

March 21, 2014

Mr. Mark Leyse
Atomic Safety Organization
P.O. Box 1314
New York, NY 10025

Dear Mr. Leyse:

I am responding to your correspondence to the U.S. Nuclear Regulatory Commission (NRC) dated December 23, 2013, found under Accession No. ML14008A427 in the NRC's Agencywide Documents Access and Management System. In your correspondence you requested that the NRC develop a new regulation that would require the following:

- 1) The rates of energy release, hydrogen generation, and fuel cladding oxidation from the zirconium-steam reaction be calculated by Spent Fuel Pool (SFP) Accident Evaluation Models, using data from multi-rod bundle (assembly) severe accident experiments.
- 2) The rates of energy release (from both fuel cladding oxidation and fuel cladding nitriding), fuel cladding oxidation, and fuel cladding nitriding from the zirconium-air reaction be calculated by SFP Accident Evaluation Models, using data from multi-rod bundle (assembly) severe accident experiments, conducted with pre-oxidized fuel cladding.
- 3) The SFP Accident Evaluation Models be required to conservatively model nitrogen-induced breakaway oxidation behavior.
- 4) Licensees be required to use conservative SFP Accident Evaluation Models to perform annual SFP safety evaluations in different accident scenarios.

The NRC considers a request to implement a rulemaking to be a petition for rulemaking (PRM). This petition must meet the criteria in § 2.802 of Title 10 of the *Code of Federal Regulations* (10 CFR), "Petition for rulemaking." The NRC has carefully reviewed your request and has concluded that the information you provided does not meet the Commission's criteria under 10 CFR 2.802(c) for a PRM.

Section 2.802(c)(1) provides that a PRM must "[s]et forth a general solution to the problem or the substance or text of any proposed regulation or amendment, or specify the regulation which is to be revoked or amended[.]" You request that the NRC adopt a new regulation specifying the rates of energy release from fuel cladding reactions. In addition, you request that SFP accident models using conservative reaction rates be completed annually. However, your request did not provide a discussion regarding what technical (safety) or regulatory problem these proposed new requirements would address, and why the NRC's current regulations are insufficient to adequately address that problem.

Section 2.802(c)(2) also provides that a PRM should "[s]tate clearly and concisely the petitioner's grounds for and interest in the action requested." Section I, "Needed Regulations," of your request identifies the "Petitioner" as the "Atomic Safety Organization." However, your

request does not contain a description of this organization, and the grounds or interest of this organization in the substance of the petition. Moreover, the NRC is unable to locate a Web site for the Atomic Safety Organization, or any activity or presence of the organization. Although your request includes a description of a previous unrelated PRM and paper you had authored and submitted to the NRC in the past, this is not an adequate substitute for a description of the Atomic Safety Organization's grounds for, and interest in, the action requested. Finally, your request does not contain information which demonstrates that you are authorized to submit the petition on behalf of the Atomic Safety Organization.

If you would like to submit additional information in order to meet the criteria in 10 CFR 2.802, then your submission should: (1) set forth the problem that your request is intended to resolve together with an explanation why the NRC current regulations are insufficient to address that problem; (2) describe your grounds for and interest in the requested action; (3) provide supporting documentation with respect to relevant technical, scientific, or other data involved that are reasonably available and other pertinent information necessary to support the actions sought; (4) describe any specific cases identifying how current regulations are deficient or need to be strengthened in order to address your identified problem; and (5) provide information about the Atomic Safety Organization, as well as information demonstrating your authority to submit the petition on behalf of the Atomic Safety Organization.

In order for the NRC to continue its consideration of your request, you must supplement your correspondence of December 23, 2013, to meet the minimum requirements for a PRM. This information must be received by the NRC within 90 days of the date of this letter or your request will be considered closed.

The regulations pertaining to the petition process may also be found online at <http://www.nrc.gov/reading-rm/doc-collections/cfr>.

If you have any questions, please contact Cindy Bladey, Chief, Rules, Announcements, and Directives Branch, by calling 301-287-0949 or toll-free 1-800-368-5642, or by e-mail to Cindy.Bladey@nrc.gov.

Sincerely,

/RA/

Mark A. Satorius
Executive Director
for Operations

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Sincerely,

/RA/

Mark A. Satorius
Executive Director
for Operations

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