

March 31, 2010

Mr. Will Schmidt  
2015 Altez NE  
Albuquerque, New Mexico 87112

SUBJECT: NEUTRON FUSION REACTORS OVER NUCLEAR FISSION REACTORS

Dear Mr. Schmidt:

Thank you for your letter dated February 20, 2010, addressed to Chairman Jaczko of the U.S. Nuclear Regulatory Commission (NRC). The NRC staff prepared SECY-2009-0064, "Regulation of Fusion-Based Power Generation Devices," dated April 20, 2009, for Commission consideration of the NRC's role in the licensing and oversight of devices based on fusion technologies. The paper is provided as Attachment 1 and can be accessed electronically from the Publicly Available Records System (PARS) component of the NRC's Agencywide Document Access and Management System (ADAMS). The ADAMS accession number assigned to the paper is ML092230171. ADAMS is accessible from the NRC website at <http://www.nrc.gov/reading-rm/adams.html>. The Commission's response to the paper, dated July 16, 2009, is provided as Attachment 2 and is available in ADAMS as accession number ML092230198.

The Commission asserted, as a general matter, that the NRC has regulatory jurisdiction over commercial fusion energy devices whenever such devices are of significance to the common defense and security, or could affect the health and safety of the public. The Commission directed that the NRC staff should wait until commercial deployment of fusion energy is more predictable, by way of successful testing of a fusion technology, before expending significant resources to develop a regulatory framework for fusion technology. It should also be noted that the role of the NRC is that of a regulatory agency and it does not sponsor technology development and does not promote specific reactor designs or technologies. As mentioned above, the NRC staff is not currently developing a regulatory framework for fusion energy and would not plan to do so until learning — from the Department of Energy or other source — that there is some certainty in the commercial deployment of one or more fusion-related designs.

W. Schmidt

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If you have any questions regarding our activities or suggestions on how the NRC might move forward on licensing approaches for innovative designs, please feel free to contact me at [william.reckley@nrc.gov](mailto:william.reckley@nrc.gov) or by telephone at (301) 415-7490.

Sincerely,

***/RA/***

William D. Reckley, Branch Chief  
Advanced Reactors Branch 1  
Advanced Reactor Program  
Office of New Reactors

If you have any questions regarding our activities or suggestions on how the NRC might move forward on licensing approaches for innovative designs, please feel free to contact me at [william.reckley@nrc.gov](mailto:william.reckley@nrc.gov) or by telephone at (301) 415-7490.

Sincerely,

*/RA/*

William D. Reckley, Branch Chief  
Advanced Reactors Branch 1  
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Office of New Reactors

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