

[7590-01-P]

NUCLEAR REGULATORY COMMISSION

10 CFR Part 72

[NRC-2018-0075]

RIN 3150-AK12

**List of Approved Spent Fuel Storage Casks: NAC International NAC-UMS®
Universal Storage System**

AGENCY: Nuclear Regulatory Commission.

ACTION: Direct final rule.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is amending its spent fuel storage regulations by revising the NAC International NAC-UMS® listing within the “List of approved spent fuel storage casks” to include Amendment No. 6 to Certificate of Compliance (CoC) No. 1015. Amendment No. 6 revises the CoC’s technical specifications (TSs) to: remove a redundant requirement for inspection of the concrete cask and canister; revise a limiting condition of operation (LCO) for heat removal to clarify that ~~“LCO not met”~~ means that the concrete heat removal system is inoperable; delete an inspection requirement that is already covered by LCO surveillance requirements for off-normal, accident, or natural phenomenon events; and clarify that “immediate” restoration of a concrete cask’s heat removal capabilities means “within the design-basis time limit” in Section 11.2.13 of the Final Safety Analysis Report (FSAR), “or within the time limit for a less than design-basis heat load case, as evaluated.”

Amendment No. 6 also clarifies that an LCO for loaded cask surface dose rates applies prior to storage conditions, when dose rates will be highest. [

Commented [HG1]: Can we summarize this rather than quote the language? The summary is bordering on too long (though if it's important we can probably fight to keep it)

DATES: This direct final rule is effective [INSERT DATE 75 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*], unless significant adverse comments are received by [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]. If this direct final rule is withdrawn as a result of such comments, timely notice of the withdrawal will be published in the *Federal Register*. Comments received after this date will be considered if it is practical to do so, but the Commission is able to ensure consideration only for comments received on or before this date. Comments received on this direct final rule will also be considered to be comments on a companion proposed rule published in the Proposed Rules section of this issue of the *Federal Register*.

Commented [RM2R1]: Carol can set us straight, but I'm not aware of any word limit for Summary sections. Although a summary by definition must be brief – and you're right, this one does border on too long -- it must also try to cover the subject in an informative way. Note that I've added language here to address your comment below about the need to clarify what the first LCO revision is about. In the spirit of your comment, I think we need to try to make what we're doing plain to an interested reader, even if it means flirting with the limits of a summary. Unless we're willing to distil these amendments to the point where we'd look jargonized and evasive, I don't see much more we could cut.

ADDRESSES: You may submit comments by any of the following methods:

- **Federal Rulemaking Web Site:** Go to <http://www.regulations.gov> and search for Docket ID NRC-2018-0075. Address questions about NRC dockets to Carol Gallagher; telephone: 301-415-3463; e-mail: Carol.Gallagher@nrc.gov. For technical questions contact the individuals listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **E-mail comments to:** Rulemaking.Comments@nrc.gov. If you do not receive an automatic e-mail reply confirming receipt, then contact us at 301-415-1677.

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

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

- **Hand deliver comments to:** 11555 Rockville Pike, Rockville, Maryland 20852, between 7:30 a.m. and 4:15 p.m. (Eastern Time) Federal workdays; telephone: 301-415-1677.

For additional direction on obtaining information and submitting comments, see “Obtaining Information and Submitting Comments” in the SUPPLEMENTARY INFORMATION section of this document.

FOR FURTHER INFORMATION CONTACT: Bernard H. White, Office of Nuclear Material Safety and Safeguards; telephone: 301-415-6577; e-mail:

Bernard.White@nrc.gov or Robert D. MacDougall, Office of Nuclear Material Safety and Safeguards; telephone: 301-415-5175; e-mail: Robert.MacDougall@nrc.gov. Both are staff of the U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

SUPPLEMENTARY INFORMATION:

TABLE OF CONTENTS:

I.	Obtaining Information and Submitting Comments
II.	Rulemaking Procedure
III.	Background
IV.	Discussion of Changes
V.	Voluntary Consensus Standards
VI.	Agreement State Compatibility
VII.	Plain Writing
VIII.	Environmental Assessment and Finding of No Significant Environmental Impact
IX.	Paperwork Reduction Act Statement
X.	Regulatory Flexibility Certification
XI.	Regulatory Analysis
XII.	Backfitting and Issue Finality

- XIII. Congressional Review Act
- XIV. Availability of Documents

I. Obtaining Information and Submitting Comments

A. Obtaining Information

Please refer to Docket ID NRC-2018-0075 when contacting the NRC about the availability of information for this action. You may obtain publicly-available information related to this action by any of the following methods:

- **Federal Rulemaking Web Site:** Go to <http://www.regulations.gov> and search for Docket ID NRC-2018-0075.

- **NRC's Agencywide Documents Access and Management System (ADAMS):** You may obtain publicly-available documents online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "[ADAMS Public Documents](#)" and then select "[Begin Web-based ADAMS Search](#)." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr.resource@nrc.gov. For the convenience of the reader, instructions about obtaining materials referenced in this document are provided in the "Availability of Documents" section.

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

B. Submitting Comments

Please include Docket ID NRC-2018-0075 in your comment submission.

The NRC cautions you not to include identifying or contact information that you do not want to be publicly disclosed in your comment submission. The NRC will post all comment submissions at <http://www.regulations.gov> as well as enter the comment submissions into ADAMS. The NRC does not routinely edit comment submissions to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the NRC, then you should inform those persons not to include identifying or contact information that they do not want to be publicly disclosed in their comment submission. Your request should state that the NRC does not routinely edit comment submissions to remove such information before making the comment submissions available to the public or entering the comment into ADAMS.

II. Rulemaking Procedure

This rule is limited to the changes contained in Amendment No. 6 to CoC No. 1015 and does not include other aspects of the NAC-UMS[®] Universal Storage System design. The NRC is using the “direct final rule procedure” to issue this amendment because it represents a limited and routine change to an existing CoC that is expected to be noncontroversial. Adequate protection of public health and safety continues to be ensured. The amendment to the rule will become effective on **[INSERT DATE 75 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**. However, if the NRC receives significant adverse comments on this direct final rule by **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**, then the NRC will publish a document that withdraws this action and will subsequently address the comments received in a final rule as a response to the companion proposed rule

published in the Proposed Rules section of this issue of the *Federal Register*. Absent significant modifications to the proposed revisions requiring republication, the NRC will not initiate a second comment period on this action.

A significant adverse comment is a comment where the commenter explains why the rule would be inappropriate, including challenges to the rule's underlying premise or approach, or would be ineffective or unacceptable without a change. A comment is adverse and significant if:

1) The comment opposes the rule and provides a reason sufficient to require a substantive response in a notice-and-comment process. For example, a substantive response is required when:

a) The comment causes the NRC staff to reevaluate (or reconsider) its position or conduct additional analysis;

b) The comment raises an issue serious enough to warrant a substantive response to clarify or complete the record; or

c) The comment raises a relevant issue that was not previously addressed or considered by the NRC staff.

2) The comment proposes a change or an addition to the rule, and it is apparent that the rule would be ineffective or unacceptable without incorporation of the change or addition.

3) The comment causes the NRC staff to make a change (other than editorial) to the rule, CoC, or TSs.

For detailed instructions on filing comments, please see the companion proposed rule published in the Proposed Rules section of this issue of the *Federal Register*.

III. Background

Section 218(a) of the Nuclear Waste Policy Act (NWPA) of 1982, as amended, requires that “the Secretary [of the Department of Energy] shall establish a demonstration program, in cooperation with the private sector, for the dry storage of spent nuclear fuel at civilian nuclear power reactor sites, with the objective of establishing one or more technologies that the [Nuclear Regulatory] Commission may, by rule, approve for use at the sites of civilian nuclear power reactors without, to the maximum extent practicable, the need for additional site-specific approvals by the Commission.” Section 133 of the NWPA states, in part, that “[the Commission] shall, by rule, establish procedures for the licensing of any technology approved by the Commission under Section 219(a) [sic: 218(a)] for use at the site of any civilian nuclear power reactor.”

To implement this mandate, the Commission approved dry storage of spent nuclear fuel in NRC-approved casks under a general license by publishing a final rule which added a new subpart K in part 72 of title 10 of the *Code of Federal Regulations* (10 CFR) entitled, “General License for Storage of Spent Fuel at Power Reactor Sites” (55 FR 29181; July 18, 1990). This rule also established a new subpart L in 10 CFR part 72 entitled, “Approval of Spent Fuel Storage Casks,” which contains procedures and criteria for obtaining NRC approval of spent fuel storage cask designs. The NRC subsequently issued a final rule on October 19, 2000 (65 FR 62581) that approved the NAC-UMS® Universal Storage System design and added it to the list of NRC-approved cask designs [provided](#) in 10 CFR 72.214 as CoC No. 1015.

Commented [HG3]: Citation needed

Commented [RM4R3]: We say at the beginning of the sentence that the quoted language came from Section 218(a) of the NWPA. Isn't that enough? Also, this paragraph is boilerplate language verbatim from the template that was reviewed and approved by OGC. I don't think we need to provide a USC or Public Law citation here when the citation would only lead the reader back to this language in §218(a).

Commented [HG5]: citation needed

Commented [RM6R5]: See response above.

IV. Discussion of Changes

On May 23, 2017, NAC International submitted a request to the NRC to amend CoC No. 1015. NAC International supplemented its request on January 16, 2018.

Amendment No. 6 revises the CoC's TSs to: revise 3.1.6 to remove a redundant requirement for inspection of the concrete cask and canister and; revise ~~its~~ LCO for heat removal to clarify that #“LCO not met” means that the concrete heat removal system is inoperable; delete in TS A5.4 an inspection requirement that is already covered by LCO surveillance requirements for off-normal, accident, or natural phenomenon events; and clarify that “immediate” restoration of a concrete cask’s heat removal capabilities means “within the design-basis time limit” in Section 11.2.13 of the FSAR, “or within the time limit for a less than design-basis heat load case, as evaluated.” Amendment No. 6 also clarifies that an LCO for loaded cask surface dose rates applies prior to storage conditions, when dose rates will be highest.

As documented in the preliminary safety evaluation report (PSER), the NRC staff performed a detailed safety evaluation of the proposed CoC amendment request. There are no significant changes to cask design requirements in the proposed CoC amendment. Considering the specific design requirements for each accident condition, the design of the cask would prevent loss of containment, shielding, and criticality control in the event of an accident. This amendment does not reflect a significant change in design or fabrication of the cask. In addition, any resulting occupational exposure or offsite dose rates from the implementation of Amendment No. 6 would remain well within the 10 CFR part 20 limits. There will be no significant change in the types or amounts of any effluent released, no significant increase in the individual or cumulative radiation

Commented [HG7]: We need to be citing ADAMS numbers throughout. I won't busy up these comment bubbles by highlighting every instance.

Commented [RM8R7]: The [template](#) for CoC DFR FRNs provides options for ADAMS citations depending on the number of citations. (See [link](#) on p.3 of template.) For FRNs with five or more citations, authors are to choose Option 3, the alternative of providing a table at the end of the FRN, which is what we've done here.

Commented [HG9]: This wording is pretty awkward, as we don't identify which LCO is being clarified, perhaps something along the lines of "Revise the LCO pertaining to ____ to clarify that..."

Commented [RM10R9]: See revision at left, in Summary section, and the EA section below to address your comment.

Commented [WB11R9]: Added specific LCO reference

exposure, and no significant increase in the potential for_ or consequences from_ radiological accidents.

This direct final rule revises the NAC-UMS[®] System listing in 10 CFR 72.214 by adding Amendment No. 6 to CoC No. 1015. The amendment consists of the changes previously described, as set forth in the revised CoC and TSs. The revised TSs are identified and evaluated in the PSER.

The amended NAC-UMS[®] cask design, when used under the conditions specified in the CoC, TSs, and NRC's regulations, will meet the requirements of 10 CFR part 72; therefore, adequate protection of public health and safety will continue to be ensured. When this direct final rule becomes effective, persons who hold a general license under 10 CFR 72.210 may load spent nuclear fuel into those NAC-UMS[®] Universal Storage System casks that meet the criteria of Amendment No. 6 to CoC No. 1015 under 10 CFR 72.212.

Commented [HG12]: Added to clarify that the criteria apply to the casks and not the fuel

Commented [RM13R12]: I think this adds an unnecessary word, because it's already implicitly clear that the SNF can be loaded only into NAC-UMS casks that meet the criteria of Amendment 6.

V. 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 direct final rule, the NRC will revise the NAC-UMS[®] Universal Storage System design listed in § 72.214, "List of approved spent fuel storage casks." This action does not constitute the establishment of a standard that contains generally applicable requirements.

VI. 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 Atomic Energy Act of 1954, as amended, or the provisions of 10 CFR. Although an Agreement State may not adopt program elements reserved to the NRC, and the Category “NRC” does not confer regulatory authority on the State, the State may wish to inform its licensees of certain requirements by means consistent with the particular State’s administrative procedure laws.

VII. Plain Writing

The Plain Writing Act of 2010 (Pub. L. 111-274) requires Federal agencies to write documents in a clear, concise, and well-organized manner. The NRC has written this document to be consistent with the Plain Writing Act as well as the Presidential Memorandum, “Plain Language in Government Writing,” published June 10, 1998 (63 FR 31883).

VIII. Environmental Assessment and Finding of No Significant Environmental Impact

A. The Action

The action is to amend 10 CFR 72.214, "List of approved spent fuel storage casks," to revise the NAC International NAC-UMS® Universal Storage System listing of casks that power reactor licensees can use for dry storage of spent fuel at reactor sites under a general license. This direct final rule amends the listing to add Amendment No. 6 to CoC No. 1015. Specifically, Amendment No. 6 revises the CoC's TSs to: revise TS 3.1.6 to remove a redundant requirement for inspection of the concrete cask and canister, and; revise ~~an~~ its LCO for heat removal to clarify that ~~it~~ "LCO not met" means that the concrete heat removal system is inoperable; TS A.5.4 to delete an inspection requirement that is already covered by LCO surveillance requirements for off-normal, accident, or natural phenomenon events; and clarify the TS bases that "immediate" restoration of a concrete cask's heat removal capabilities means "within the design-basis time limit" in Section 11.2.13 of the FSAR, "or within the time limit for a less than design-basis heat load case, as evaluated." Amendment No. 6 also clarifies that an LCO for loaded cask surface dose rates applies prior to storage conditions, when dose rates will be highest.

B. The Need for the Action

This direct final rule amends the CoC for the NAC-UMS® Universal Storage System design within the list of approved spent fuel storage casks that power reactor licensees can use to store spent fuel at reactor sites under a general license. Specifically, Amendment No. 6 clarifies and removes redundancies in requirements for the use of the NAC-UMS® Universal Storage System. The Amendment facilitates the dry cask storage of spent fuel that would otherwise have to be stored in the affected power reactors' spent fuel storage pools.

Commented [HG14]: Same comment as before, we should try and clean up the language here to better explain which LCO we are referring to

Commented [RM15R14]: See edits here and above responding to this comment.

Commented [WB16R14]: Added specific TS numbers.

C. Environmental Impacts of the Action

On July 18, 1990 (55 FR 29181), the NRC issued an amendment to 10 CFR part 72 to provide for the storage of spent fuel under a general license in cask designs approved by the NRC. The potential environmental impact of using NRC-approved storage casks was initially analyzed in the environmental assessment (EA) for the 1990 final rule. The EA for this Amendment No. 6 tiers off of the EA for the July 18, 1990, final rule. Tiering on past EAs is a standard process under the National Environmental Policy Act of 1969, as amended (NEPA).

NAC-UMS® Universal Storage Systems are designed to mitigate the effects of design basis accidents that could occur during storage. Design basis accidents account for human-induced events and the most severe natural phenomena reported for the site and surrounding area. Postulated accidents analyzed for an Independent Spent Fuel Storage Installation, the type of facility at which a holder of a power reactor operating license would store spent fuel in casks in accordance with 10 CFR part 72, include tornado winds and tornado-generated missiles, a design basis earthquake, a design basis flood, an accidental cask drop, lightning effects, fire, explosions, and other incidents/events.

Considering the specific design requirements for each accident condition, the design of the cask would prevent loss of confinement, shielding, and criticality control in the event of an accident. If there is no loss of confinement, shielding, or criticality control, the environmental impacts resulting from an accident would be insignificant. This amendment does not reflect a significant change in design or fabrication of the cask. Because there are no significant design or process changes, any resulting occupational exposure or offsite dose rates from the implementation of Amendment No. 6 would remain well within the 10 CFR part 20 limits. Therefore, the proposed CoC

Commented [HG17]: I'd shy away from "accidents" as it's not a good substitute for "natural phenomena." 72.90 uses "external events" could that fit here?

Commented [RM18R17]: Bernie might want to weigh in on this, but "accidents" is the term used throughout the OGC-approved template for CoC DFR FRNs, in NAC's FSAR, and our SER. As the preceding sentence makes clear design basis accidents (and presumably less-than-design-basis accidents) account for human-induced events as well as the most severe natural phenomena reported for the site and surrounding area. I don't think we want to introduce a new term here to substitute for language already approved by your OGC colleagues.

Commented [WB19R17]: 72.90 is a requirement for specific licensees only, not for CoC. Having said that, the requirements for CoC in Subparts K and L use the term accidents not natural phenomena (see 71.236(l)).

Commented [HG20]: Similar comment above. Not sure if this is a term of art, but "accident" doesn't seem a great fit.

Commented [RM21R20]: See response above.

Commented [HG22]: same comment

Commented [RM23R22]: Same response.

changes will not result in any radiological or non-radiological environmental impacts that significantly differ from the environmental impacts evaluated in the EA supporting the July 18, 1990, final rule. There will be no significant change in the types or amounts of any effluent released, no significant increase in individual or cumulative radiation exposures, and no significant increase in the potential for or consequences of radiological accidents. The staff documented its safety findings in a PSER.

D. Alternative to the Action

The alternative to this action is to deny approval of Amendment No. 6 and end the direct final rule. Consequently, any 10 CFR part 72 general licensee that seeks to load spent nuclear fuel into NAC International NAC-UMS® Universal Storage Systems in accordance with the changes described in proposed Amendment No. 6 would have to request an exemption from the requirements of 10 CFR 72.212 and 72.214. Under this alternative, interested licensees would have to prepare, and the NRC would have to review, a separate exemption request, thereby increasing the administrative burden upon the NRC and the costs to each licensee. Therefore, the environmental impacts of the alternative action would be the same as, or more likely greater than, the preferred action.

E. Alternative Use of Resources

Approval of Amendment No. 6 to CoC No. 1015 would result in no irreversible commitment of resources.

F. Agencies and Persons Contacted

No agencies or persons outside the NRC were contacted in connection with the

Commented [HG24]: Citation?

Commented [RM25R24]: See response to similar comment above, and Availability of Documents table in Section XIV below.

Commented [HG26]: This is not exactly accurate, as the NRC could deny the exemptions. What would be the environmental impact in such an instance? Isn't our argument that these regulations are redundant and therefore would have no different environmental impact than taking no action at all?

Commented [RM27R26]: I think the environmental impact would be the same whether we approved or denied the exemption request. Each applicant (and there would probably be multiple applicants, since several utilities have SNF they'd like to store in Amendment 6-equivalent casks) would incur the same burden and generate the same environmental impacts (including, e.g., paper and electricity consumption) to prepare an exemption request whether it was approved or denied. And NRC would incur the same NRC-specific burden with associated environmental impacts to review the application(s) regardless of whether they're ultimately approved or denied. This is why I think the environmental impacts of the no-action alternative, which would effectively require case-by-case NRC reviews of exemption requests, would be greater than the preferred action.

Commented [WB28R26]: Yes, we are saying that the TS are redundant for this system. I am fine with the way Garret said it above.

Commented [MR29R26]: Bernie, can you explain this for me? I don't understand how the TSs are redundant, and what that has to do with the expected environmental impacts of the no-action alternative compared to the preferred action. If we don't take the preferred action, licensees will have to request exemptions in order to load the affected SNF, or allow the fuel to accumulate in storage pools. If we say, as we do here, that each interested licensee would have to submit, and NRC would have to review, a separate exemption request, wouldn't the "administrative burden" of that, if there is more than one request, involve environmental impacts greater than the one generic rulemaking action we're proposing here?

Commented [WB30R26]: Every day the licensee has ensure that the cooling system ins operable either by measurement or visual inspection of the vents. The TS A5.4 for inspection of the vents was redundant with what is required in TS A3.1.6since they have to inspect every day, they can do the inspection after the event, if one were to occur. In addition, the regulations in 10 CFR 72.212 require that the loading conforms with the certificate, therefore performing this action in the event that the vents are blocked. Unblocking the vents will ensure they meeting the TS. The other changes to TS A3.1.6 are solely renumbering or conforming changes because we eliminated the original A.2 action. Revising the TS for when doses rates are measured is consistent with practice. The dose rates are measured prior to placing the cask into storage.

Contrary to what I said yesterday, after thinking about it, spent fuel will not accrue in the pool if we don't enact this, since ... [1]

Commented [MR31R26]: Bernie, FYI, this is Garrett's response to my response to his original comment. It was in his commentary on yesterday's version of the FRN, which didn't have the benefit of your response to me above: "I agree that the environmental impact is not significantly affected whether or not we approve the amendment. What I want to avoid is the appearance that we'd just rubberstamp an ... [2]

preparation of this EA.

G. Finding of No Significant Impact

The environmental impacts of the action have been reviewed under the requirements in NEPA, and the NRC's regulations in subpart A of 10 CFR part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions." Based on the foregoing EA, the NRC concludes that this direct final rule entitled, "List of Approved Spent Fuel Storage Casks: NAC International NAC-UMS® Universal Storage System," will not have a significant effect on the human environment. Therefore, the NRC has determined that an environmental impact statement is not necessary for this direct final rule.

IX. Paperwork Reduction Act Statement

This direct final rule does not contain any new or amended collections of information subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). Existing collections of information were approved by the Office of Management and Budget (OMB), approval number 3150-0132.

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 Flexibility Certification

Under the Regulatory Flexibility Act of 1980 (5 U.S.C. 605(b)), the NRC certifies that this direct final rule will not, if issued, have a significant economic impact on a substantial number of small entities. This direct final rule affects only nuclear power plant licensees and NAC International. 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).

XI. Regulatory Analysis

On July 18, 1990 (55 FR 29181), the NRC issued an amendment to 10 CFR part 72 to provide for the storage of spent nuclear fuel under a general license in cask designs approved by the NRC. Any nuclear power reactor licensee can use NRC-approved cask designs to store spent nuclear fuel if it notifies the NRC in advance, the spent fuel is stored under the conditions specified in the cask's CoC, and the conditions of the general license are met. A list of NRC-approved cask designs is contained in 10 CFR 72.214. On October 19, 2000 (65 FR 62581), the NRC issued an amendment to 10 CFR part 72 that approved the NAC-UMS[®] Universal Storage System design by adding it to the list of NRC-approved cask designs in 10 CFR 72.214.

On May 23, 2017, and as supplemented on January 16, 2018, NAC International submitted an application to amend the NAC-UMS[®] Universal Storage System as described in Section IV, "Discussion of Changes," of this document.

The alternative to this action is to withhold approval of Amendment No. 6 and to require any 10 CFR part 72 general licensee seeking to load spent nuclear fuel into NAC

International NAC-UMS® Universal Storage Systems under the changes described in Amendment No. 6 to request an exemption from the requirements of 10 CFR 72.212 and 72.214. Under this alternative, each interested 10 CFR part 72 licensee would have to prepare, and the NRC would have to review, a separate exemption request, thereby increasing the administrative burden upon the NRC and the costs to each licensee.

Approval of this direct final rule is consistent with previous NRC actions. Further, as documented in the PSER and EA, this direct final rule will have no adverse effect on public health and safety or the environment. This direct final rule has no significant identifiable impact or benefit on other Government agencies. Based on this regulatory analysis, the NRC concludes that the requirements of this direct final rule are commensurate with the NRC's responsibilities for public health and safety and the common defense and security. No other available alternative is believed to be as satisfactory, and therefore, this action is recommended.

XII. Backfitting and Issue Finality

The NRC has determined that the actions in this direct final rule do not require a backfit analysis because they either do not fall within the definition of backfitting under 10 CFR 72.62 or 10 CFR 50.109(a)(1), or they do not impact any general licensees currently using these systems. Additionally, the actions in this direct final rule do not impact issue finality provisions applicable to combined licenses under 10 CFR part 52.

This direct final rule revises CoC No. 1015 for the NAC International NAC-UMS® Universal Storage System, as currently listed in 10 CFR 72.214, "List of approved spent fuel storage casks." The revision consists of Amendment No. 6, which revises the CoC's TS 3.1.6 ~~to-~~ remove a redundant requirement for inspection of the concrete cask and

canister and; revise an the LCO for heat removal to clarify that ~~it~~ “LCO not met” means that the concrete heat removal system is inoperable; delete in TS A5.4 an inspection requirement that is already covered by LCO surveillance requirements for off-normal, accident, or natural phenomenon events; and clarify that “immediate” restoration of a concrete cask’s heat removal capabilities means “within the design-basis time limit” in Section 11.2.13 of the FSAR, “or within the time limit for a less than design-basis heat load case, as evaluated.” Amendment No. 6 also clarifies that an LCO for loaded cask surface dose rates applies prior to storage conditions, when dose rates will be highest.

Amendment No. 6 to CoC No. 1015 for the NAC International NAC-UMS® Universal Storage System was initiated by NAC International and was not submitted in response to new NRC requirements, or an NRC request for amendment. Amendment No. 6 applies only to new casks fabricated and used under Amendment No. 6. These changes do not affect existing users of the NAC International NAC-UMS® Universal Storage System, and the current Amendment No. 5 continues to be effective for existing users. While current CoC users may comply with the new requirements in Amendment No. 6, this would be a voluntary decision on the part of current users.

For these reasons, Amendment No. 6 to CoC No. 1015 does not constitute backfitting under 10 CFR 72.62 or 10 CFR 50.109(a)(1), or otherwise represent an inconsistency with the issue finality provisions applicable to combined licenses in 10 CFR part 52. Accordingly, the NRC staff has not prepared a backfit analysis for this rulemaking.

XIII. Congressional Review Act

This direct final rule is not a rule as defined in the Congressional Review Act.

Commented [HG32]: same comment as previously provided on identical text above.

Commented [RM33R32]: Same response as provided on identical text above.

XIV. Availability of Documents

The documents identified in the following table are available to interested persons through one or more of the following methods, as indicated.

DOCUMENT	ADAMS ACCESSION NO. / WEB LINK / FEDERAL REGISTER CITATION
Request to Amend Certificate of Compliance No. 1015 for the NAC-UMS® Cask System, dated May 23, 2017	ML17145A380
Revision of Request to Amend Certificate of Compliance No. 1015 for the NAC-UMS® Cask System, dated January 16, 2018	ML18018A893
Revision 11 to NAC-UMS® Final Safety Analysis Report for the UMS Universal Storage System	ML16341B102
Proposed CoC No. 1015, Amendment No. 6	ML18088A174
Proposed Technical Specifications Appendix A	ML18088A176
Proposed Technical Specifications Appendix B	ML18088A178
Preliminary Safety Evaluation Report	ML18088A181

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List of Subjects in 10 CFR Part 72

Commented [GC34]: This document is not in the PARS library. The FRN cannot go to the OFR until the document is in PARS.

Commented [WB35R34]: We know. After this gets signed by the EDO, Rob will let me know and we will have them immediately declared. We keep them in draft form until the direct final rule is signed, just in case there are changes that need to be made during the rulemaking's concurrence process

Commented [MR36R34]: Carol, correct me if I'm wrong here, but I think your comments about your needing to have the documents in PARS before you can send them to the OFR was intended as a reminder, a caveat not to forget, even though, as Bernie rightly says, we know that.

Commented [GC37]: Same note as above.

Commented [GC38]: Same note as above.

Commented [GC39]: Same not as above.

Administrative practice and procedure, Hazardous waste, Indians, Intergovernmental relations, Nuclear energy, Penalties, Radiation protection, Reporting and recordkeeping requirements, Security measures, 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. 552 and 553; the NRC is adopting 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: Atomic Energy Act of 1954, secs. 51, 53, 57, 62, 63, 65, 69, 81, 161, 182, 183, 184, 186, 187, 189, 223, 234, 274 (42 U.S.C. 2071, 2073, 2077, 2092, 2093, 2095, 2099, 2111, 2201, 2210e, 2232, 2233, 2234, 2236, 2237, 2238, 2273, 2282, 2021); Energy Reorganization Act of 1974, secs. 201, 202, 206, 211 (42 U.S.C. 5841, 5842, 5846, 5851); National Environmental Policy Act of 1969 (42 U.S.C. 4332); Nuclear Waste Policy Act of 1982, secs. 117(a), 132, 133, 134, 135, 137, 141, 145(g), 148, 218(a) (42 U.S.C. 10137(a), 10152, 10153, 10154, 10155, 10157, 10161, 10165(g), 10168, 10198(a)); 44 U.S.C. 3504 note.

2. In § 72.214, Certificate of Compliance 1015 is revised to read as follows:

§ 72.214 List of approved spent fuel storage casks.

* * * * *

Certificate Number: 1015.

Initial Certificate Effective Date: November 20, 2000.

Amendment Number 1 Effective Date: February 20, 2001.

Amendment Number 2 Effective Date: December 31, 2001.

Amendment Number 3 Effective Date: March 31, 2004.

Amendment Number 4 Effective Date: October 11, 2005.

Amendment Number 5 Effective Date: January 12, 2009.

Amendment Number 6 Effective Date: **[INSERT DATE 75 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].**

SAR Submitted by: NAC International, Inc.

SAR Title: Final Safety Analysis Report for the NAC-UMS Universal Storage System.

Docket Number: 72-1015.

Certificate Expiration Date: November 20, 2020.

Model Number: NAC-UMS.

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Dated at Rockville, Maryland, this xxth day of Xxxxx, 2018.

For the Nuclear Regulatory Commission.

~~Victor M. McCree~~Margaret M. Doane,
Executive Director for Operations.

Commented [WB40]: Will need to change to Margaret M. Doane

Commented [MR41R40]: A timely reminder. Done, with thanks.

Every day the licensee has ensure that the cooling system ins operable either by measurement or visual inspection of the vents. The TS A5.4 for inspection of the vents was redundant with what is required in TS A3.1.6 since they have to inspect every day, they can do the inspection after the event, if one were to occur. In addition, the regulations in 10 CFR 72.212 require that the loading conforms with the certificate, therefore performing this action in the event that the vents are blocked. Unblocking the vents will ensure they meeting the TS. The other changes to TS A3.1.6 are solely renumbering or conforming changes because we eliminated the original A.2 action. Revising the TS for when doses rates are measured is consistent with practice. The dose rates are measured prior to placing the cask into storage.

Contrary to what I said yesterday, after thinking about it, spent fuel will not accrue in the pool if we don't enact this, since we are not changing anything related to loading of the spent fuel. We are only changing items related to either surveillance or actions to take in the event an LCO is not met. This has no bearing on whether fuel can be loaded.

Finally, I didn't think that our typical EAs go into the environmental effects of us doing business, meaning the applicants energy use to put together applications and our reviewing them.

For these reasons, I am good with saying the environmental effects would be no greater. Denying the exemptions for something that is not necessary, goes against our principle of ALARA, but that isn't included in the EA.

Bernie, FYI, this is Garrett's response to my response to his original comment. It was in his commentary on yesterday's version of the FRN, which didn't have the benefit of your response to me above: "I agree that the environmental impact is not significantly affected whether or not we approve the amendment. What I want to avoid is the appearance that we'd just rubberstamp an exemption request. We should focus on the difference between the environmental impact of taking this action versus the requirements being in place (and not delve into the possibility of exemptions, which would be a different action)."

In response to Garrett here, I would say that the "administrative burden" argument has been in the EA section of every CoC DFR template I've seen since I started working on these rulemakings in 2015, and each revision of the template was specifically approved by OGC. . I've done 6 CoC rulemakings now, and the EA section of each DFR FRN had the same basic language on the no-action alternative:

"Under this alternative, interested licensees would have to prepare, and the NRC would have to review, each separate exemption request, thereby increasing the administrative burden on the NRC and the costs to each licensee. The environmental impacts of this no-action alternative would therefore be the same as or more than those for the action itself."

Each of my several OGC working group members on these rulemakings approved this language. Given this ample precedent, I don't think we should be straying from this basic formulation without a compelling reason, and I don't see one here.