

# United States Senate

WASHINGTON, DC 20510

November 20, 2007

The Honorable Byron Dorgan  
Chairman  
Subcommittee on Energy and Water  
Development Appropriations  
United States Senate  
Washington, DC 20510

The Honorable Pete V. Domenici  
Ranking Member  
Subcommittee on Energy and Water  
Development Appropriations  
United States Senate  
Washington, DC 20510

Dear Chairman Dorgan and Ranking Member Domenici:

We are writing to ask you to cut funding for the Department of Energy (DOE)'s efforts to initiate the reprocessing and re-use of commercial nuclear spent fuel. This effort, which is promoted as part of the Administration's Global Nuclear Energy Partnership, is primarily funded under the Advanced Fuel Cycle Initiative.

The Senate Energy and Water Development Appropriations bill currently provides \$243 million for the Advanced Fuel Cycle Initiative, whereas the House version provides \$120 million.

We have significant concerns with DOE's plans to initiate commercial reprocessing of nuclear fuel in the United States, setting in motion a massive multi-decade government-subsidized nuclear reprocessing program. A new report from the National Academy of Sciences states "the GNEP program should not go forward," calling DOE's accelerated timetable and efforts to initiate commercial-scale facilities "unwise," "[lacking] economic justification" and that it "will create significant technical and financial risks."

Our concerns include:

- Reprocessing and plutonium fuel use could cost taxpayers \$200 billion. Although DOE has failed to provide an official cost analysis of the entire program, it is clear that reprocessing is drastically more expensive than the current practice of "once-through" fuel cycle systems. In 1996, the National Academy of Sciences estimated reprocessing and transmutation could easily cost \$100 billion to deal only with the current spent fuel in the U.S., and a 2007 NAS report found that contrary to DOE claims, technical challenges likely will result in GNEP costing—rather than saving—the United States money. Furthermore, industry has expressed no interest in cost sharing, almost ensuring that the entire burden would fall on the taxpayers.
- Past efforts to reprocess and re-use spent fuel in the U.S. have been failures. In 1983, Congress canceled the Clinch River Breeder Reactor, initially estimated to cost \$400 million, when GAO cost estimates reached \$8.8 billion. In 1972, the West Valley, New York reprocessing facility shut down after only reprocessing in its six years of operation the equivalent of four months of spent fuel produced by the current fleet of U.S. reactors. Its \$5.3 billion clean-up effort is still ongoing today.

- GNEP has morphed into a large-scale construction project well beyond research and development (R&D), even though the technologies that GNEP proposes are not available. Since first unveiling GNEP to Congress in February 2006, the Administration has changed its plans at least four times and is now proposing to build a commercial-scale reprocessing plant and a full-scale fast reactor, even though currently available technologies do not meet GNEP's goals. Much of the necessary technology will not be viable for 40-50 years at best, as GNEP hinges on the development and deployment of dozens of fast-neutron reactors – a type of reactor that has not been successfully commercialized anywhere despite 50 years of U.S. and international research.
- Reprocessing is not a viable solution to the nuclear waste problem. According to the recently released Keystone Center report, which is the product of a federal, industry, academic, and non-profit collaborative process, “reprocessing of spent nuclear fuel does not eliminate the need for a geologic repository, because there is residual high-level waste from the reprocessing stream that needs to be sequestered in a geologic repository.” Reprocessing would only divert attention away from a viable long-term solution to nuclear waste, and the GNEP program may further complicate the waste disposal problem as it proposes to reprocess spent fuel from not only new domestic reactors, but also from foreign reactors.
- Reprocessing undercuts U.S. non-proliferation efforts. Commercial reprocessing in the United Kingdom, France, Japan, and Russia has resulted in the accumulation of about 250 metric tons of separated plutonium that can be used to make nuclear weapons, exacerbating the risk of terrorists gaining access to this material. Similarly, DOE's proposed technologies would also result in material that could be easily processed to make a nuclear weapon. At a time when the United States is seeking to limit the spread of reprocessing technology and expertise to other countries, resuming reprocessing would reverse decades of U.S. leadership that contributed to countries such as Argentina, Brazil, South Korea, and Taiwan abandoning their reprocessing ambitions.

We have serious concerns about the implications of current plans for commercial spent fuel reprocessing and urge you to cut funding for spent fuel reprocessing in the Fiscal Year 2008 Energy and Water Development appropriations bill.

Thank you for your consideration of this important matter.

Sincerely,


  
Russell D. Feingold

United States Senator




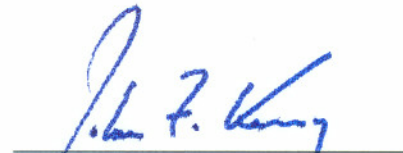
Ron Wyden

United States Senator

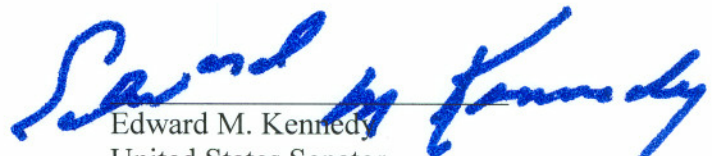
  
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