

**PRM-70-9  
(75FR80730)**

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# **PUBLIC SUBMISSION**

**Docket:** NRC-2010-0372  
Francis Slakey - Nuclear Proliferation Assessments

**Comment On:** NRC-2010-0372-0003  
Francis Slakey on Behalf of the American Physical Society; Receipt of Petition for Rulemaking

**Document:** NRC-2010-0372-DRAFT-0035  
Comment on FR Doc # 2010-32242

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## **Submitter Information**

**Name:** Sharon Squassoni  
**Organization:** Center for Strategic & International Studies

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## **General Comment**

See attached file(s)

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## **Attachments**

**NRC-2010-0372-DRAFT-0035.1:** Comment on FR Doc # 2010-32242

Template = SECY-067

DS10

**Statement of Sharon A. Squassoni in support of the APS Petition, Docket ID NRC-2010-0372  
Senior Fellow and Director, Proliferation Prevention Program, Center for Strategic & International  
Studies**

*I am writing in my personal capacity; my views do not reflect those of the Center for Strategic and International Studies.*

I support the APS petition to require an assessment of the proliferation impact of constructing and operating enrichment and reprocessing plants in the United States.

The biggest hurdle for any nuclear weapons program is fissile material production. Uranium enrichment and spent fuel reprocessing plants can produce material either for weapons or fuel for nuclear power plants. The proliferation dangers of the spread of enrichment and reprocessing plants are widely accepted not just in the nonproliferation community but also by nuclear industry, as a recent survey by the Brookings Institution indicates. The export of such plants and technology is closely guarded by suppliers at the national level and internationally within the Nuclear Suppliers Group.

Although reprocessing is fairly simple and much of the information is public knowledge, the same is not true of uranium enrichment. In addition to traditional export controls, major suppliers have adopted a technique known as "black-boxing." Even though an enrichment plant may be exported (as in the case of AREVA and URENCO plants to the United States and a Russian plant to China), the technology is kept in a "black box," which protects proprietary and proliferation secrets.

The unfortunate truth is that laser enrichment methods are not very amenable to this black-box technique, which eliminates one potential avenue to curb the proliferation risk of laser enrichment. Several countries have dabbled in clandestine laser enrichment programs without much success, the most recent being Iran. Demonstrating the commercial viability of the SILEX process at the GE-Hitachi plant could be a green light for interested states to proceed with their own clandestine programs of this easily hidden technology.

The impact of the APS petition is quite limited: rather than requesting the NRC to conduct its own proliferation assessment as a requirement for licensing, APS asks that commercial entities submit such a proliferation assessment as part of their licensing applications. The current regulations (10CRF Part 70.23a) only call for a separate hearing for licensing a uranium enrichment facility.

The industry proliferation assessment should be a first step in amending the regulatory process to take greater account of nonproliferation concerns. At a minimum, it will encourage awareness of proliferation concerns in commercial entities. Because so few facilities are actually safeguarded in the United States, there is less awareness here among industry and operators than abroad. At the most, that awareness could be translated into design features that improve the proliferation resistance of future facilities, a trend which the U.S. government strongly endorses elsewhere. Finally, the requirement for proliferation assessments for domestic licensing of enrichment and reprocessing plants

should also be applied to the NRC: it is within the NRC's statutory mandate and well within the capabilities of NRC staff.

## **Rulemaking Comments**

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**From:** Gallagher, Carol  
**Sent:** Tuesday, March 08, 2011 8:03 AM  
**To:** Rulemaking Comments  
**Subject:** Comment letter on PRM-70-9  
**Attachments:** NRC-2010-0372-DRAFT-0035.pdf

Van,

Attached for docketing is a comment letter from Sharon Squassoni on the above noted PRM (75 FR 80730) that I received via the regulations.gov website on 3/07/11.

Thanks,  
Carol