

BASIS FOR EXPIRATION TERM FOR CERTIFICATES OF COMPLIANCE FOR TRANSPORTATION PACKAGES

PURPOSE

To document the technical and programmatic basis for the expiration term for certificates of compliance issued pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 71, "Packaging and Transportation of Radioactive Material."

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) has no documented technical basis to explain the 5-year term for transportation certificates of compliance issued under 10 CFR Part 71. Therefore, the NRC conducted an analysis to develop the regulatory and technical bases for the Part 71 certificate of compliance term and to document its findings.

In developing this analysis, the NRC reviewed the regulatory history and current practice regarding the 5-year term. The agency also conducted stakeholder outreach to ensure a thorough understanding of the domestic and international implications of changing the current 5-year term. As a result of this review, the NRC has concluded that maintaining the 5-year term for certificates of compliance under Part 71 is the preferable approach. This document provides a summary of the review conducted, and provides the rationale and basis for this determination.

BACKGROUND

Statutory Authority

The NRC's authority to promulgate the regulations in 10 CFR Part 71, which includes regulations governing the issuance of certificates of compliance for transportation packages, stems in part from Section 161 of the Atomic Energy Act of 1954, as amended (the Act).

Section 161, "General Provisions," of the Act authorizes, in part, the Commission to "establish by rule, regulations, or order, such standards and instructions to govern the possession and use of special nuclear material, source material, and byproduct material as the Commission may deem necessary or desirable to promote the common defense and security or to protect health or to minimize danger to life or property..." This section does not specify a length for a specific license or certificate of compliance term.

Regulatory History

In order to better understand the current 5-year term for certificates of compliance issued under 10 CFR Part 71, the NRC staff first looked at the pertinent regulatory history. In promulgating the 10 CFR Part 71 regulations, the NRC did not specify a particular term length for the transportation certificates of compliance, but did include a provision authorizing renewal of a certificate of compliance. The NRC regulation in 10 CFR 71.38, "Renewal of a certificate of compliance," states that the certificate of compliance expires at the end of the day, in the month and year stated in the approval. Thus, the term of each transportation package certificate of compliance is governed by the certificate itself.

Enclosure

With the term of each certificate governed by the certificate itself, the five-year term is currently relegated to NRC staff guidance, which does not establish a basis for the five year expiration date. The guidance provides information on processing applications for new, renewed, and revised certificates of compliance. The guidance states that “Transportation Package CoCs [certificates of compliance] are issued for 5-year periods.” Further, the guidance states that “If the Certificate is renewed early, the new expiration date is 5 years from the old expiration date.” This could result in an expiration term of greater than 5 years if the certificate holder requests a renewal earlier than scheduled and the renewed certificate is issued prior to its expiration date. Additionally, certificate holders may have a business need to have a longer expiration term such as when they are coordinating revalidation of a U.S. Department of Transportation (DOT) certificate of competent authority, and thus, may request a longer expiration term.

Current Process for Review of Package Design Approval

The NRC also reviewed the current process for review of certificates of compliance applications under 10 CFR Part 71 to gain a better understanding of how the process accounts for the certificate term. During the course of reviewing an application for a package design approval, the NRC ensures that the applicant’s evaluation meets the design requirements in 10 CFR Part 71. In addition, NRC oversight is designed to ensure that the package will meet the NRC requirements in 10 CFR Part 71 after fabrication and will continue to meet the NRC requirements over time when the package is in use.

The application for package approval includes an evaluation of the aging of package components, operating procedures, a maintenance program and acceptance tests. This evaluation in these areas determines the effect that aging will have on the package components as they are used over time and ensures that components that do age are appropriately maintained. The acceptance tests are designed to verify that the package will be fabricated in accordance with its approved design, that its performance will meet the regulatory requirements of 10 CFR Part 71, and will be consistent with the package’s evaluations. In addition, the package operating procedures are included as a condition in the certificate and ensure that, among other things, as required by 10 CFR 71.87(b), the licensee determines prior to each use that “the package is in unimpaired physical condition except for superficial defects such as marks or dents.” Any damage beyond this must be remediated to bring the package in compliance with the package design drawings listed in the certificate of compliance.

The NRC also performs oversight of package fabrication and use. The NRC performs inspections of fabricators to ensure that they apply their quality assurance program such that the packages are fabricated in accordance with the design approved by the NRC and that the fabricator is effectively implementing its quality assurance program. In addition to fabricators, the NRC inspects its licensees to ensure that shipments made in NRC-approved packages comply with both NRC and DOT regulations, appropriate for the package design and material being transported.

If the use of the package is anticipated to continue past the established expiration date of the certificate, then the NRC regulations allow for the renewal of the certificate of compliance (see 10 CFR 71.38). A renewal application is not a re-review of the package design. As explained above, the initial review, and any subsequent reviews for certificate amendments, of the package includes not just the fabrication and use of the package, but also an evaluation of the aging of package components. Given the thorough and broad evaluation conducted during the review of an application, even if NRC's regulations have been modified since the package was originally approved, package designs and packagings compliant with the existing regulations do not become "unsafe" when the regulations are amended (unless a significant safety issue is corrected in the revision).

After NRC issues a certificate of compliance for domestic transport, if requested by the certificate holder, the DOT issues a certificate of competent authority for international transport based on the NRC approval¹. Prior to performing international transport, the shipper is required to have the DOT certificate revalidated in any country from where the package will originate, pass through, and end its transport. As part of the revalidation process, a foreign competent authority may add additional conditions for its approval and will include the expiration date of the revalidation.

LICENSE TERMS IN OTHER PROGRAM AREAS

In evaluating the basis for the expiration term for certificates of compliance for transportation packages, the NRC staff reviewed the history of expiration terms for the other licenses or certificates of compliance issued by the NRC for spent fuel storage for use by a general or specific license at independent spent fuel storage installations regulated under 10 CFR Part 72. Section 72.42, "Duration of license; renewal," in 10 CFR Part 72, states that the license term for an Independent Spent Fuel Storage Installation facility or Monitored Retrievable Storage Installation facility must not exceed 40 years. Section 72.238, "Issuance of an NRC Certificate of Compliance," in 10 CFR Part 72, states that "a certificate of compliance for a cask model will be issued by NRC for a term not to exceed 40 years on a finding that the requirements in § 72.236(a) through (i) are met."

The expiration term for storage certificates of compliance and ISFSI licenses under 10 CFR Part 72 was not always the current 40-year term; prior to 2011, the term for storage certificates of compliance and ISFSIs was 20 years. In 2002 and 2004, the NRC received two requests for an exemption from the 20-year term for independent spent fuel storage installation licenses. After evaluating the two exemption requests, the NRC generically evaluated the expiration term for licenses and certificates of compliance issued in accordance with 10 CFR Part 72. The NRC published a notice in the *Federal Register* on February 16, 2011 (76 FR 8872) in which the NRC staff discussed the evaluations surrounding the exemption requests and determined that the expiration term could be extended with no impact to public health and safety. As explained in the notice, the NRC staff evaluated technical data from NRC-supported research by Idaho National Laboratory and considered experience with spent fuel storage casks used at one of the licensees requesting the exemption. The NRC staff determined that, over an extended licensing

¹ NRC currently has 84 certificates of compliance that can be used with the general license in 10 CFR 71.17. According to the U.S. Department of Energy's Radioactive Material Packaging website (<https://rampac.energy.gov/home/package-certification-information/certificates/dot-iaea>), of these 84 certificates issued by the NRC, DOT has issued 41 certificates of competent authority authorizing these packages for international transport.

period, there would be little to no fuel degradation and limited degradation of other internal components due to the absence of significant corrosive influences in the inert environment. The staff noted that these licensees are inspected on a routine basis and have corrective action programs to address any deficiencies. The staff also noted that the licensees conduct routine maintenance. With appropriate aging management and maintenance programs, extending the license terms were determined to be reasonable and protective of public health and safety.

Additionally, the staff reviewed the expiration term for new nuclear power plant licenses and certifications. In 1989, the NRC added a new part to the NRC regulations for the procedures and licensing requirements for reviewing applications for new nuclear power plant licenses and certifications (10 CFR Part 52). In this new part of the regulations, the NRC set the design certification to a 15-year period to “permit more operating experience with a given design to accumulate before the certification comes up for renewal or ceases to be available to applicants for combined licenses” (54 FR 15372; April 18, 1989). This was reaffirmed in a final rule issued in 2007, “Licenses, Certifications, and Approvals for Nuclear Power Plants” (72 FR 49351; August 28, 2007) in 10 CFR 52.55.

In addition to the obvious differences in uses between the certificates of compliance for storage and certificates for new power plant designs, discussed above, and the certificates of compliance for transportation packages, there is also a programmatic difference in that the transportation packages are transported internationally, using certificates of competent authority issued by the DOT with revalidations by other member states of the IAEA through their approval processes. As discussed more below, the review and approval process varies by country.

STAKEHOLDER INTERACTIONS

On April 26, 2018, the NRC held a public meeting to discuss the OIG report, “Audit of NRC’s Oversight for Issuing Certificates of Compliance for Radioactive Material Packages (OIG-17-A-21),” dated August 16, 2017.” A meeting summary for the public meeting is available in ADAMS, at Accession No. ML18184A298. 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. Comments related to these specific topics are addressed within those respective sections below. Additional information may be found in the meeting summary and the meeting transcript (ADAMS Accession Nos. ML18184A298 and ML18129A185, respectively).

FACTORS TO CONSIDER

The NRC staff evaluated extensive information for determining the basis for an appropriate term for certificates of compliance for transportation packages. After reviewing the regulations, guidance, and the basis for certificate terms under 10 CFR Part 72 and 10 CFR Part 52, the NRC staff determined the following factors to be the most relevant for evaluating the appropriate term of transportation certificates of compliance. These factors are: (1) the risk to the public from transportation activities, (2) international impacts, and (3) implementation challenges and cost. The NRC staff also interacted with stakeholders to obtain external perspectives on these factors, including holding a public meeting and engaging in discussions with the DOT and other International Atomic Energy Agency (IAEA) competent authorities. Below is a discussion of each of these factors, including comments from the stakeholder interactions relevant to each factor.

Risk to the Public

In order to better understand the risk to the public associated with certificates of compliance for transportation, the NRC staff re-reviewed four previous NRC studies relevant in this area that were conducted: (1) risk to the public from transportation of radioactive material; (2) shipping container response to highway and railway accident conditions; (3) spent fuel shipment risk estimates; and (4) spent fuel transportation risk assessment. In each of these studies, the risk was found to be low. A summary of the NRC staff review of each of these studies is provided below.

The NRC published NUREG-0170, Vol. 1, "Final Environmental Statement on the Transportation of Radioactive Material by Air and Other Modes," published in December 1977 (ADAMS Accession No. ML022590355), to document the evaluation of the risk to the public from the transportation of radioactive material. In NUREG-0170, the NRC determined that the risk of radiation doses to the public under routine and accident conditions is low. Since then, the NRC performed three additional studies to evaluate the risk to the public health and safety for the transportation of spent nuclear fuel. In each of these studies, the NRC determined that the risk to the public from spent fuel transportation is low. All three of these studies were published in NUREG documents and are discussed below.

Two of these studies are: (1) NUREG/CR-4829, "Shipping Container Response to Severe Highway and Railway Accident Conditions," published in February 1987 (ADAMS Accession Nos. ML070810403 and ML070810404), also known as the Modal Study, and (2) NUREG/CR-6672, "Reexamination of Spent Fuel Shipment Risk Estimates," published in March 2000 (ADAMS Accession No. ML003698324). Both of these studies were conducted using more recent analytical techniques than those employed in NUREG-0170 to evaluate package response to accident conditions. In each of these studies, the NRC affirmed that the results in NUREG-1070, which demonstrated that the risk for spent nuclear fuel transportation is low, continued to be valid. While NUREG/CR-4829 was not a true risk study in that it did not evaluate radiological consequences of accidents, the results of its analysis did show that the radiological risks from spent fuel under severe highway and railway accident conditions are lower than the risk previously estimated in NUREG-0170. The risks calculated in NUREG/CR-6672 were several orders of magnitude less than the estimates in NUREG-0170, concluding that no radioactive material would be released in more than 99.99 percent of accidents involving spent fuel shipments.

The third study, NUREG-2125, "Spent Fuel Transportation Risk Assessment," published in January 2014 (ADAMS Accession No. ML13249A329), is the most recent study. From this study, the NRC determined that risk to the public from spent fuel transportation is extremely low. The results of NUREG-2125 show that utilizing "the improved analysis tools and techniques, improved data availability, and a reduction in uncertainty has made the estimate of accident risk from the release of radioactive material in this study approximately five orders of magnitude less than what was estimated in NUREG-0170. The results demonstrate that NRC regulations continue to provide adequate protection of public health and safety during the transportation of SNF [spent nuclear fuel]."

The risk to the public from spent fuel transportation was determined to be so low because the results of the analysis determined that:

- Radioactive material would not be released in an accident if the fuel is contained in an inner welded canister inside the packages.

- Only rail packages without inner welded canisters would release radioactive material, and only then in exceptionally severe accidents.
- If there were an accident during a spent fuel shipment, there is only about one-in-a-billion chance that the accident would result in a release of radioactive material.
- If there were a release of radioactive material in a spent fuel shipment accident, the dose to the maximally exposed individual would be less than 2 Sieverts (Sv) (200 rem) and would not result in an acute lethality.

These results are due to several factors, including the regulations in 10 CFR Part 71 that the package must meet in order to be certified; the rigorous NRC review of an application for a Type B package; and the oversight that NRC performs to ensure that packages are fabricated in accordance with the design approved by the NRC.

The package tests required in 10 CFR 71.73 were established to simulate real-life accidents. These tests are not intended to represent any specific transportation route, any specific historical transportation accident, or a “worst-case” accident. These tests are intended to simulate the damaging effects of a severe transportation accident in a manner that provides international acceptability, uniformity, and repeatability. All IAEA member states use these tests. The NRC’s evaluation in NUREG-2125 analyzed package damage for impacts at 30 mph (equivalent to the 30-foot drop required in 10 CFR 71.73(c)(1)) as well as three beyond-design-basis impacts of 45 mph, 90 mph, and 120 mph. The results demonstrated that even in the most severe accidents, the risk to the public is low.

During the public meeting, the NRC staff asked the stakeholders how risk should be considered in determining an appropriate expiration date for the terms of transportation certificates of compliance. The stakeholders indicated that risk is tied to the operational use and fabrication of the package and not to the expiration term of the certificate. The NRC staff agreed with this view. Packages are evaluated prior to each use and any degradation related to age or use would be found and remediated.

In evaluating the risk of transportation of radioactive material, the NRC staff concluded, from its review of the studies discussed above, that the package design by itself does not impose a risk to the public. Rather, the risk to the public is associated with the improper use or fabrication of the package; therefore, the NRC staff concluded that a shorter expiration term is not needed to protect the public health and safety, and the environment. The NRC application review and oversight processes seeks to ensure that the package is designed, fabricated and used in accordance with NRC regulations, thereby minimizing risk. While the low risk to the public of radiological harm due to the transportation of radioactive material could argue for a term longer than the current 5-year term, other considerations discussed below would argue against lengthening the term.

International Impacts

NRC and DOT co-regulate the transportation of radioactive material. The memorandum of understanding (MOU) between NRC and DOT (44 FR 38690; July 2, 1979) delineates the responsibility of each agency. As a result of this MOU, NRC reviews, and approves or denies approval of package designs for fissile materials and for other radioactive materials (other than low specific activity materials) in quantities exceeding Type A limits, as defined in 10 CFR Part 71, for domestic transport. The DOT is the U.S. competent authority with respect to the administrative requirements set forth by the IAEA. As the U.S. competent authority, the

DOT issues certificates of competent authority for international transport². According to the MOU, prior to issuance of a certificate for competent authority, the DOT will require that packages of U.S. origin have an approval issued by the NRC.

As explained previously, after NRC issues a certificate of compliance for domestic transport, if requested by the certificate holder, the DOT issues a certificate of competent authority for international transport based on the NRC approval. Prior to performing international transport, the certificate holder is required to have the DOT certificate revalidated in any country from where the package will originate, pass through, and end its transport. As part of the revalidation process, a foreign competent authority may add additional conditions for its approval and will include the expiration date of the revalidation. Managing the country specific expiration dates and additional conditions is the responsibility of the certificate holder. To alleviate the administrative burden, vendors will often seek to harmonize their certificates across the different countries and often seek to have synchronized expiration terms.

Typically, the expiration date of the revalidation matches the DOT certificate's expiration date; therefore, the certificates issued by the NRC and the DOT, along with the foreign revalidation, all have the same expiration date. If NRC were to extend its expiration term to 10 years and DOT were to follow, it is not clear that foreign competent authorities would extend their expiration date for revalidations of the U.S. certificate to a 10-year term. If they did not follow with the 10-year revalidation term, then the same package could have two different expiration dates, one on U.S. approvals and the other on foreign revalidations. In addition to the DOT, other competent authorities around the world also issue certificates of competent authority, which have a 5-year term for expiration. The DOT revalidates these certificates for international transport to or from the U.S. The 5-year certificate term is the standard for most competent authorities.

At the last meeting of the Transportation Safety Standards Committee (known as TRANSSC) on June 6-8, 2018, NRC had an informal discussion with five foreign competent authorities that were in a working group with the U.S. participants concerning the length of the term for certificates of compliance. All five foreign competent authorities conduct reviews of transportation certificates on a 5-year term. They stated that European Union member states rely on operating experience to evaluate performance of the certificates. One country indicated that if it has a new certificate, it may review it after 3 years to understand whether it is performing well. When asked about the 5-year term for certificates, the five foreign competent authorities responded that it corresponds to the time period in which the IAEA Safety Standards³ are revised, and adopted in their national legislations. All five of the foreign competent authorities consulted stated that consistency is maintained as everyone uses the same term for approved certificates. These certificates can be widely used across many member states.

As the IAEA revises its regulations, the NRC and the DOT each perform a rulemaking, coordinated with one another, to harmonize the U.S. transportation regulations with those of the IAEA. While not identical, the U.S. and the IAEA transport regulations provide similar levels of protection for minimizing dose rate, release of radioactive material, and prevention of an inadvertent criticality. Similar levels of protection by both regulations ensures that the risk to the public and the environment is very low for both domestic and international transport.

² In many IAEA member states, the same agency is the competent authority for both domestic and international transport

³ Regulations for the Safe Transport of Radioactive Material, Specific Safety Requirements No. SSR-6; hereafter referred to as SSR-6

During the public meeting, the NRC staff asked the stakeholders about domestic and international impacts of revising the term for transportation certificates of compliance. The stakeholders said that the NRC certificate holders obtain renewals from the NRC first before they request renewal of the DOT certificate. After these approvals, they then work to obtain renewal of foreign revalidations as needed. Additionally, the stakeholders indicated that since some countries take longer for renewals, having a longer expiration term with the NRC could be beneficial. However, changing the expiration term could have unintended consequences with foreign validations in other countries.

Commenters indicated that, in determining whether to change the term of the transportation certificate of compliance, the NRC should also consider the frequency of updates of the IAEA safety standards for transportation, SSR-6, and the U.S transport regulations issued by both the NRC and DOT. Since 2005, the IAEA has updated its transportation regulations on a revision cycle that is slightly less than 5 years. NRC and DOT have updated their regulations on a 10-year cycle. Commenters noted that if the IAEA regulations were to be 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, but since the IAEA regulations are updated more frequently, the current 5-year term makes sense.

In evaluating the international impacts, the NRC staff determined that consistency with the NRC, DOT, and foreign competent authorities is important. Consistency across the NRC, DOT, and foreign competent authorities, as well as with the updates of the IAEA safety standards for transportation, minimizes burden to the certificate holders. Different expiration terms for these approvals could increase burden on the certificate holders in maintaining different certificates.

Implementation Challenges and Cost

The NRC evaluated implementation challenges and cost if there were a change to the expiration term for certificates of compliance for transportation. The costs to certificate holders associated with the current expiration term comes from having to request a renewal every 5 years. The number of supplements listed in the certificate will determine the documentation needed to request renewal of a certificate. Because the package has been determined to be safe for use and is verified compliant prior to each use, when processing a renewal application, the NRC does not perform a technical review of the information submitted in support of a certificate of compliance. As stated in 10 CFR 71.38(c), "In applying for renewal of an existing Certificate of Compliance, an applicant may be required to submit a consolidated application that is comprised of as few documents as possible. The consolidated application should incorporate all changes to its certificate, including changes that are incorporated by reference in the existing certificate."

If a certificate holder is not required to submit a consolidated application, the certificate holder submits a letter to the NRC requesting renewal of the certificate. The burden on certificate holders to submit a letter every 5 years is approximately 1 to 2 hours. The NRC review of the documentation and issuance of the renewed certificate should take approximately 2 to 3 hours. The burden to submit a renewal request with a consolidated application will vary depending on the type of package for which the renewal is requested and the amount of documentation submitted for the certificate and subsequent revisions. The NRC estimates that for packages with less documentation, the burden to submit a consolidated application is approximately a half day. For packages with more documentation, such as spent fuel or type B waste packages, the effort to assemble a consolidated application and ensure it is complete and accurate could take

up to 2.5 weeks for some of the larger submittals (on the order of a couple of thousand pages). NRC review of these applications and issuance of a renewed certificate of compliance range from 5 hours to 8 hours, depending on the complexity of the consolidated application. Some certificate holders have found it easier to either submit a consolidated application with each revision request or periodically (between renewal requests) submit a consolidated application. Fewer supplements being consolidated into a single application reduces the cost to the certificate holder to prepare a consolidated application.

During the public meeting, the NRC and stakeholders discussed implementation challenges and costs. Commenters noted that if the NRC changes the expiration term and the international community does not, that could make it more difficult for certificate holders. The stakeholders noted that it could be more confusing and difficult to maintain the current status if there are two separate terms for the same package. Also, if the expiration term is extended beyond 8-10 years, that could create more burden – for the certificate holder and for the NRC – because if there have been extensive changes in this time period, it's a significant amount of work to bring documentation up to date. The NRC also heard from stakeholders that if the expiration term were extended too far out, expertise could be lost at the vendor and at the NRC. There was general consensus among the stakeholders that if the expiration term is changed, the term should be in multiples of 5 years.

One commenter believed that extending the expiration term would decrease the burden. No one believed that the NRC would receive more amendments because of an extension of the expiration term since amendments are driven by customer needs.

The NRC staff agrees that it would be an additional burden to certificate holders if the revalidation approval from the foreign competent authorities had a different expiration term than the expiration term given by the NRC or DOT. Extending the expiration term could save burden in submitting renewals to the NRC for those certificates that do not have a corresponding DOT certificate of competent authority and subsequent foreign revalidations. While this could relieve burden in some instances, the lack of consistency across the NRC, DOT, and the foreign competent authorities could create more significant burdens. Therefore, the NRC staff agrees with the comments from the stakeholders regarding the need for consistency across the NRC, DOT, and the foreign competent authorities.

PRINCIPLES OF GOOD REGULATION

The NRC operates under the Principles of Good Regulation (Principles). These Principles focus the NRC on ensuring safety and security while balancing the interests of the NRC's stakeholders, including the public and licensees. The Principles include independence, openness, efficiency, clarity, and reliability. By developing a regulatory basis for the expiration term for certificates of compliance for transportation packages, the NRC contributes to the principles of openness, efficiency, and clarity.

Under the openness principle, the stakeholders must be informed about and have the opportunity to participate in the regulatory processes as required by law. Open channels of communication must be maintained with Congress, other government agencies, licensees, and the public, as well as with the international nuclear community.

Under the efficiency principle, the public and licensees are entitled to the best possible management and administration of regulatory activities. Regulatory activities should be

consistent with the degree of risk reduction they achieve. If several effective alternatives are available, the option, which minimizes the use of resources should be adopted.

Under the clarity principle, the NRC regulations should be coherent, logical, and practical. There should be a clean connection between the regulations and agency goals and objectives. And agency positions should be readily understood and easily applied.

As discussed above, the NRC sought stakeholder views from the public, the DOT, vendors/licensees, and foreign competent authorities in preparing this regulatory and technical basis for the term for transportation certificates of compliance. The views from stakeholders were considered by the NRC staff in the preparation of this final regulatory and technical basis document. Additionally, the NRC staff considered whether a change to the term of the transportation certificate of compliance would result in an increase in burden or inefficiencies. By maintaining a 5-year term for transportation certificates of compliance, the NRC remains consistent with the DOT and foreign competent authorities, as well as with the IAEA's schedule for revising its transportation regulations. Developing a basis for the expiration term of the transportation certificates of compliance contributes to regulatory clarity in that the NRC's stakeholders understand the regulatory basis for the expiration. This also provides the foundation to understand the basis for the NRC's 5-year expiration term for transportation certificates of compliance should a vendor wish to request and provide support for a longer expiration term.

CONCLUSION

Based on its technical and regulatory evaluation as discussed above, the NRC has determined that, absent a request from a vendor for a different term, a 5-year expiration term is appropriate for certificates of compliance for transportation packages. While a longer expiration term could provide equivalent protection for public health and safety, and could potentially save some burden for some NRC certificate holders, the efficiency in maintaining consistency between NRC, DOT, and foreign competent authority expiration dates in certificates outweighs any burden saved. The NRC staff notes that the regulations afford flexibility in selecting an appropriate term and that certificate holders may request a longer renewal term, with appropriate supporting documentation.