authority: 10 nuclear power projects reportedly submitted Part II loan guarantee applications representing $93.2 billion in loan volume. Two uranium enrichment projects submitted applications seeking $4.8 billion, more than double the available amount.

The loan guarantee program for nuclear energy is self-financing, with project sponsors responsible for underwriting the cost of providing the credit support to the federal government. Properly implemented, there will be no cost to the taxpayer. In addition, reducing the cost of capital will reduce project costs and lower electricity prices for all consumers. Southern Co. projects that its $3.4 billion share of the $8.3 billion loan guarantee for two reactors at the Vogtle plant in Georgia is expected to save consumers $15 million to $20 million in interest costs annually over the life of the loan. The nuclear industry is confident that new nuclear generating capacity will be competitive and is not aware of any credible mainstream analysis that shows otherwise. In last year’s National Academies’ report, *America’s Energy Future*, new nuclear capacity competes well against all other baseload options in a carbon-constrained world.

NEI believes the loan guarantee program’s credibility and integrity rest on demonstrable proof that the lender’s interest is well-protected. NEI supports rigorous due diligence being conducted by the DOE loan guarantee program office. In addition to legal, financial and market analysis of proposed projects, DOE will use an independent engineer to monitor construction progress and certify that construction is proceeding according to plan before authorizing each month’s draw against the guaranteed loan. DOE’s due diligence process, together with the fact that new nuclear power plants will be competitive, should ensure that the probability of default – and thus risk to the taxpayer – is extremely low. NEI urges Congress to support DOE’s request to fully cover the program’s administrative costs in FY11, which will result in a net zero appropriation given offsetting collections from loan applicants for nuclear energy projects.
Ensuring Adequate Funding for the Nuclear Regulatory Commission

The industry supports FY11 funding at the NRC’s requested level. However, the industry recommends that NRC appropriately, and more expeditiously, resolve long-standing regulatory issues. The industry applauds the continued oversight of the NRC by Congress to prioritize agency actions. The agency should be more transparent in its budgeting to reveal planned staffing and resource needs by individual divisions. This would demonstrate to Congress, the public and the industry, which pays 90 percent of the NRC’s budget, that the budget fairly reflects those activities that should be allocated toward licensee-specific charges rather than general license fees. NEI supports continuation of the Integrated University Program, which includes support for universities and community colleges.

Integrated Used Fuel Management Program

The administration’s decision to withdraw the construction license application for a federal repository at Yucca Mountain, Nev., is not a repudiation of the government’s obligation under the Nuclear Waste Policy Act to dispose of used nuclear fuel from commercial reactors and defense applications. NEI does not support the termination of the Yucca Mountain repository project. Any effort to shut down the site and remediate it is premature. Numerous state and local governments and the National Association of Regulatory Utility Commissioners are seeking admission to the NRC licensing proceeding to oppose DOE’s withdrawal of the application. Several opponents also have brought suit to stop this action. The project should proceed and be funded so that the technical review of the license application is completed. If the NRC licensing proceeding for the project is terminated, it should be done in a manner that would permit it to be restarted. Project records, tests, samples, etc. should be preserved so that they can be used should the project be resumed.

If the Yucca Mountain project is terminated, consumer payments into the Federal Nuclear Waste Fund should be suspended for the period of time for which there is no waste management program against which to assess costs. Termination of Yucca Mountain project does not affect the NRC’s pending revision to its “waste confidence” findings nor affect the standard contract for used reactor fuel management between DOE and utilities.

NEI supports the work of the Blue Ribbon Commission on America’s Nuclear Future, but recommends that the NRC continue technical review of the Yucca Mountain license application to completion (with the adjudicatory proceeding held in abeyance) to inform the deliberations of the commission. The industry supports a three-part integrated used fuel management strategy that includes: 1) On-site storage at reactor sites and development of centralized storage at volunteer locations; 2) Research, development and demonstration of advanced fuel cycle technologies; and 3) Development of a permanent repository.

The nuclear industry consistently has supported research and development of the advanced fuel cycle technologies proposed in the Fuel Cycle Research and Development program ($201
million). DOE’s plans should be brought into compliance with any recommendations of the blue ribbon commission that Congress ultimately accepts.

**Development of Advanced Reactor Technologies**

The Administration has proposed several new initiatives for the Office of Nuclear Energy for FY11. NEI is encouraged by DOE’s development of a road map on milestones and annual funding so that Congress and the public will support these new program initiatives. NEI supports $195 million in funding for the Reactor Concepts Research, Development and Deployment program in FY11. Within this program, $103 million in funding would be allocated for the Next Generation Nuclear Plant (NGNP) program. Westinghouse Electric Co. and General Atomics will begin work on next generation reactor designs after being awarded $40 million last month by the Department of Energy. Advanced reactor technology can displace the use of fuels such as natural gas for producing process heat, thus enhancing U.S. energy security, stabilizing energy prices and improving the use of finite natural resources.

NEI also recommends $25.7 million in FY11 for the Light Water Reactor Sustainability program, focusing on materials science and materials performance in reactor operations; $38.8 million for the Small Modular Reactors program with the possibility of additional funds if justified; and $21.8 million for the continuation of the Generation IV program on advanced reactor concepts. NEI supports $99.3 million for the new Nuclear Enabling Technologies program, including the Modeling and Simulation Hub as suggested by the Administration but recommends DOE seek industry input for program plans as the hub focuses on materials science and improving reactor component manufacturing.

**Maintain Funding for Work Force and Infrastructure**

Congress in the last two years has approved $45 million for an Integrated University Program. NEI requests the committee maintain DOE and NRC funding for this program to effectively educate technicians and professionals for careers in all sectors of nuclear science and technology. Additionally, NEI recommends that the subcommittee support $5 million for the DOE Research Reactor Infrastructure program for new fuel and shipping containers, reactor instrumentation and upgrades, and used fuel services. Industry also supports $20 million for the Advanced Test Reactor (ATR) National Scientific User Facility at Idaho National Lab as part of the lab’s $177.5 million facilities management budget in FY11. This funding supports a vital facility needed to evaluate and improve nuclear fuel and materials behavior and performance for DOE, university and industry projects.

**Environmental Clean Up**

NEI supports the budget request of $6 billion for DOE’s Environmental Management Office.