

**U. S. Nuclear Regulatory Commission Public Meeting Summary
April 26, 2018**

Title:

Public meeting to discuss the recommendations in the Office of Inspector General (OIG) report, "Audit of NRC's Oversight for Issuing Certificates of Compliance for Radioactive Material Packages (OIG-17-A-21)," dated August 16, 2017.

Meeting Identifier: 20180043

Date of Meeting: Thursday, April 26, 2018

Location: U.S. Nuclear Regulatory Commission
Rockville, MD

Type of Meeting: Category 3

Purpose of the Meeting:

Discuss the Office of the Inspector General's Recommendation Related to the Technical Basis for the 10 CFR Part 71 Certificates of Compliance Expiration Term (Report number OIG-17-A-21, August 16, 2017)

General Meeting Details:

The meeting started at 1:30 p.m. and lasted until about 4:00 p.m. There were 39 people participating in the public meeting both physically and by teleconference (note that there may have been multiple people on the same teleconference line so the total participants could be higher), including two NRC staff. Organizations represented included National Energy Institute, National Institute of Standards and Technology, Department of Transportation, Energy Solutions, TN Americas LLC, Sciencetech/Curtiss-Wright Nuclear Division, Westinghouse Electric Company, Framatome, GE-Hitachi Nuclear Energy Americas LLC, Robatel Technologies, Yankee Atomic Electric Company, Alpha-Omega Services, Inc., and The 3 Yankees. Many people participated in the discussion asking questions and providing comment. A table of the known meeting participants is attached (Attachment 1).

Summary of Presentations:

A copy of the presentation slides is attached (Attachment 2). In summary, the NRC staff led a discussion of the: 1) OIG audit and the OIG recommendations; 2) NRC staff response to the recommendations; process for developing the appropriate expiration term; 3) general discussion; and the next steps and schedule. Under the general discussion session, the NRC staff sought insights on several issues in determining the appropriate expiration term: 1) factors that the NRC should consider; 2) how the NRC should consider risk; 3) domestic and international impacts; and 4) implementation challenges such as costs. The citations for the risk studies were provided and is included in the attached presentation slides.

Enclosure

The NRC staff welcomed comments related to this meeting by May 25, 2018. The views expressed during the public meeting and any subsequent comments we receive will be considered as the NRC staff develops a regulatory and technical bases for the expiration term.

Summary of General Discussion:

General Comment

A commenter noted that it would be difficult to provide comments related to the meeting without reviewing the regulatory basis that staff develops. They asked if the staff planned to make the regulatory basis available for public comment. The NRC staff noted that a public comment period was not planned. The expiration term for certificates of compliance is not specifically stated in the regulation so a change to the regulations is not needed. However, the NRC staff said we would benefit from public comment and would definitely consider seeking public comment.

Factors the NRC should consider

The NRC staff led the discussion to identify what factors the NRC should consider in evaluating an appropriate term for certificates of compliance. There were several comments from stakeholders. The NRC staff emphasized that the primary driver for decisions is safety but other factors can also be considered that would not compromise safety. One commenter noted that the NRC should consider cost-benefit as well and noted that evaluating cost by the industry could justify a public comment period.

A commenter noted that if the NRC changes the expiration term and the international community does not, that could make it more difficult for certificate holders. It could be more confusing and difficult to maintain the current status if there are two separate terms for the same package. And if the expiration term is extended beyond 8-10 years, that could create more burden – for the certificate holder and for the NRC. If there have been extensive changes in this time period, it's a significant amount of work to bring documentation up to date. Additionally, technical staff in industry and the NRC may have changed extensively. This could add increased work for revalidation and reconfirmation of the documentation for the certificate. Commenters noted that if there is a change to the expiration term, the term should be in multiples of 5 years.

Commenters noted that the NRC should also consider the frequency of updates of standards by the American National Standards Institute or International Atomic Energy Agency (IAEA) standards. If these standards are updated every 10 years, then that could help justify a change to the NRC expiration term and enable the NRC and the users to work more efficiently. Other agencies look to the NRC as the lead Federal agency in this area. Given this, other agencies may consider changing their expiration terms to be consistent with the NRC's.

Resources for industry and the NRC was discussed. The NRC staff noted that resources for amendments can vary based on the complexity of the change. The expiration date is not revised with each amendment although there is nothing to prohibit a certificate holder from requesting the expiration to be updated when the amendment is approved. The stakeholders and the NRC agreed that the burden of the renewals is on the certificate holders. Stakeholders and the DOT representative noted that other competent authorities follow different practices and can take a long time to complete the review. The DOT representative notes that DOT is seeing an amendment request at the half way point of an expiration period, about every 2½ years. The

majority of requests that the DOT receives is not because the approval expired. A commenter noted that the biggest impact is any impact on the international shipments and expiration dates on the international approvals.

How risk should be considered

The NRC staff provided a summary of its review of the four existing risk studies related to transportation. The citations for the specific studies are provided in the attached meeting presentation. The NRC staff discussed the objective of each of the studies along with the assumptions used and conclusions. The NRC staff noted that the risk studies demonstrated that risk is low. The studies did not evaluate human errors, human factors, and any risk that correlated with the expiration term. The NRC is seeking comments from stakeholders on their perspectives about low risk and its connection to the expiration term.

A commenter said that the NRC staff should evaluate the basis when the agency extended the license expiration terms for byproduct materials licensees. The commenter noted that this was evaluated from risk and resource perspectives. The Commission recently approved an extension of the expiration term for uranium recovery licensees.

A commenter thought that the risk is more tied to the operational use than to the expiration term. Regarding age degradation, this is checked before each use of the package. Another commenter noted that the renewal terms for dry cask storage licensees went from 20-40 years in 2011. The NRC staff should evaluate the basis for that decision as well. This commenter also noted that with such an extensive Safety Analysis Report, one might lose institutional expertise. This could be an unintended consequence of extending the expiration term. The commenter also noted that for dry storage, there are regular inspections and that should be considered when evaluating risk. Other commenters also agreed with this – there is useful information from inspections and operations.

Domestic and international impacts

The NRC staff led a discussion on domestic and international impacts. The NRC staff is seeking comments on the domestic costs to certificate holders and licensees as well as international impacts based on DOT's Certificate of Competent authority and other re-validations by foreign countries. If the NRC were to change the expiration term, how would that affect those of you who do business with DOT and internationally?

A commenter said that his company addresses renewals through the NRC first before they request authorization from DOT. After these approvals, they then work through the international approvals. Some countries take longer for renewals; having a longer term period with the NRC could be beneficial. Another commenter indicated that there are also fee considerations – the NRC has an hourly fee while there is a flat fee for some of the international reviews. In this case, industry could benefit from a longer expiration term.

Another commenter noted that there is no set time frame for revalidations in other countries. These countries generally follow the time frame and expiration that the DOT sets on the certificate. And the DOT follows the NRC expiration term. It's not clear that increasing or decreasing the expiration term would have unintended consequences with foreign validations in other countries.

One commenter asked if the NRC has rejected any renewal applications and what the basis was for any rejection. His comment was that there is a good safety record and with that, what would prevent the NRC from extending the term to 10 years. The commenter asked the NRC to consider the historical data and good safety record in developing the regulatory basis for keeping or extending the current term.

Another commenter noted that even coming in fairly frequently, she sees that there are changes in how the standards are applied due to staff turnover at the NRC. Her concern was if the agency extends the expiration term beyond 10 years, increasing the time between renewals, there could be substantial changes in what is considered acceptable or an adequate level of detail for packages that have previously been approved. Another commenter believed that extending the expiration term would decrease the burden. No one believed that the NRC would receive more amendments. Amendments are driven by customer needs.

Implementation challenges, including cost

The NRC staff asked about any challenges such as costs, including revisions to internal processes if the agency were to change the expiration term. One commenter noted that it could be a challenge if an amendment was needed that is close to the expiration of the certificate of compliance. The NRC staff said that the agency could easily address industry needs.

Another commenter provided three reasons why it might not be a good idea to increase the expiration term: 1) the possibility of new requirements having been established; 2) possible loss of expertise at the designer or certificate holder; and 3) possible loss of expertise at the NRC. If the NRC were to decrease the expiration term, errors might be introduced in more frequently renewing certificates for a transportation package. Other commenters believed that the reasons for not extending the expiration term are overcome by the safety record from operational experience. Many of the commenters supported revising the expiration term to 10 years. There did not seem to be much support to extend the expiration term beyond 10 years.

Next Steps:

The NRC staff will continue to evaluate an appropriate expiration term for certificates of compliance for transportation packages considering input from this public meeting and interactions with the Department of Transportation. The NRC staff will also seek input from international counterparts. A response to the OIG recommendations is currently scheduled for September 2018.

Attachments:

- List of attendees
- Presentation Slides

References (with the Agencywide Documents Access and Management Systems accession number provided):

- Meeting agenda: ML18113A235
- NRC staff presentation: ML18113A240
- Meeting transcript: ML18129A185
- Office of the Inspector General Report: ML17228A217
 - <https://www.nrc.gov/docs/ML1722/ML17228A217.pdf>
- NRC staff response to the Office of the Inspector General Report: ML17249A889

LIST OF KNOWN MEETING PARTICIPANTS

| Attended in person | | | |
|---|---|------------------------|--------------------------------|
| Name | Organization | Name | Organization |
| Randolph (Randy) Strader | NIST | Chris Bajwa | NRC |
| Michael Conroy | DOT | Alice Carson | Energy Solutions |
| Gerard P. Van Noordennen | Energy Solutions | Rod McCullen | NEI |
| Glenn Mathues | TN Americas LLC | Janet Schlueter | NEI |
| Jana Bergman | Sciencetech/Curtiss-Wright Nuclear Division | Torre Taylor | NRC |
| Bernard White | NRC | John McKirgan | NRC |
| Attended by teleconference Number of lines: 28 (note: there could have been multiple people on one line) | | | |
| Name | Organization | Name | Organization |
| Lawrence (Larry) Gelder (Contractor) | DOE (EM) | Tanya Sloma | Westinghouse (contractor) |
| Timothy M. Lloyd | Westinghouse Electric Company | Bob Capstick | Yankee Atomic Electric Company |
| Don Shaw | TN Americas LLC | Paul Watts | Alpha-Omega Services, Inc. |
| Bryan Flanagan | Framatome | Paul Plante | The 3 Yankees |
| Aleksandr X. Gelfond | Energy Solutions | Thomas Bruel | Robatel Technologies |
| Lisa Schichlein | GE-Hitachi Nuclear Energy Americas LLC | Abdulsalam Shakhatareh | Robatel Technologies |
| Jared Bower | Robatel Technologies | David Pstrak | NRC |

PRESENTATION SLIDES