

**NUCLEAR REGULATORY COMMISSION**

**10 CFR Part 72**

**RIN: 3150-AI09**

**[NRC-2008-0361]**

**License and Certificate of Compliance Terms**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Proposed rule.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is proposing to amend its regulations that govern licensing requirements for the independent storage of spent nuclear fuel. These proposed amendments include changes that would enhance the effectiveness and efficiency of the licensing process for spent nuclear fuel storage. Specifically, they would clarify the term limits for dry storage cask Certificates of Compliance (CoCs) and independent spent fuel storage installation (ISFSI) specific licenses. The proposed amendments would also provide consistency between the general and specific ISFSI license requirements, and allow general licensees subject to these regulations to implement changes authorized by an amended CoC to a cask loaded under the initial CoC or an earlier amended CoC (a “previously loaded cask”).

**DATES:** The comment period expires (**insert 75 days from date of publication**). Comments received after this date will be considered if it is practical to do so, but the NRC is able to assure consideration only for comments received on or before this date.

**ADDRESSES:** You may submit comments by any one of the following methods. Please include Docket ID NRC-2008-0361 in the subject line of your comments. Comments submitted in writing or in electronic form will be posted on the NRC website and on the Federal rulemaking website Regulations.gov. Because your comments will not be edited to remove any identifying or contact information, the NRC cautions you against including any information in your submission that you do not want to be publicly disclosed.

The NRC requests that any party soliciting or aggregating comments received from other persons for submission to the NRC inform those persons that the NRC will not edit their comments to remove any identifying or contact information, and therefore, they should not include any information in their comments that they do not want publicly disclosed.

**Federal Rulemaking Website:** Go to <http://www.regulations.gov> and search for documents filed under Docket ID NRC-2008-0361. Address questions about NRC dockets to Carol Gallagher 301-492-3668; e-mail [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov).

**Mail comments to:** Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, ATTN: Rulemakings and Adjudications Staff.

**E-mail comments to:** [Rulemaking.Comments@nrc.gov](mailto:Rulemaking.Comments@nrc.gov). If you do not receive a reply e-mail confirming that we have received your comments, contact us directly at 301-415-1677.

**Hand deliver comments to:** 11555 Rockville Pike, Rockville, Maryland 20852, between 7:30 am and 4:15 pm Federal workdays. (Telephone 301-415-1677).

**Fax comments to:** Secretary, U.S. Nuclear Regulatory Commission at 301-415-1101.

You may submit comments on the information collections by the methods indicated in the Paperwork Reduction Act Statement.

You can access publicly available documents related to this proposed rule using the following methods:

**NRC's Public Document Room (PDR):** The public may examine and have copied for a fee publicly available documents at NRC's PDR, Public File Area O1 F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland.

**NRC's Agencywide Documents Access and Management System (ADAMS):** Publicly available documents created or received at the NRC are available electronically at the NRC's Electronic Reading Room at <http://www.nrc.gov/reading-rm/adams.html>. From this site, the public can gain entry into ADAMS, which provides text and image files of NRC's public documents. If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the NRC's PDR reference staff at 1-800-397-4209, 301-415-4737 or by e-mail to [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov).

**Federal Rulemaking Website:** Public comments and supporting materials related to this proposed rule can be found at <http://www.regulations.gov> by searching on Docket ID NRC-2008-0361.

**FOR FURTHER INFORMATION CONTACT:** Keith McDaniel, Office of Federal and State Materials and Environmental Management Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone (301) 415-5252, e-mail, [Keith.McDaniel@nrc.gov](mailto:Keith.McDaniel@nrc.gov).

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#### I. Background

On April 29, 2002, the Virginia Power and Electric Company (Dominion) submitted an application to renew Special Nuclear Materials (SNM) License SNM-2501 for the Surry ISFSI. SNM-2501 authorizes the storage of spent nuclear fuel in dry casks at the Surry Nuclear Power Plant. In the renewal application, Dominion requested an exemption from the 20-year license renewal term specified in 10 CFR 72.42(a) and sought approval for a 40-year license renewal term. Similarly, on February 27, 2004, Progress Energy Carolinas, Inc. (Progress Energy) submitted an application for the renewal of H. B. Robinson's ISFSI license which requested an exemption from the provisions of 10 CFR 72.42(a), so that the license renewal period for the H. B. Robinson ISFSI could be extended from 20 to 40 years.

The NRC staff determined the 40-year renewal exemption request to be a policy decision, not a technical one, because the safety evaluation indicated sufficient technical information had been provided in the application to grant the 40-year renewal period. As a result, a Commission paper (SECY-04-0175) entitled, "Options for Addressing the Surry

Independent Spent Fuel Storage Installation License-Renewal Period Exemption Request,” was submitted on September 28, 2004, to request Commission approval of the Surry 40-year renewal exemption request.

On November 29, 2004, the Commission issued a Staff Requirements Memorandum (SRM) for SECY-04-0175, which authorized the NRC staff to approve 40-year license renewal terms for the Surry ISFSI, with appropriate license conditions to manage the effects of aging. The SRM further directed the NRC staff to: (1) initiate a program to review the technical basis for future rulemaking; (2) provide recommendations on the license term for Part 72 CoCs for spent nuclear fuel dry cask storage systems; and (3) apply the Commission-approved guidance for Part 72 renewals to future site-specific exemption requests without further Commission approval. In response to this direction, the staff submitted a Commission paper (SECY-06-0152) entitled, “Title 10 Code of Federal Regulations Part 72 License and Certificate of Compliance Terms,” on July 7, 2006, to recommend the scope of rulemaking.

In an SRM, dated August 14, 2006, the Commission authorized the staff to proceed with rulemaking proposals described in SECY-06-0152. In addition, the Commission specifically directed the staff to address the following points in the rulemaking: (1) clarify the start of the 20-year term limit for cask designs approved under general license provisions; (2) identify whether the cask vendor or licensee is responsible for applying for the CoC renewals; (3) discuss possible conflicts that could arise for storage cask designs that are granted a license term extension and that have been approved for transport with a different license term; (4) discuss how the cask expiration dates are tracked at each general license site so that it is clearly understood when the CoC for each cask design must be renewed; and (5) clarify the difference between CoC “approval” and “renewal.”

As this rulemaking commenced, the NRC staff identified a related issue regarding its approval of Amendment 4 to CoC 72-1026, which revised cask monitoring and surveillance

requirements for the BNG Fuel Solutions W-150 storage cask. Subsequent to the approval, the certificate holder requested guidance from the NRC on the implementation of the changes authorized by the CoC amendment to previously loaded casks. In addition to this request, the NRC staff became aware of the belief among some general licensees that changes authorized by CoC amendments can be applied to previously loaded casks without prior NRC approval, if an analysis under § 72.48 is performed.

The NRC staff determined that under the current regulations, changes authorized by CoC amendments cannot be applied to previously loaded casks without express NRC approval, if such change results in a change to the terms or conditions of the CoC under which the cask was loaded. A previously loaded cask is bound by the terms and conditions (including the technical specifications) of the CoC applicable to that cask when the licensee loaded the cask. Therefore, under the current regulations, general licensees that want to apply changes approved by a CoC amendment to a previously loaded cask must request an exemption from the NRC if these changes alter the terms or conditions of the CoC under which that cask was loaded.

In the SRM for COMSECY-07-0032, dated December 12, 2007, the Commission stated that it did not object to the staff expanding the scope of the proposed rulemaking to include two issues concerning the extension of license renewal terms for ISFSI specific licenses and to allow Part 72 general licensees to apply CoC amendment changes to previously loaded casks.

In the August 14, 2006, SRM for SECY-06-0152, the Commission directed the NRC staff to be as transparent as possible in developing the proposed rule package, including making draft text available for comment to stakeholders, and holding public meetings, if necessary, before formal submission of the proposed rule to the Commission. In response, the NRC staff held public meetings on November 7, 2006, and February 29, 2008, to discuss the technical bases of the rulemaking with stakeholders. In addition, on August 4, 2008, the NRC

staff made preliminary draft rule text available for comment to stakeholders on Regulations.gov (Docket ID NRC-2008-0361). The only external stakeholders that submitted comments were Nuclear Energy Institute and Florida Power and Light. The comments generally supported the rulemaking. The “Discussion” section of this document includes NRC responses to significant stakeholder comments.

## II. Discussion

### *A. What action is the NRC taking, and why?*

The NRC is proposing to revise Part 72 requirements for site-specific and general ISFSI licensees and CoCs to enhance the effectiveness and efficiency of the licensing process.

For site-specific ISFSI licenses, the Commission is proposing to codify a technical approach consistent with that applied in granting the 40-year exemptions for the Surry and H. B. Robinson site-specific ISFSI license renewals, so that all site-specific ISFSI licensees will have the flexibility to request up to 40-year initial and renewal terms while ensuring safe and secure storage of spent nuclear fuel.

For CoCs, the Commission is also proposing to allow the flexibility for applicants to request initial and renewal terms up to 40 years. Question C of this section discusses the technical basis for this change. Under this proposed change, applicants would be required to demonstrate that design and support/operational programs are suitable for the requested term. The NRC staff has developed a standard review plan for renewal applications.

For both site-specific licenses and CoCs, the proposed rule adds a requirement that renewal applicants must provide time limited aging analyses and a description of an aging management program (see Questions F, G, and H) to ensure that storage casks will perform as designed under extended license terms.

The NRC is proposing to replace the term “reapproval,” which is used to describe the process of extending the CoC terms, to “renewal” for consistency with site-specific license terminology. Question E of this section discusses the rationale for this change.

The proposed rule also would allow general licensees to implement changes associated with CoC amendments to previously loaded casks, provided that the loaded cask conforms to the CoC amendment codified by the NRC in § 72.214 and continue to ensure the safe and secure storage of spent fuel. Question N of this section discusses the rationale for this change.

*B. Whom does this action affect?*

The proposed rule would affect Part 72 site-specific and general licensees and certificate holders.

*C. Why is the NRC increasing initial and renewal terms for site-specific ISFSI licenses from 20 years to not to exceed 40 years?*

The NRC is increasing initial and renewal terms for site-specific ISFSI licenses from 20 years to not to exceed 40 years to be consistent with the NRC staff’s findings regarding the safety of spent nuclear fuel storage, as documented in the renewal exemptions issued to the Surry and H.B. Robinson ISFSIs. During the review for the Surry and H. B. Robinson renewal applications, the NRC staff evaluated the technical data resulting from an NRC-supported research program at the Idaho National Laboratory (INL), formerly Idaho National Engineering and Environmental Laboratory, and also considered experience with dry spent fuel storage casks used at Surry. Under the INL research program, INL opened a dry storage cask after the fuel had been stored for approximately 15 years. At Surry, several casks were also opened after less than 15 years of storage as a result of some faulty weather covers which were

corrected. Summaries of the findings regarding the condition of the fuel and cask components follow:

(1) Cladding creep is a time-dependent change in the dimension of the cladding resulting from high temperature and stress. It was considered as a potential degradation mechanism during storage. Confirmatory inspection of the spent fuel stored at INL verified that no cladding creep had occurred. The spent fuel in dry storage at Surry also supports this finding. The NRC staff expects very little to no fuel degradation at the end of an extended licensing period. The established limits for cladding temperature during storage, and continually decreasing level of cladding stress and temperature, further remove creep as a degradation mechanism. Assessment indicated that cladding creep would not be an issue.

(2) The NRC staff also expects limited degradation of other internal components because there are no significant corrosive influences in the inert environment, either for the fuel or for other components. The INL inspection verified that there was no indication of corrosion for any internal canister components. The NRC staff has also concluded that radiation levels are too low to significantly alter the properties of the metals for any storage canister components.

(3) The other external components of the storage systems (which are exposed to weathering effects) would already be covered by an inspection and corrective action program, or routine maintenance, to ensure that any degradation will be identified and assessed for its importance to safety, and will be addressed through corrective actions to ensure continued safe operation of the storage system.

Based on these findings, the NRC staff concludes that, with appropriate aging management and maintenance programs, license terms not to exceed 40 years are reasonable and protect public health and safety and the environment.

*D. Can applicants apply for an initial or renewal term greater than 40 years?*

Under the proposed rule, applicants cannot apply for an initial or renewal term greater than 40 years. Any request for a term greater than 40 years must be justified and will be processed as an exemption request under § 72.7. As discussed in Question C of this section, the NRC staff believes that 40-year increments are reasonable without undue risk to the public or to the environment, if there are appropriate aging management and maintenance programs.

The license term (i.e., initial license or renewed license) establishes specific intervals for the systematic evaluation of systems, structures, and components important to safety to ensure their safe operation. For licensing purposes, the Commission has determined that the license term for dry spent fuel cask storage is limited to 40 years or less depending on the technical justification submitted by the licensee. However, if a licensee requested that a specific license period be longer than 40 years, that license application would have to provide additional information on the long-term material degradation of dry spent fuel storage casks, as well as associated aging management activities, to justify safe operation during the extended period, and the NRC would need to evaluate this information. This discussion about license renewal terms longer than 40 years does not imply that the spent fuel cannot be safely stored beyond the maximum allowed 40 year license term. In fact, the regulations place no restrictions on the number of times the license can be renewed. The key element in approving an initial license application or renewal application is a finding of reasonable assurance that the public health and safety will be protected during the license term. This finding arises from the review of the technical basis.

*E. Why is the NRC changing the word “reapproval” to “renewal”?*

The NRC is changing the word “reapproval” to “renewal” in the proposed rule to be consistent with the terminology used in other license requirements under Part 72. Currently,

§ 72.240 uses “reapproval” to describe the process of extending the terms of CoCs. However, this terminology differs from other sections in Part 72. For example, § 72.42 uses the word “renewal” to define the process for extending the term of site-specific ISFSI licenses, and § 72.212(a)(3) uses “renewal” to define the process for the continued use of storage casks of a particular design at a given site. Although “reapproval” and “renewal” are similar words, they are subject to different regulatory interpretations. “Renewal” typically implies a process whereby a new license, subject to the same requirements as the original, replaces an expired license. “Reapproval” could imply a process to reevaluate the design bases in accordance with current review standards, which may be different from the standards in place at initial certification and storage cask use.

By using the word “renewal,” the proposed rule revisions would remove ambiguity from the process for extending the terms of CoCs, as opposed to the uncertainty of extending CoC terms based on reevaluation of design bases using current standards. Although the NRC continuously updates its review standards, no compelling safety concerns have been identified to warrant the removal of spent fuel from a cask design that does not meet the latest review standards.

In addition, the Statements of Consideration (55 FR 29184; July 18, 1990) for the final rule that added the general license provisions to Part 72 stated that the intent of reapproval is not to reevaluate the initial licensing basis: “[t]he procedure for reapproval of cask designs was not intended to repeat all the analyses required for the original approval.” Thus, this interpretation of “reapproval” is more in the nature of a “renewal,” in that the initial licensing basis does not need to be reevaluated to extend CoC terms.

The referenced Statements of Consideration also reported that, “[t]he Commission believes that the staff should review spent fuel storage cask designs periodically to consider any new information, either generic to spent fuel storage or specific cask designs, that may

have arisen since issuance of the Certificate of Compliance.” Clearly, measures would need to be taken if the “new information” involves safety concerns. These measures would depend on the nature of the safety concerns and the cask design. Requests for Additional Information (RAIs) may be generated during the renewal process to prompt licensees/applicants to address such safety concerns.

The NRC recognizes that a cask design certified years ago may not meet the latest standards, yet it may be fully acceptable to continue to store fuel already in casks of that design. Furthermore, there would be significant safety considerations if spent fuel were to be repackaged. When considering repackaging, safety considerations associated with the repackaging operation should be weighed against any safety concerns with leaving the spent fuel in its existing storage container. Renewal for an existing loaded cask should consider the initial licensing basis. For an unloaded cask or an older cask design whose CoC has expired, it would be prudent to review it against the latest standards.

*F. Why is the NRC adding a definition for the term “time-limited aging analyses”?*

Time-Limited Aging Analyses (TLAA) is a process to assess systems, structures, and components (SSCs) important to safety which have a time-dependent operating life. The NRC is proposing to add a definition for TLAA because TLAA would be required for the renewal of a site-specific license under proposed § 72.42(a)(1) and for the renewal of a spent fuel storage cask CoC under proposed § 72.240(c)(2). Furthermore, stakeholders asked for a definition of “time-limited aging analyses” when they reviewed the initial guidance document for the Surry and H. B. Robinson site-specific ISFSI license renewals.

*G. What is an Aging Management Program (AMP)?*

An AMP is a program for addressing aging effects which may include prevention, mitigation, condition monitoring and performance monitoring programs. SSCs must be evaluated to demonstrate that aging effects will not compromise the SSCs' intended functions during the storage period.

*H. Why is the NRC requiring an AMP?*

The NRC believes that it is appropriate to codify an AMP in Part 72 for applicants who apply to renew site-specific ISFSI licenses or CoCs because degradation of the SSCs at an ISFSI, such as degradation due to corrosion, radiation, and creep, are time-dependent mechanisms. AMP requirements would ensure that SSCs will perform as designers intended during the renewal period.

*I. Why is the NRC changing the 20-year general license term for cask designs approved for use under the general license provisions?*

The NRC is proposing to change the 20-year general license term limit for the storage of spent fuel in casks fabricated under a CoC to be consistent with the proposed revisions to CoC initial and renewal terms (which establish a CoC term not to exceed 40 years).

Under § 72.210, a general license for the storage of spent fuel in an ISFSI at power reactor sites is issued to those persons authorized to possess or operate nuclear power reactors under 10 CFR Parts 50 or 52. The general license is limited to that spent fuel which the general licensee is authorized to possess at the site under the specific license for the site. The general license is further limited to storage of spent fuel in casks approved and fabricated under the provisions of Subpart L of Part 72. Currently, the general licensee's authority to use a particular cask design under an approved CoC terminates 20 years after the date that the

general licensee first uses the particular cask to store spent fuel, unless the cask's CoC is renewed, in which case the general license terminates 20 years after the CoC renewal date. In the event the cask's CoC were to expire, any loaded spent fuel storage casks of that design would need to be removed from service after a storage period not to exceed 20 years.

The NRC proposes to revise the regulations to specify that the general license for the storage of spent fuel in each cask fabricated under a CoC commences upon the date that the particular cask is first used by the general licensee to store spent fuel and shall not exceed the term certified by the cask's CoC, unless the cask's CoC is renewed, in which case the general license terminates when the cask's CoC expires. The proposed rule further specifies that if a CoC were to expire, any loaded spent fuel storage casks of that design would need to be removed from service after a storage period not to exceed the term certified by the cask's CoC.

*J. Are there possible conflicts that could arise for storage cask designs that are granted a term extension that are also approved for a different term limit as a transportation package?*

The Commission raised this issue in its SRM for SECY-06-0152, dated August 14, 2006. The NRC staff does not foresee any possible conflicts. The current regulations in Part 72 encourage, but do not require storage cask designs to have a compatible, approved transportation cask. So called "dual use" systems must be separately certified under the requirements in 10 CFR Part 71 (transportation) and Part 72 (storage). Typically, the only common item between these systems is the inner canister, which holds the spent fuel contents.

Part 71 certificates for transportation packages are issued for a 5-year term whereas Part 72 CoCs are issued for much longer periods (under the current regulations, most CoCs have 20 year terms; under the proposed rule, the CoC term is extended to a not to exceed 40 year term). For each transportation cask certified under 10 CFR Part 71, the CoC specifies "approved contents." The description of the approved contents for a spent fuel transportation

package defines the acceptable fuel types and characteristics and, typically, it is the condition of the fuel, not its age that determines its acceptability. Spent fuel stored in dry casks, even for extended terms, is not expected to experience any significant degradation that would affect its acceptability to be shipped in a suitable transportation cask. Part 72 general design criteria require fuel retrievability and that design of the storage casks should consider, to the extent practicable, compatibility with removal of the stored spent fuel from the reactor site, transportation, and ultimate disposition by the Department of Energy. Based upon the NRC supported INL research program and the Surry and H.B. Robinson ISFSI renewal applications, the NRC staff has concluded that typical spent fuel can be safely stored in dry casks without appreciable degradation.

If the condition of spent fuel, or its storage canister, was believed to have degraded during extended storage such that it no longer met the criteria for approved contents, a licensee would have other alternatives for transport of that spent fuel. A new or modified approved transportation cask might be used, or the fuel might be repackaged (or “canned”), to place it in an acceptable configuration.

*K. How do general licensees track cask expiration dates?*

General licensees maintain a schedule for each cask used at their sites, and the licensees submit this information to the Commission. Section 72.212(b)(1) of the proposed rule requires general licensees to notify the Commission at least 90 days before first storing spent nuclear fuel under a general license. Section 72.212(b)(2) of the proposed rule would require general licensees to register use of each cask with the Commission no later than 30 days after using that cask to store spent fuel. To register casks, licensees must submit their name and address, reactor license and docket numbers, the name and title of a person responsible for providing additional information concerning spent fuel storage under the general license, the

cask certificate number, the amendment number, if applicable, cask model number, and the cask identification number. With this information, the Commission will know the loading and expiration dates of each cask. This information also will enable the NRC to schedule any necessary inspections and will permit the NRC to maintain an independent record of use for each cask.

*L. Who is responsible for applying for CoC renewals?*

The proposed rule retains the structure of the current rule which emphasizes the certificate holder (the cask vendor) applying for cask renewal. If the certificate holder chooses not to apply for the renewal of a particular cask design or is no longer in business, a general licensee may apply for renewal in its place. If the general licensee seeks to fabricate this cask design, it must satisfy the applicable requirements of Part 72, including establishment and maintenance of the requisite quality assurance (QA) program.

*M. Does the NRC have a definition for “terms, conditions, and specifications” as they relate to the CoC?*

The NRC does not include a definition for “terms, conditions, and specifications” in the proposed rule because these words are generic in nature, and are used in other parts of the NRC’s regulations without definition.

*N. Under the proposed rule, can a licensee apply CoC amendments to previously loaded casks?*

Proposed § 72.212 would allow a general licensee to apply changes authorized by a CoC amendment to a previously loaded cask provided that the licensee demonstrates, through a written evaluation, that the cask meets the terms and conditions of the subject CoC

amendment (i.e., the loaded cask must conform to the CoC amendment codified by the NRC in § 72.214).

*O. May a general licensee implement only some of the authorized changes in a CoC amendment without prior NRC approval?*

If a general licensee elects to apply the changes authorized by a CoC amendment to a previously loaded cask, the cask must conform to the terms and conditions after the changes have been applied, including the technical specifications of the CoC amendment. Partial or selective application of some of the authorized changes, but not others, requires prior NRC approval (in this case, the general licensee would apply for an exemption). The basis for allowing licensees to apply the changes authorized by a CoC amendment to a previously loaded cask without prior approval from the NRC is that the cask will remain in an analyzed condition if, after the changes have been applied, it conforms to the terms and conditions of the CoC amendment. The NRC has previously stated, “a spent fuel storage cask will be relied on to provide safe confinement of radioactive material independent of a nuclear power reactor’s site, so long as conditions of the Certificate of Compliance are met” (54 FR 19381; May 5, 1989). However, partial or selective application of a CoC amendment’s changes would result in a cask that would be in an unanalyzed condition.

In a related issue, the NRC agrees with an industry comment raised in response to the publication of the draft preliminary rule text (73 FR 45173; August 4, 2008). The draft preliminary rule text required that a general licensee ensure that once the changes authorized by a CoC amendment had been applied to a previously loaded cask, that the cask then “fully conforms” to the terms and conditions of the CoC amendment. The industry comment raised the concern that the phrase “fully conforms” was overly restrictive and requiring conformance with all the changes authorized by a CoC amendment would not be feasible or logical in certain

instances, namely, in those cases where the amended CoC requirements do not apply to that particular general licensee site or ISFSI (e.g., requirements for pressurized water reactors (PWR) fuel at a boiling water reactor (BWR) plant).

In light of this comment, the proposed rule language now requires that the cask, once CoC amendment changes have been applied, “conforms” to the terms and conditions of the CoC amendment. Thus, CoC amendment requirements for PWR fuel need not be met at a BWR plant.

Similarly, if the CoC amendment changes the Technical Specifications for loading, general licensees may have difficulty demonstrating that the previously loaded cask complies with the new loading requirements. Proposed 10 CFR 72.212(b)(5) would require general licensees to perform written evaluations prior to applying the changes authorized by an amended CoC to a previously loaded cask. If the evaluation indicates that the loading conditions under the old CoC amendment would not affect the ability of the previously loaded cask to meet the storage or unloading requirements of the newer CoC amendment, general licensees would be considered as conforming with the terms and conditions of the newer CoC amendment without having to meet the new loading requirements.

*P. Do later CoC amendments encompass earlier CoC amendments?*

No, later CoC amendments do not encompass earlier amendments unless the language of the later CoC amendment expressly indicates otherwise. Generally, when the NRC reviews an amendment to a CoC, the NRC staff considers the changes associated with the amendment request only and limits its review to the bounding conditions of the analysis. Specific changes associated with earlier CoC amendments for previously loaded casks are not considered during the review process for a later amendment. Thus, depending on the nature of the changes, later

amendments do not necessarily encompass earlier amendments and sometimes may be inconsistent with earlier amendments.

*Q. Why can't general licensees use the 10 CFR 72.48 process to apply CoC amendment changes to previously loaded casks?*

The principal requirement of § 72.48 regarding changes to cask designs is that the desired changes do not result in a change in the terms, conditions, or specifications incorporated in the CoC. A previously loaded cask is bound by the terms, conditions, and technical specifications of the CoC applicable to that cask at the time the licensee loaded the cask. Thus, under § 72.48, a licensee may only make those cask design changes that do not result in a change to the terms, conditions, or specifications of the CoC under which the cask was loaded. The proposed rule would not amend § 72.48; but would amend § 72.212 by authorizing a general licensee to apply the changes authorized by a CoC amendment to a previously loaded cask, provided that after the changes have been applied, the cask conforms to the terms and conditions, including the technical specifications, of the CoC amendment.

*R. If a general licensee selects and purchases a cask system under an earlier amendment, but does not load the casks, can the general licensee adopt the most recent amendment for the empty casks before loading them?*

Adoption of the most recent amendment depends on the nature of the changes between the CoC amendment under which the cask system was fabricated and the most recent amendment. CoC amendments are routinely requested by cask manufacturers or vendors (also referred to as the certificate holders) to account for advances in cask design and technology. Some amendments will be associated with cask hardware changes. A cask

system that was purchased under an older amendment may or may not be able to be modified to a cask system that meets the most recent amendment.

Proposed § 72.212 would require that general licensees perform written evaluations demonstrating that the conditions in the CoC have been met before loading empty casks. If such an evaluation failed to meet the conditions in the most recent CoC amendment, the empty cask cannot be changed to the most recent amendment by the general licensee before loading. If the evaluation demonstrates that the conditions in the most recent CoC amendment are met, then the most recent amendment can be implemented to this previously purchased empty cask.

*S. What are NRC's plans for providing guidance and examples of aging analyses and AMPs to licensees?*

The NRC is developing a draft Standard Review Plan (SRP) entitled, "Standard Review Plan for License Renewal of Independent Fuel Storage Installations." The intent of this SRP is to provide guidance to the NRC staff in reviewing the licensees' programs for managing the effects of aging on spent fuel storage casks or ISFSI sites. Aging analyses and aging management programs are two components of an overall program for managing the effects of aging. Because applicants would need to submit a time-limited aging analysis and a description of their program to manage the effects of aging when applying for renewal of either CoCs or specific licenses under the proposed rule, this SRP would also assist potential applicants in identifying parameters to be included in a renewal application and measures necessary to ensure that the cask or ISFSI can be operated during the renewal period without undue risk to the public health and safety. The draft SRP will be published for public comment following the publication of this proposed rule.

*T. Could the NRC maintain the current paragraph designations of 10 CFR 72.212(b)?*

The NRC understands the burden arising from changing the paragraph designations of a regulation. However, the NRC is proposing to rearrange the provisions of § 72.212(b) to better organize regulatory requirements. For example, the proposed rule would group recordkeeping requirements at the end of § 72.212(b) rather than dispersing them among other requirements, as is currently the case. The NRC's intent for rearranging § 72.212(b) is to make this provision more user-friendly. These proposed changes are documented in Table 1 located in Section III (Item 4) of this document (Discussion of Proposed Amendments by Section under the discussion pertaining to § 72.212).

*U. When are licensees required to submit cask registration letters?*

Under proposed 10 CFR 72.212(b)(2), general licensees must submit a cask registration letter no later than 30 days after using (loading) that cask to store spent fuel. One registration letter may be submitted for a campaign that loads more than one cask, provided that the letter lists the cask certificate number, the amendment number, the cask model number, and the cask identification number of each cask covered by the campaign.

In addition, under proposed 10 CFR 72.212(b)(4), general licensees must submit a cask registration letter no later than 30 days after applying the changes authorized by an amended CoC to a previously loaded cask. One registration letter may be submitted for a campaign that applies CoC amendment changes to more than one cask, provided that the letter lists the cask certificate number, the amendment number to which the cask will conform, the cask model number, and the cask identification number of each cask covered by the campaign.

*V. If a CoC is not renewed, how long would general licensees have to remove expired casks from service?*

For those dry storage systems for which renewals are not planned, users should plan ahead to remove these dry storage systems from service before the expiration of the storage terms specified in the expired CoC. Because users are most aware of the general cask schedule and the number of casks to be removed from service at their sites, users are in the best position to develop a reasonable schedule for the removal. The NRC anticipates that dry storage systems with a large number of casks in use likely will be renewed either by the vendor or by a user or group of users. Therefore, it is unlikely that licensees will need to remove a large number of casks from service at the same time.

*W. When the NRC renews a CoC, are all amendments to that CoC simultaneously renewed as well?*

Section 72.214 lists one expiration date for each CoC. Amendments under a CoC may have different effective dates; however, they share the same certificate number and docket number. Therefore, a single renewal application for a CoC with updated information to reflect all the changes would apply to all CoC amendments.

*X. If a general licensee applies for the renewal of a given CoC (assuming the certificate holder went out of business or chose not to apply for the renewal of a given CoC), and if the NRC approves the renewal of that CoC, is the renewed CoC available only to that general licensee or is it available to all general licensees?*

CoC certificates are generic designs and approved by rulemaking. The renewed CoC would be available to all persons who hold a general license under § 72.210.

*Y. Can the requirements in the proposed rule regarding time-limited aging analyses for CoC renewals be based upon a “current licensing basis” patterned after 10 CFR Part 54 rather than the design bases?*

The NRC does not believe that the Part 54 “current licensing basis” (CLB) is the appropriate basis for time-limited aging analyses in support of CoC renewals. The NRC does not believe that it is appropriate for the CLB to be applied to cask CoC renewals, which are generic. The CLB is typically the set of NRC requirements applicable to a specific plant and a specific licensee’s written commitments for ensuring compliance with and operation within applicable NRC requirements, including the plant specific design basis (including all modifications and additions to regulatory commitments over the life of the license) that are docketed and in effect.

*Z. What is the status of the draft NRC Regulatory Issue Summary (RIS) 2007-26 which was issued on January 14, 2008 (73 FR 2281)?*

The NRC has decided not to finalize the draft RIS 2007-26, because proposed § 72.212(b) would provide a path forward for implementation of later amendments to previously loaded casks. An Enforcement Guidance Memorandum (EGM) will be issued in conjunction with the publication of this proposed rule to provide guidance to NRC inspectors for exercising enforcement discretion concerning deficiencies related to implementing changes, authorized by CoC amendments to previously loaded casks, that occurred prior to issuance of the EGM.

*AA. On what issues does the Nuclear Regulatory Commission specifically ask for public review and comment?*

The NRC is inviting the public to comment on the proposed rule in its entirety. In particular, the NRC requests public review and comment on the proposed provisions in 10 CFR

72.212 with regard to implementation of the requirements to allow a licensee to apply the changes authorized by an amended CoC to a previously loaded cask, and whether or not the evaluation required by 10 CFR 72.212(b)(5) should be reviewed and approved by the NRC. The NRC also seeks public review and comment on whether the requirement for an aging management program for CoC renewals should fully address possible site aging issues (e.g., different environmental conditions) for general licensees.

### III. Discussion of Proposed Amendments by Section

#### 1. Section 72.3, Definitions.

The proposed rule would add a definition for “Time-limited aging analysis.”

#### 2. Section 72.24, Contents of application; Technical information.

The proposed rule change to § 72.24(c) would require applicants seeking initial specific licenses or specific licensees seeking renewals to demonstrate in sufficient detail that the design of the ISFSI or monitored retrievable storage installation (MRS) is capable of performing the intended functions for the term requested in the application.

#### 3. Section 72.42, Duration of license; renewal.

The proposed rule change to § 72.42(a) would extend the term for both an initial specific license and a license renewal from a term of 20 years to a term not to exceed 40 years. The proposed rule change would also add a requirement that specific licensees seeking renewals submit a time-limited aging analysis and a description of the aging management program. Any license renewal application will be required to include an analysis that considers the effects of aging on SSCs important to safety for the requested renewal term.

The proposed rule change to § 72.42(b) would add language to require applications for license renewal to include design bases information as documented in the most recently updated final safety analysis report (FSAR) as required by § 72.70.

4. Section 72.212, Conditions of general license issued under § 72.210.

The proposed rule would make several changes to § 72.212. The proposed rule would revise § 72.212(a)(3) by changing the general license term from 20 years after the date that the particular cask is first used by the general licensee to one that shall not exceed the term certified by the cask's CoC after the date that the particular cask is first used by the general licensee. Similarly, the termination of the general license, following any renewal, is changed from 20 years after the renewal date to the expiration date set forth in the renewed CoC. The proposed rule would change the cask removal from service requirement from a storage period not to exceed 20 years following the expiration of the cask's CoC, to one that shall not exceed the term certified by the cask's CoC following the expiration of the cask's CoC. In addition, the proposed rule would substitute the term "certificate holder" for the term "cask vendor" and the term "renewal" for "reapproval" with respect to cask designs. The proposed rule would retain the language that if a CoC holder does not renew a particular cask CoC, a general licensee using casks of that design may apply for design renewal under § 72.240.

The proposed rule would amend § 72.212(b), including changes to redesignate and reorganize the provisions of that section. The following table cross references the proposed regulations with the current regulations. Use of "modified" in Table 1 refers to a rule whose content has been modified. Remaining table entries are either new rules or rules that have been renumbered but whose content is unchanged.

Table 1 - Cross Reference of Proposed Regulations with Current Regulations

<b>Proposed Rule</b>	<b>Current Rule</b>
§ 72.212(b)(1)	§ 72.212(b)(1)(i)
§ 72.212(b)(2)	§ 72.212(b)(1)(ii) (modified)
§ 72.212(b)(3)	New
§ 72.212(b)(4)	New
§ 72.212(b)(5)	§ 72.212(b)(2)(i) (modified)
§ 72.212(b)(5)(i)	§ 72.212(b)(2)(i)(A)
§ 72.212(b)(5)(ii)	§ 72.212(b)(2)(i)(B)
§ 72.212(b)(5)(iii)	§ 72.212(b)(2)(i)(C)
§ 72.212(b)(6)	§ 72.212(b)(3) (modified)
§ 72.212(b)(7)	§ 72.212(b)(2)(ii) (modified)
§ 72.212(b)(8)	§ 72.212(b)(4) (modified)
§ 72.212(b)(9)	§ 72.212(b)(5)
§ 72.212(b)(9)(i)	§ 72.212(b)(5)(i)
§ 72.212(b)(9)(ii)	§ 72.212(b)(5)(ii)
§ 72.212(b)(9)(iii)	§ 72.212(b)(5)(iii)
§ 72.212(b)(9)(iv)	§ 72.212(b)(5)(iv)
§ 72.212(b)(9)(v)	§ 72.212(b)(5)(v)
§ 72.212(b)(9)(vi)	§ 72.212(b)(5)(vi)
§ 72.212(b)(10)	§ 72.212(b)(6)
§ 72.212(b)(11)	§ 72.212(b)(7) (modified)
§ 72.212(b)(12)	§ 72.212(b)(8)(i)
§ 72.212(b)(12)(i)	§ 72.212(b)(8)(i)(A)
§ 72.212(b)(12)(ii)	§ 72.212(b)(8)(i)(B)
§ 72.212(b)(12)(iii)	§ 72.212(b)(8)(i)(C)
§ 72.212(b)(13)	§ 72.212(b)(9)
§ 72.212(b)(14)	§ 72.212(b)(10)
§ 72.212(c)	§ 72.212(b)(8)(ii) (modified)
§ 72.212(d)	§ 72.212(b)(8)(iii) (modified)
§ 72.212(e)	§ 72.212(b)(1)(iii)

The proposed rule would redesignate § 72.212(b)(1)(i) as § 72.212(b)(1) and would make minor editorial changes to this provision.

The proposed rule would redesignate § 72.212(b)(1)(ii) as § 72.212(b)(2) and further revise the provision to add a requirement that general licensees, when registering a cask no later than 30 days after loading, include the CoC amendment number, if applicable.

The proposed rule would add a new provision, § 72.212(b)(3), that emphasizes the requirement that general licensees must conform to the terms, conditions, and specifications of

a CoC or an amended CoC listed in § 72.214. Partial or selective application of the terms, conditions, and specifications of a CoC or an amended CoC, without prior NRC approval, will result in a cask that is in an unanalyzed condition and is therefore, prohibited.

The proposed rule would add a new provision, § 72.212(b)(4), that would require registration of those previously loaded casks no later than 30 days after applying the changes authorized by an amended CoC.

The proposed rule would redesignate § 72.212(b)(2)(i) as § 72.212(b)(5). Proposed § 72.212(b)(5) would expand the scope of § 72.212(b)(2)(i) to require written evaluations before applying the changes authorized by an amended CoC to a previously loaded cask. Thus, the proposed rule would require a written evaluation before loading the cask with spent fuel and an additional written evaluation before any changes authorized by a CoC amendment are applied to a previously loaded cask. The proposed rule would redesignate § 72.212(b)(2)(i)(A) as § 72.212(b)(5)(i) and revise it to specify that the written evaluations are to establish that the cask will conform to the terms, conditions, and specifications of a CoC or amended CoC after the cask is loaded with spent fuel or the changes authorized by an amended CoC have been applied. The proposed rule would redesignate §§ 72.212(b)(2)(i)(B) and (C) as §§ 72.212(b)(5)(ii) and (iii), respectively.

The proposed rule would redesignate § 72.212(b)(3) as § 72.212(b)(6) and revise it to add a reference to an amended CoC.

The proposed rule would redesignate § 72.212(b)(2)(ii) as § 72.212(b)(7) and revise it to add a requirement to evaluate any changes to the site parameters determination and analyses required by paragraph § 72.212(b)(6), using the requirements of § 72.48.

The proposed rule would redesignate §§ 72.212(b)(4) through (b)(6) as §§ 72.212(b)(8) through (b)(10). The proposed rule would make changes to cross references and other minor editorial changes. Proposed § 72.212(b)(9) reflects amendments made to § 73.55 by two

recent rulemakings amending Part 73 (74 FR 63573; October 24, 2008, and 74 FR 13926; March 27, 2009).

The proposed rule would redesignate § 72.212(b)(7) as § 72.212(b)(11) and revise it to add references to an amended CoC. The proposed rule would also add language to clarify that a licensee must comply with the technical specifications of the CoC, in addition to the terms and conditions of the CoC. Further, added language would require the licensee to comply with the terms, conditions, and specifications of the amended CoC for those casks to which the licensee has applied the changes of an amended CoC.

The proposed rule would redesignate §§ 72.212(b)(8)(i), (b)(9), and (b)(10) as §§ 72.212(b)(12), (b)(13), and (b)(14), respectively.

The proposed rule would redesignate §§ 72.212(b)(8)(ii), (b)(8)(iii), and 72.212(b)(1)(iii) as §§ 72.212(c), (d), and (e), respectively, and makes conforming cross-reference changes.

5. Section 72.230, Procedures for spent fuel storage cask submittals.

The proposed rule would revise § 72.230(b) by adding language that establishes the proposed term for a period not to exceed 40 years. The proposed rule would further amend § 72.230(b) by replacing the words “for a period of at least 20 years” with “the term proposed in the application.”

6. Section 72.236, Specific requirements for spent fuel storage cask approval and fabrication.

The proposed rule would revise § 72.236(g) by adding language to require spent fuel storage casks to be designed to store spent fuel safely for the term proposed in the application, eliminating the current language that requires the cask design to store spent fuel safely for a minimum of 20 years.

7. Section 72.238, Issuance of an NRC Certificate of Compliance.

The proposed rule would revise § 72.238 by adding language that establishes the term for a CoC to be “not to exceed 40 years.”

8. Section 72.240 Conditions for spent fuel storage cask renewal.

The proposed rule would revise the heading of § 72.240 and the language of §§ 72.240(a), (b), and (d) by replacing the word “reapproval” with “renewal.” The proposed rule would further revise § 72.240(a) to establish the CoC renewal term as one not exceeding 40 years. The proposed rule would further revise § 72.240(a) to clarify that the certificate holder is the entity expected to apply for renewal of the CoC, although in the event that a certificate holder does not apply for a CoC renewal, any general licensee using that particular cask design may then apply for renewal of the CoC.

The proposed rule would add a new § 72.240(c) which would require that the safety analysis report (SAR) accompanying the renewal application must include design bases information as documented in the most recently updated FSAR, a time-limited aging analysis of structures, systems, and components important to safety, and a description of the program for management of issues associated with aging that could adversely affect structures, systems, and components important to safety. The proposed rule would redesignate § 72.240(c) as § 72.240(d) and revise it to add a requirement that any CoC renewal application must demonstrate compliance with Subpart G of Part 72, the quality assurance provisions. The proposed rule also revises the last sentence of the provision to improve its readability.

#### IV. Criminal Penalties

For the purpose of Section 223 of the Atomic Energy Act (AEA), the Commission is proposing to amend Part 72 under one or more of Sections 161b, 161i, or 161o of the AEA. Willful violations of the rule would be subject to criminal enforcement.

#### V. Agreement State Compatibility

Under the “Policy Statement on Adequacy and Compatibility of Agreement State Programs” approved by the Commission on June 30, 1997, and published in the *Federal Register* on September 3, 1997 (62 FR 46517), this rule is classified as Compatibility Category “NRC.” Compatibility is not required for Category “NRC” regulations. The NRC program elements in this category are those that relate directly to areas of regulation reserved to the NRC by the AEA, as amended, or the provisions of Title 10 of the CFR. Although an Agreement State may not adopt program elements reserved to NRC, it may wish to inform its licensees of certain requirements via a mechanism that is consistent with the particular State’s administrative procedure laws but does not confer regulatory authority on the State.

#### VI. Plain Language

The Presidential Memorandum “Plain Language in Government Writing” published June 10, 1998 (63 FR 31883), directed that the Government’s documents be in clear and accessible language. The NRC requests comments on this proposed rule specifically with respect to the clarity and effectiveness of the language used. Comments should be sent to the NRC as explained in the “ADDRESSES” caption of this document.

## VII. Voluntary Consensus Standards

The National Technology Transfer and Advancement Act of 1995 (Pub. L. 104-113) requires that Federal agencies use technical standards that are developed or adopted by voluntary consensus standards bodies unless the use of such a standard is inconsistent with applicable law or otherwise impractical. In this proposed rule, the NRC would clarify the terms for dry spent fuel storage cask designs, or CoCs, and ISFSI licenses. In addition, the proposed action also allows Part 72 general licensees to implement changes authorized by an amended CoC to a cask loaded under the initial CoC or an earlier amended CoC (a “previously loaded cask”). These actions do not constitute the establishment of a standard that establishes generally applicable requirements.

## VIII. Finding of No Significant Environmental Impact: Availability

Under the National Environmental Policy Act of 1969, as amended, and the NRC regulations in Subpart A of 10 CFR Part 51, the NRC has determined that this rule, if adopted, would not be a major Federal action significantly affecting the quality of the human environment and, therefore, an environmental impact statement is not required. The NRC has prepared an environmental assessment and, on the basis of this environmental assessment, has made a finding of no significant impact. The proposed amendments are procedural in nature whereby extended license and CoC terms and the implementation of CoC amendments to previously loaded casks could be achieved by exemptions under the current regulations. They will not have a significant incremental effect on the environment. Therefore, the NRC has determined that an environmental impact statement is not necessary for this rulemaking.

The determination of this environmental assessment is that there will be no significant impact to the public from this action. However, the general public should note that the NRC welcomes public participation. Comments on any aspect of the Environmental Assessment may be submitted to the NRC as indicated under the ADDRESSES heading in this document.

The NRC has sent a copy of the Environmental Assessment and this proposed rule to every State Liaison Officer and requested their comments on the Environmental Assessment. The Environmental Assessment may be examined at the NRC Public Document Room, Room O-1F21, 11555 Rockville Pike, Rockville, MD 20852.

#### IX. Paperwork Reduction Act Statement

This proposed rule contains new or amended information collection requirements that are subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq). This rule has been submitted to the Office of Management and Budget (OMB) for review and approval of the information collection requirements.

*Type of submission, new or revision:* Revision

*The title of the information collection:* 10 CFR Part 72, "License and Certificate of Compliance Terms"

*The form number if applicable:* Not applicable

*How often the collection is required:* On occasion

*Who will be required or asked to report:* Nuclear power plant licensees who operate and maintain an ISFSI under the general license provisions of 10 CFR Part 72, site-specific ISFSI licensees, and CoC holders for spent nuclear fuel dry cask storage designs.

*An estimate of the number of annual responses:* 109.6 (or approximately 329 responses over three years). This includes 101.6 annual responses + 8 annual recordkeepers.

*The estimated number of annual respondents:* 46

*An estimate of the total number of hours needed annually to complete the requirement or request:* -39 hours (savings of 39 hours)

*Abstract:* The proposed rule amends Part 72 to clarify the terms for dry spent fuel storage cask designs, or CoCs, and ISFSI licenses. Specifically, the proposed rule changes would allow for longer initial and renewal terms for Part 72 CoCs and licenses, clarify the general license storage term, and clarify the difference between CoC “reapproval” and “renewal.” In addition, the proposed rule also allows Part 72 general licensees to implement changes authorized by an amended CoC to a cask loaded under the initial CoC or an earlier amended CoC (a “previously loaded cask”) without NRC approval, provided the cask then conforms to the terms, conditions, and specifications of the amended CoC. Specifically, the draft proposed rule results in changes to information collection requirements in §§ 72.42, 72.212, and 72.240.

The U.S. Nuclear Regulatory Commission is seeking public comment on the potential impact of the information collections contained in this proposed rule and on the following issues:

1. Is the proposed information collection necessary for the proper performance of the functions of the NRC, including whether the information will have practical utility?
2. Is the estimate of burden accurate?
3. Is there a way to enhance the quality, utility, and clarity of the information to be collected?

4. How can the burden of the information collection be minimized, including the use of automated collection techniques?

A copy of the Office of OMB clearance package may be viewed free of charge at the NRC Public Document Room, One White Flint North, 11555 Rockville Pike, Room O-1 F21, Rockville, MD 20852. The OMB clearance package and rule are available at the NRC web site: <http://www.nrc.gov/public-involve/doc-comment/omb/index.html> for 60 days after the signature date of this notice and are also available at <http://www.regulations.gov>.

Send comments on any aspect of these proposed information collections, including suggestions for reducing the burden and on the above issues, by **[INSERT DATE 30 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER]** to the Records and FOIA/Privacy Services Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet electronic mail to [INFOCOLLECTS.Resource@NRC.GOV](mailto:INFOCOLLECTS.Resource@NRC.GOV) and to the NRC Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0132), Office of Management and Budget, Washington, DC 20503. Comments received after this date will be considered if it is practical to do so, but assurance of consideration cannot be given to comments received after this date.

#### Public Protection Notification

The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid OMB control number.

## X. Regulatory Analysis

The NRC has prepared a draft regulatory analysis on this proposed regulation. The analysis examines the costs and benefits of the alternatives considered by the NRC. The NRC requests public comment on the draft regulatory analysis. Comments on the draft analysis may be submitted to the NRC as indicated under the ADDRESSES heading of this document. The analysis is available for inspection in the NRC PDR, 11555 Rockville Pike, Rockville, MD 20852.

## XI. Regulatory Flexibility Certification

In accordance with the Regulatory Flexibility Act of 1980 (5 U.S.C. 605(b)), the Commission certifies that this rule would not, if promulgated, have a significant economic impact on a substantial number of small entities. This proposed rule affects only nuclear power plant licensees and the manufacturers of dry cask spent fuel storage systems. These entities do not fall within the scope of the definition of "small entities" set forth in the Regulatory Flexibility Act or the size standards established by the NRC (10 CFR 2.810).

## XII. Backfit Analysis

The NRC has determined that the backfit rule (§§ 50.109, 72.62) does not apply to this proposed rule because these amendments do not involve any provisions that would impose backfits as defined in 10 CFR Chapter I. These amendments do not require the addition, elimination, or modification of structures, systems, or components of an ISFSI or of the procedures or organization required to operate an ISFSI. Therefore, a backfit analysis is not required.

## List of Subjects for Part 72

Administrative practice and procedure, Hazardous waste, Nuclear materials, Occupational safety and health, Penalties, Radiation protection, Reporting and recordkeeping requirements, Security measures, Spent fuel, Whistleblowing.

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974, as amended; the Nuclear Waste Policy Act of 1982, as amended; and 5 U.S.C. 553; the NRC is proposing to adopt the following amendments to 10 CFR Part 72.

### **PART 72-LICENSING REQUIREMENTS FOR THE INDEPENDENT STORAGE OF SPENT NUCLEAR FUEL, HIGH-LEVEL RADIOACTIVE WASTE, AND REACTOR-RELATED GREATER THAN CLASS C WASTE**

1. The authority citation for Part 72 continues to read as follows:

**Authority:** Secs. 51, 53, 57, 62, 63, 65, 69, 81, 161, 182, 183, 184, 186, 187, 189, 68 Stat. 929, 930, 932, 933, 934, 935, 948, 953, 954, 955, as amended, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2071, 2073, 2077, 2092, 2093, 2095, 2099, 2111, 2201, 2232, 2233, 2234, 2236, 2237, 2238, 2282); sec. 274, Pub. L. 86-373, 73 Stat. 688, as amended (42 U.S.C. 2021); sec. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846); Pub. L. 95-601, sec. 10, 92 Stat. 2951 as amended by Pub. L. 102-486, sec. 7902, 106 Stat. 3123 (42 U.S.C. 5851); sec. 102, Pub. L. 91-190, 83 Stat. 853 (42 U.S.C. 4332); secs. 131, 132, 133, 135, 137, 141, Pub. L. 97-425, 96 Stat. 2229, 2230, 2232, 2241, sec. 148, Pub. L. 100-203, 101 Stat. 1330-235 (42 U.S.C. 10151, 10152, 10153, 10155, 10157,

10161, 10168); sec. 1704, 112 Stat. 2750 (44 U.S.C. 3504 note); sec.651(e), Pub. L. 109-58, 119 Stat. 806-10 (42 U.S.C. 2014, 2021, 2021b, 2111).

Section 72.44(g) also issued under secs. 142(b) and 148(c), (d), Pub. L. 100-203, 101 Stat. 1330-232, 1330-236 (42 U.S.C. 10162(b), 10168(c), (d)). Section 72.46 also issued under sec. 189, 68 Stat. 955 (42 U.S.C. 2239); sec. 134, Pub. L. 97-425, 96 Stat. 2230 (42 U.S.C. 10154). Section 72.96(d) also issued under sec. 145(g), Pub. L. 100-203, 101 Stat. 1330-235 (42 U.S.C. 10165(g)). Subpart J also issued under secs. 2(2), 2(15), 2(19), 117(a), 141(h), Pub. L. 97-425, 96 Stat. 2202, 2203, 2204, 2222, 2224 (42 U.S.C. 10101, 10137(a), 10161(h)). Subparts K and L are also issued under sec. 133, 98 Stat. 2230 (42 U.S.C. 10153) and sec. 218(a), 96 Stat. 2252 (42 U.S.C. 10198).

2. In § 72.3, add the definition for “Time-limited aging analyses” in alphabetical order to read as follows:

**§ 72.3 Definitions.**

\* \* \* \* \*

*Time-limited aging analyses*, for the purposes of this part, means those licensee or certificate holder calculations and analyses that:

(1) Involve structures, systems, and components important to safety within the scope of the license renewal, as delineated in subpart F of this part, or within the scope of the spent fuel storage certificate renewal, as delineated in subpart L of this part, respectively;

(2) Consider the effects of aging;

(3) Involve time-limited assumptions defined by the current operating term, for example, 40 years;

(4) Were determined to be relevant by the licensee or certificate holder in making a safety determination;

(5) Involve conclusions or provide the basis for conclusions related to the capability of structures, systems, and components to perform their intended safety functions; and

(6) Are contained or incorporated by reference in the design bases.

\* \* \* \* \*

3. In § 72.24, revise the introductory text of paragraph (c) to read as follows:

**§ 72.24 Contents of application; Technical information.**

\* \* \* \* \*

(c) The design of the ISFSI or MRS in sufficient detail to support the findings in § 72.40 for the term requested in the application, including:

\* \* \* \* \*

4. In § 72.42, revise paragraphs (a) and (b) to read as follows:

**§ 72.42 Duration of license; renewal.**

(a) Each license issued under this part must be for a fixed period of time to be specified in the license. The license term for an ISFSI must not exceed 40 years from the date of

issuance. The license term for an MRS must not exceed 40 years from the date of issuance. Licenses for either type of installation may be renewed by the Commission at the expiration of the license term upon application by the licensee for a period not to exceed 40 years and under the requirements of this rule. Application for renewals must include the following:

(1) Time-limited aging analyses that demonstrate that structures, systems, and components important to safety will continue to perform their intended function for the requested period of extended operation; and

(2) A description of the program for management of issues associated with aging that could adversely affect structures, systems, and components important to safety.

(b) Applications for renewal of a license should be filed in accordance with the applicable provisions of subpart B of this part at least two years before the expiration of the existing license. The application must also include design bases information as documented in the most recently updated FSAR as required by § 72.70. Information contained in previous applications, statements, or reports filed with the Commission under the license may be incorporated by reference provided that these references are clear and specific.

\* \* \* \* \*

5. In § 72.212, revise paragraphs (a)(3) and (b) and add paragraphs (c), (d), and (e) to read as follows:

**§ 72.212 Conditions of general license issued under § 72.210.**

(a) \* \* \*

(3) The general license for the storage of spent fuel in each cask fabricated under a Certificate of Compliance commences upon the date that the particular cask is first used by the general licensee to store spent fuel and shall not exceed the term certified by the cask's

Certificate of Compliance, unless the cask's Certificate of Compliance is renewed, in which case the general license terminates when the cask's Certificate of Compliance expires. In the event that a certificate holder does not apply for a certificate renewal under § 72.240, any cask user or user's representative may apply for a certificate renewal. If a Certificate of Compliance expires, casks of that design must be removed from service after a storage period not to exceed the term certified by the cask's Certificate of Compliance.

(b) The general licensee must:

(1) Notify the Nuclear Regulatory Commission using instructions in § 72.4 at least 90 days before first storage of spent fuel under this general license. The notice may be in the form of a letter, but must contain the licensee's name, address, reactor license and docket numbers, and the name and means of contacting a person responsible for providing additional information concerning spent fuel under this general license. A copy of the submittal must be sent to the administrator of the appropriate Nuclear Regulatory Commission regional office listed in appendix D to part 20 of this chapter.

(2) Register use of each cask with the Nuclear Regulatory Commission no later than 30 days after using that cask to store spent fuel. This registration may be accomplished by submitting a letter using instructions in § 72.4 containing the following information: the licensee's name and address, the licensee's reactor license and docket numbers, the name and title of a person responsible for providing additional information concerning spent fuel storage under this general license, the cask certificate number, the CoC amendment number to which the cask conforms, unless loaded under the initial certificate, cask model number, and the cask identification number. A copy of each submittal must be sent to the administrator of the appropriate Nuclear Regulatory Commission regional office listed in appendix D to part 20 of this chapter.

(3) Ensure that each cask used by the general licensee conforms to the terms, conditions, and specifications of a CoC or an amended CoC listed in § 72.214.

(4) In applying all the changes authorized by an amended CoC to a cask loaded under the initial CoC or an earlier amended CoC, register each such cask with the Nuclear Regulatory Commission no later than 30 days after applying the changes authorized by the amended CoC. This registration may be accomplished by submitting a letter using instructions in § 72.4 containing the following information: the licensee's name and address, the licensee's reactor license and docket numbers, the name and title of a person responsible for providing additional information concerning spent fuel storage under this general license, the cask certificate number, the CoC amendment number to which the cask conforms, cask model number, and the cask identification number. A copy of each submittal must be sent to the administrator of the appropriate Nuclear Regulatory Commission regional office listed in appendix D to part 20 of this chapter.

(5) Perform written evaluations, before use and before applying the changes authorized by an amended CoC to a cask loaded under the initial CoC or an earlier amended CoC, which establish that:

(i) The cask, once loaded with spent fuel or once the changes authorized by an amended CoC have been applied, will conform to the terms, conditions, and specifications of a CoC or an amended CoC listed in § 72.214;

(ii) Cask storage pads and areas have been designed to adequately support the static and dynamic loads of the stored casks, considering potential amplification of earthquakes through soil-structure interaction, and soil liquefaction potential or other soil instability due to vibratory ground motion; and

(iii) The requirements of § 72.104 have been met. A copy of this record shall be retained until spent fuel is no longer stored under the general license issued under § 72.210.

(6) Review the Safety Analysis Report referenced in the CoC or amended CoC and the related NRC Safety Evaluation Report, prior to use of the general license, to determine whether or not the reactor site parameters, including analyses of earthquake intensity and tornado missiles, are enveloped by the cask design bases considered in these reports. The results of this review must be documented in the evaluation made in paragraph (b)(5) of this section.

(7) Evaluate any changes to the written evaluations required by paragraph (b)(5) of this section, and any changes to the site parameters determination and analyses required by paragraph (b)(6) of this section, using the requirements of § 72.48(c). A copy of this record shall be retained until spent fuel is no longer stored under the general license issued under § 72.210.

(8) Before use of the general license, determine whether activities related to storage of spent fuel under this general license involve a change in the facility Technical Specifications or require a license amendment for the facility pursuant to § 50.59(c)(2) of this chapter. Results of this determination must be documented in the evaluations made in paragraph (b)(5) of this section.

(9) Protect the spent fuel against the design basis threat of radiological sabotage in accordance with the same provisions and requirements as are set forth in the licensee's physical security plan pursuant to § 73.55 of this chapter with the following additional conditions and exceptions:

(i) The physical security organization and program for the facility must be modified as necessary to assure that activities conducted under this general license do not decrease the effectiveness of the protection of vital equipment in accordance with § 73.55 of this chapter.

(ii) Storage of spent fuel must be within a protected area, in accordance with § 73.55(e) of this chapter, but need not be within a separate vital area. Existing protected areas may be expanded or new protected areas added for the purpose of storage of spent fuel in accordance with this general license;

(iii) For the purpose of this general license, personnel searches required by § 73.55(h) of this chapter before admission to a new protected area may be performed by physical pat-down searches of persons in lieu of firearms and explosives detection equipment;

(iv) The observational capability required by § 73.55(i)(3) of this chapter as applied to a new protected area may be provided by a guard or watchman on patrol in lieu of video surveillance technology; and

(v) Each general licensee that receives and possesses power reactor spent fuel and other radioactive materials associated with spent fuel storage shall protect Safeguards Information against unauthorized disclosure in accordance with the requirements of § 73.21 and the requirements of § 73.22 or § 73.23 of this chapter, as applicable; and

(vi) For the purpose of this general license, the licensee is exempt from requirements to interdict and neutralize threats in § 73.55(k) of this chapter.

(10) Review the reactor emergency plan, quality assurance program, training program, and radiation protection program to determine if their effectiveness is decreased and, if so, prepare the necessary changes and seek and obtain the necessary approvals.

(11) Maintain a copy of the CoC and, for those casks to which the licensee has applied the changes of an amended CoC, the amended CoC, and the documents referenced in such

Certificates, for each cask model used for storage of spent fuel, until use of the cask model is discontinued. The licensee shall comply with the terms, conditions, and specifications of the CoC and, for those casks to which the licensee has applied the changes of an amended CoC, the terms, conditions, and specifications of the amended CoC.

(12) Accurately maintain the record provided by the cask supplier for each cask that shows, in addition to the information provided by the cask vendor, the following:

- (i) The name and address of the cask vendor or lessor;
- (ii) The listing of spent fuel stored in the cask; and
- (iii) Any maintenance performed on the cask.

(13) Conduct activities related to storage of spent fuel under this general license only in accordance with written procedures.

(14) Make records and casks available to the Commission for inspection.

(c) The record described in paragraph (b)(12) of this section must include sufficient information to furnish documentary evidence that any testing and maintenance of the cask has been conducted under an NRC-approved quality assurance program.

(d) In the event that a cask is sold, leased, loaned, or otherwise transferred to another registered user, the record described in paragraph (b)(12) of this section must also be transferred to and must be accurately maintained by the new registered user. This record must be maintained by the current cask user during the period that the cask is used for storage of spent fuel and retained by the last user until decommissioning of the cask is complete.

(e) Fees for inspections related to spent fuel storage under this general license are those shown in § 170.31 of this chapter.

6. In § 72.230, revise paragraph (b) to read as follows:

**§ 72.230 Procedures for spent fuel storage cask submittals.**

\* \* \* \* \*

(b) Casks that have been certified for transportation of spent fuel under part 71 of this chapter may be approved for storage of spent fuel under this subpart. An application must be submitted in accordance with the instructions contained in § 72.4, for a proposed term not to exceed 40 years. A copy of the CoC issued for the cask under part 71 of this chapter, and drawings and other documents referenced in the certificate, must be included with the application. A safety analysis report showing that the cask is suitable for storage of spent fuel, for the term proposed in the application, must also be included.

\* \* \* \* \*

7. In § 72.236, revise paragraph (g) to read as follows:

**§ 72.236 Specific requirements for spent fuel storage cask approval and fabrication.**

\* \* \* \* \*

(g) The spent fuel storage cask must be designed to store the spent fuel safely for the term proposed in the application, and permit maintenance as required.

\* \* \* \* \*

8. Revise § 72.238 to read as follows:

**§ 72.238 Issuance of an NRC Certificate of Compliance.**

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.

9. In § 72.240, revise paragraphs 72.240(a) and 72.240(b), add new paragraph 72.240(c), and redesignate current paragraph 72.240(c) as 72.240(d), and revise paragraph 72.240(d) to read as follows:

**§ 72.240 Conditions for spent fuel storage cask renewal.**

(a) The certificate holder may apply for renewal of the design of a spent fuel storage cask for a term not to exceed 40 years. In the event that a certificate holder does not apply for a cask design renewal, any licensee that uses this cask model under the general license issued under § 72.210 may apply for a renewal of that cask design for a term not to exceed 40 years.

(b) The application for renewal of the design of a spent fuel storage cask must be submitted not less than 30 days before the expiration date of the CoC. When the applicant has submitted a timely application for renewal, the existing CoC will not expire until the application for renewal has been determined by the NRC.

(c) The application must be accompanied by a safety analysis report (SAR). The SAR must include the following:

(1) Design bases information as documented in the most recently updated final safety analysis report FSAR as required by § 72.248; and

(2) Time-limited aging analyses that demonstrate that structures, systems, and components important to safety will continue to perform their intended function for the requested period of extended operation; and

(3) A description of the program for management of issues associated with aging that could adversely affect structures, systems, and components important to safety.

(d) The design of a spent fuel storage cask will be renewed if the conditions in subpart G of this part and § 72.238 are met, and the application includes a demonstration that the storage of spent fuel has not, in a significant manner, adversely affected structures, systems, and components important to safety.

Dated at Rockville, Maryland, this 8<sup>th</sup> day of September 2009.

For the Nuclear Regulatory Commission.

/RA/

Annette L. Vietti-Cook,  
Secretary of the Commission.