NUCLEAR REGULATORY COMMISSION

10 CFR Part 72

[NRC-2021-0052]

RIN 3150-AK63

List of Approved Spent Fuel Storage Casks: NAC International NAC-UMS\textsuperscript{®} Universal Storage System, Certificate of Compliance No. 1015, Amendment No. 8

AGENCY: Nuclear Regulatory Commission.

ACTION: Proposed rule.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is proposing to amend its spent fuel storage regulations by revising the NAC International NAC-UMS\textsuperscript{®} Universal Storage System listing within the “List of approved spent fuel storage casks” to include Amendment No. 8 to Certificate of Compliance No. 1015. Amendment No. 8 revises the certificate of compliance to add the storage of damaged boiling-water reactor spent fuel, including higher enrichment and higher burnup spent fuel; change the allowable fuel burnup range; expand the boiling-water reactor class 5 fuel inventory that could be stored in the cask; and revise definitions in the technical specifications.

DATES: Submit comments by [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. Comments received after this date will be considered if it is practical to do so, but the NRC is able to ensure consideration only for comments received on or before this date.

ADDRESSES: Submit your comments, identified by Docket ID NRC-2021-0052, at https://www.regulations.gov. If your material cannot be submitted using https://www.regulations.gov, call or email the individuals listed in the FOR FURTHER INFORMATION CONTACT section of this document for alternate instructions.

For additional direction on obtaining information and submitting comments, see “Obtaining Information and Submitting Comments” in the SUPPLEMENTARY
FOR FURTHER INFORMATION CONTACT: Bernard White, Office of Nuclear Material Safety and Safeguards; telephone: 301-415-6577; email: Bernard.White@nrc.gov or James Firth, Office of Nuclear Material Safety and Safeguards; telephone: 301-415-6628, email: James.Firth@nrc.gov. Both are staff of the U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001.

SUPPLEMENTARY INFORMATION:

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I. Obtaining Information and Submitting Comments

A. Obtaining Information

Please refer to Docket ID NRC-2021-0052 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 Website: Go to https://www.regulations.gov and search for Docket ID NRC-2021-0052. Address questions about NRC dockets to Dawn Forder, telephone: 301-415-3407, email: Dawn.Forder@nrc.gov. For technical questions contact the individuals listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- NRC’s Agencywide Documents Access and Management System (ADAMS): You may obtain publicly available documents online in the ADAMS Public Documents collection at https://www.nrc.gov/reading-rm/adams.html. To begin the search, 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 email 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.

- **Attention:** The PDR, where you may examine and order copies of public documents, is currently closed. You may submit your request to the PDR via email at pdr.resource@nrc.gov or call 1-800-397-4209 between 8:00 a.m. and 4:00 p.m. (EST), Monday through Friday, except Federal holidays.

B. Submitting Comments

Please include Docket ID NRC-2021-0052 in your comment submission. The NRC requests that you submit comments through the Federal rulemaking website at https://www.regulations.gov. If your material cannot be submitted using https://www.regulations.gov, call or email the individuals listed in the FOR FURTHER INFORMATION CONTACT section of this document for alternate instructions.

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 https://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

Because the NRC considers this action to be non-controversial, the NRC is publishing this proposed rule concurrently with a direct final rule in the Rules and Regulations section of this issue of the Federal Register. The direct final rule will
become effective on [INSERT DATE 75 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. However, if the NRC receives any significant adverse comment by [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], then the NRC will publish a document that withdraws the direct final rule. If the direct final rule is withdrawn, the NRC will address the comments in a subsequent final rule. Absent significant modifications to the proposed revisions requiring republication, the NRC will not initiate a second comment period on this action in the event the direct final rule is withdrawn.

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 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.

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 to make a change (other than editorial) to the rule, certificate of compliance, or technical specifications.

For a more detailed discussion of the proposed rule changes and associated analyses, see the direct final rule published in the Rules and Regulations section of this
III. Background

Section 218(a) of the Nuclear Waste Policy Act of 1982, as amended, requires that “[t]he 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 Nuclear Waste Policy Act states, in part, that “[t]he 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 that 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 casks approved for use under the terms, conditions, and specifications of their certificate of compliance or an amended certificate of compliance pursuant to this general license are listed in § 72.214. The NRC subsequently issued a final rule on October 19, 2000 (65 FR 62581), that approved the NAC International NAC-UMS® Universal Storage System and added it to the list of NRC-approved cask designs in § 72.214 as Certificate of Compliance No. 1015.

The NAC International NAC-UMS® Universal Storage System consists of the following components: 1) transportable storage canister (TSC), which contains the spent fuel; 2) vertical concrete cask, which contains the TSC during storage; and 3) a
transfer cask, which contains the TSC during loading, unloading, and transfer operations. Amendment No. 8 revises the certificate of compliance to 1) add the storage of damaged boiling-water reactor spent fuel, including higher enrichment and higher burnup spent fuel; 2) change the allowable fuel burnup range; and 3) expand the boiling-water reactor class 5 fuel inventory that could be stored in the cask; and 4) change definitions in the technical specifications that are associated with the contents of the spent nuclear fuel stored in the cask (e.g., high burnup fuel and initial peak planar-average enrichment).

IV. 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 31885). The NRC requests comment on the proposed rule with respect to clarity and effectiveness of the language used.

V. Availability of Documents

The documents identified in the following table are available to interested persons, as indicated.

<table>
<thead>
<tr>
<th>DOCUMENT</th>
<th>ADAMS ACCESSION NO.</th>
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</thead>
<tbody>
<tr>
<td>Submission of a Request to Amend the U.S. Nuclear Regulatory Commission Certificate of Compliance No. 1015 for the NAC-UMS Cask System, December 18, 2019</td>
<td>ML20006D749</td>
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<tr>
<td>Application for Amendment No. 8 to the Model No. NAC-UMS Storage Cask – Acceptance Letter, March 17, 2020</td>
<td>ML20076A546</td>
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<tr>
<td>NAC International, Submittal of Supplement to Amend the NRC Certificate of Compliance No. 1015 for the NAC-UMS Cask System, April 24, 2020</td>
<td>ML20122A201</td>
</tr>
<tr>
<td>Application for Amendment No. 8 to the Model No. NAC-UMS Storage Cask – Request for Additional Information, June 25, 2020</td>
<td>ML20170A800</td>
</tr>
<tr>
<td>Submission of Responses to the U.S. Nuclear Regulatory Commission Request for</td>
<td>ML20227A066</td>
</tr>
</tbody>
</table>
The NRC may post materials related to this document, including public comments, on the Federal Rulemaking Web site at https://www.regulations.gov under Docket ID NRC-2021-0052.

Dated: July 26, 2021.

For the Nuclear Regulatory Commission.

Margaret M. Doane, 
Executive Director for Operations.