

**From:** [Iyengar, Raj](#)  
**To:** [Arce, Jeannette](#)  
**Subject:** FW: Comment on Docket ID NRC-2010-0267  
**Date:** Thursday, July 07, 2011 12:54:22 PM  
**Attachments:** [Comment on Docket ID NRC-2010-0267, Spent Nuclear Fuel Reprocessing.doc](#)

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**From:** Rulemaking Comments  
**Sent:** Thursday, July 07, 2011 12:53 PM  
**To:** Iyengar, Raj; Sulima, John  
**Subject:** FW: Comment on Docket ID NRC-2010-0267

[Comment No. 10](#)

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**From:** Barbara Antonoplos [mailto:[barbara.a369@gmail.com](mailto:barbara.a369@gmail.com)]  
**Sent:** Thursday, July 07, 2011 10:45 AM  
**To:** Rulemaking Comments  
**Subject:** Comment on Docket ID NRC-2010-0267

Barbara Antonoplos      369 Bass St., S.E.,      Atlanta, GA      30315

July 7, 2011

Secretary  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001  
Attn: Rulemakings and Adjudications Staff  
fax **301-415-1101**

[Rulemaking.Comments@nrc.gov](mailto:Rulemaking.Comments@nrc.gov)

**Re:      Comment on Docket ID NRC–2010–0267**

**NRC "Draft Regulatory Basis for a Potential Rulemaking on Spent Nuclear Fuel Reprocessing Facilities"**

To Whom It May Concern:

I am submitting this commentary for the record in response to the latest notice published by the NRC in the Federal Register on June 10, 2011 regarding development of regulations for future facilities for the reprocessing of spent, or irradiated, nuclear fuel.

The order of these comments does not indicate relative importance:

1) I OPPOSE DEVELOPMENT OF REGULATIONS FOR REPROCESSING FACILITIES because it is unnecessary and unwise to create facilities for reprocessing irradiated nuclear fuel. No urgency for such regulations has been established; in fact, the Blue Ribbon Commission which is currently deliberating the issue is likely to affirm that the pursuit of reprocessing is decades away—if it ever materializes—which underscores the lack of necessity to put forth regulations which will not be used and will quickly become outdated.

2) It is inappropriate to develop a single set of regulations to cover all aspects of potential future reprocessing, and trying to do so at this point would exceed the ability of the regulatory structure and the NRC to properly manage. Given the myriad functions that would likely take place at a reprocessing facility, including but not limited to storing spent fuel, reprocessing, managing and disposing of the waste produced by the reprocessing, capturing and containing noble gases, storing materials, creating fuel, etc.—a single set of regulations at this juncture would not be sufficient to cover all potential aspects of the enterprise. There are existing regulations that might not actually need to be changed; therefore it should not be attempted to roll them into a single regulatory framework.

3) I oppose a one-step licensing process for potential future reprocessing facilities. It would be unsound and inappropriate to apply such an approach to speculative and untested technologies such as reprocessing and associated enterprises and facilities, and would also undermine valuable opportunities for public input and involvement in the licensing process.

4) Whereas the NRC maintains that it does not set national policy, it stands to inappropriately influence national policy on plutonium by writing a rule on reprocessing now. In the past the U.S. has pointedly and for good reason decided not to separate plutonium from civilian radioactive waste. This should remain our practice. The fact that there are companies who state that they would apply for a license for reprocessing is not a sound basis for promulgating rulemaking on reprocessing at this point. The NRC and U.S. policymakers especially should not allow themselves to be influenced by foreign interests, such as AREVA and the French government whose purpose is to gain economic benefit for themselves, while the liability for U.S. taxpayers and consumers is increased.

5) Fuel made from plutonium—Mixed Oxide Fuel (“MOX”)—which is produced by commercial reprocessing, is vastly more dangerous in a reactor than uranium fuel, much harder to control, and more deadly in the event of an accident. Because of the heightened hazards that would result from using MOX, it should not be produced or used! The facts that there is no national policy to use plutonium fuel on a widespread basis, there are no reactors identified to use such fuel, and the Department of Energy’s MOX program continues to face numerous hurdles, are indicators that it is an unwise enterprise to pursue and therefore needs no regulatory framework at this time.

6) Reprocessing is NOT “RECYCLING” and cannot and should not be defined as such. There are toxic waste streams generated from reprocessing that have no potential use at all, and it is incorrect and misleading to call it “recycling.” Any draft definitions by the NRC must be honest and reflect reality. The NRC must not use erroneous, misleading, benign-sounding labels that are favored by the industry but patently inaccurate.

7) Reprocessing creates an abundance of radioactive waste streams which are difficult to manage, including high-level waste, waste rated greater than Class C, low-level waste,

noble gases, contaminated uranium, and weapons-grade plutonium. These forms of waste are even harder to manage and isolate from the biosphere than the original irradiated fuel; furthermore, they create a larger amount of waste with no reduction in radioactivity. I am in favor of containment and isolation of radioactive waste from the environment; however, reprocessing does not achieve this! It creates the opposite result, in fact, with a higher monetary cost than managing spent fuel via Hardened On-Site Storage (HOSS).

8) The NRC must take into account the fact that reprocessing in the United Kingdom has been a failure; that Russia's reprocessing program produces separated plutonium for which they have no use; that all European countries have withdrawn from France's reprocessing enterprise; that France actually reuses very little of the contaminated uranium removed through reprocessing; and that the \$20 billion Japanese reprocessing plant Rokkasho, after more than two years of trying, has not yet started up.

The U.S. attempt at commercial reprocessing at West Valley, New York from 1966-1972 was a disastrous failure, contaminating the environment and costing billions of dollars in clean-up efforts that are still going on. This is an indication that in any consideration of reprocessing of spent fuel, the NRC must guarantee that all costs of operation, clean-up and potential accidents be guaranteed by license holders.

9) Before any rulemaking on reprocessing ever were to happen, the NRC MUST carry out a full-scale analysis under the National Environmental Policy Act (NEPA)—a Programmatic Environmental Impact Statement—covering all aspects of reprocessing from start to finish. All details of the overall impact of reprocessing as it relates to the entire nuclear fuel cycle must be taken into account and analyzed beforehand. Furthermore, the NRC must carefully examine from all sides the ramifications of encouraging the separation of plutonium in the United State, including implications for U.S. taxpayers and ratepayers, waste production and management, environmental impacts at every step in the entire process, and the grave international concerns regarding proliferation of nuclear weapons material. Open and complete public debate should be considered an integral part of any such analysis.

Thank you for your full consideration of my concerns.

Sincerely,

Barbara Antonoplos

Electronically submitted by email on July 7, 2011