

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

June 2, 2017

The Honorable Rodney Frelinghuysen Chairman, Committee on Appropriations United States House of Representatives Washington, DC 20515

Dear Mr. Chairman:

In the Joint Explanatory Statement and Section 402(e) of the Energy and Water Development and Related Agencies Appropriations Act, 2017, the U.S. Nuclear Regulatory Commission (NRC) was directed to submit to Congress "a report on the Commission's progress to be fully prepared to effectively and efficiently review any subsequent license renewal applications by mid-2017" for nuclear plants. On behalf of the Commission, I am providing this report.

Please feel free to contact me or Eugene Dacus, Director of the Office of Congressional Affairs, at (301) 415-1776 if you have questions or need more information.

Sincerely,

Kristine L. Svinicki

Enclosure: As stated

cc: Representative Nita Lowey

Report on the Commission's Progress To Be Fully Prepared To Effectively and Efficiently Review Any Subsequent License Renewal Applications by Mid-2017

Based on the letters of intent received, the U.S. Nuclear Regulatory Commission (NRC) expects to receive the first subsequent license renewal (SLR) application in fiscal year 2018.

The Commission has determined that no revisions to either the safety or environmental regulations for license renewal are needed to support the NRC's review of an SLR application. However, the Commission directed that license renewal guidance documents be updated, as needed, to provide additional clarity on the implementation of the license renewal regulatory framework during the period of subsequent license renewal.

The NRC evaluated these guidance documents to determine what, if any, revisions were necessary to address up to 80 years of plant operation (the timeframe considered for SLR). The staff determined that no revisions were needed to the relevant guidance document for environmental reviews associated with license renewal: NUREG-1555, "Standard Review Plans for Environmental Reviews for Nuclear Power Plants," Supplement 1, Revision 1, dated June 2013. However, the staff determined that two other license renewal guidance documents—the Generic Aging Lessons Learned Report and the Standard Review Plan for License Renewal—should be updated to allow a more effective and efficient review of the SLR applications.

In December 2015, the NRC staff published draft revisions to those SLR guidance documents for public comment.

Once finalized, these documents are expected to provide the generic evaluation of acceptable methods to manage aging effects for up to 80 years of plant operation. They contain an evaluation of domestic and international operating experience of nuclear plants, lessons learned from the review of previous license renewal applications, and assessment of recent research findings.

The NRC held nine related public meetings during 2016 to discuss the NRC's disposition of public comments received on the SLR guidance documents, the NRC's plans for finalizing the documents, and the bases for the revisions. The NRC's Advisory Committee on Reactor Safeguards completed an independent review of the guidance documents after comments were addressed, and recommended that they be issued. The final versions will be published in July 2017, in advance of projected submission dates for SLR applications.

The NRC has also been actively involved in work to resolve several technical issues related to subsequent license renewal, including four key issues identified by the Commission (reactor pressure vessel neutron embrittlement at high fluence, irradiation assisted stress corrosion cracking of reactor internals, concrete and containment degradation, and electrical cable qualification and condition assessment). Although the industry is responsible for developing the technical basis to demonstrate that aging effects for these and other technical issues will be managed for subsequent license renewal, the NRC is carrying out confirmatory research. Progress on these issues has been made through NRC staff research, and through coordination with the Department of Energy and the Electric Power Research Institute on their research activities. Some of this progress has resulted in enhanced aging management programs, which are addressed in the subsequent license renewal guidance documents.

The NRC will continue to actively engage stakeholders to identify issues relevant to SLR. These efforts will include public meetings with industry representatives, the public, and other stakeholders, including those who are considering submittal of SLR applications.

Identical letter sent to:

The Honorable Rodney Frelinghuysen Chairman, Committee on Appropriations United States House of Representatives Washington, DC 20515 cc: Representative Nita Lowey

The Honorable Thad Cochran Chairman, Committee on Appropriations United States Senate Washington, DC 20510 cc: Senator Patrick Leahy