

NUCLEAR REGULATORY COMMISSION

10 CFR Part 52

[NRC-2025-0018]

RIN 3150-AL26

Revising the Duration of Design Certifications

AGENCY: Nuclear Regulatory Commission.

ACTION: Proposed rule.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is proposing to amend its regulations to revise the duration of design certifications (DCs). Specifically, this proposed rule would replace the 15-year duration for DCs with a 40-year duration period, both for existing DCs currently in effect and generically for future DCs, including renewals. This proposed rule would not change the date of issuance or renewal for existing DCs (i.e., the start date by which an existing DC may be referenced would remain unchanged). The proposed rule would also incorporate a minor editorial correction.

DATES: Submit comments on the proposed rule by August 1, 2025. 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: You may submit comments by any of the following; however, the NRC encourages electronic comment submission through the **Federal rulemaking website**:

- **Federal Rulemaking Website:** Go to <https://www.regulations.gov> and search for Docket ID NRC-2025-0018. Address questions about NRC dockets to Helen Chang; telephone: 301-415-3228; email: Helen.Chang@nrc.gov. For technical questions contact the individuals listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **Email comments to:** Rulemaking.Comments@nrc.gov. If you do not receive an automatic email 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.

You can read a plain language description of this proposed rule at <https://www.regulations.gov/docket/NRC-2025-0018>. 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: Daniel Doyle, Office of Nuclear Material Safety and Safeguards, telephone: 301-415-3748, email: Daniel.Doyle@nrc.gov; or Jordan Glisan, Office of Nuclear Reactor Regulation, telephone: 301-415-3478, email:

Jordan.Glisan@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
- V. Plain Writing
- VI. Paperwork Reduction Act
- VII. Regulatory Planning and Review (Executive Order 12866)
- VIII. Availability of Documents

I. Obtaining Information and Submitting Comments

A. Obtaining Information

Please refer to Docket ID NRC-2025-0018 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-2025-0018.

- **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, at 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 of this document.

- **NRC’s PDR:** The PDR, where you may examine and order copies of publicly available documents, is open by appointment. To make an appointment to visit the PDR, please send an email to PDR.Resource@nrc.gov or call 1-800-397-4209 or 301-415-4737, between 8 a.m. and 4 p.m. eastern time, Monday through Friday, except Federal holidays.

- **Technical Library:** The Technical Library, which is located at Two White Flint North, 11545 Rockville Pike, Rockville, Maryland 20852, is open by appointment only. Interested parties may make appointments to examine documents by contacting the NRC Technical Library by email at Library.Resource@nrc.gov between 8 a.m. and 4 p.m. eastern time, Monday through Friday, except Federal holidays.

B. Submitting Comments

The NRC encourages electronic comment submission through the Federal rulemaking website (<https://www.regulations.gov>). Please include Docket ID NRC-2025-0018 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 <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 September 15, 2025. However, if the NRC receives significant adverse comments by August 1, 2025, 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 or as otherwise appropriate. 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.

For the specific proposed changes to the NRC's regulations and additional discussion and associated analyses (including the regulatory analysis, environmental assessment, and finding of no significant impact), see the direct final rule published in the Rules and Regulations section of this issue of the *Federal Register* and at <https://www.regulations.gov> under Docket ID NRC-2025-0018.

III. Background

A standard design certification, also referred to simply as a design certification (DC), is a Commission approval by regulation of a final standard design for a nuclear power facility. A DC is codified via rulemaking and is independent of a specific site or an application to construct or operate a plant. An application to construct or operate a plant may reference a DC to take advantage of reviews previously completed by the NRC, though such an application must still address certain site-specific matters. The NRC's regulations governing DCs are codified in part 52 of title 10 of the *Code of Federal Regulations* (10 CFR), Subpart B, "Standard Design Certifications," and specific DCs are published as appendices to part 52.

In this proposed rule, the NRC would amend its regulations to revise the duration of DCs, as approved by the Commission in Staff Requirements Memorandum (SRM)-

COMDAW-24-0001, “Revising the Duration of Design Certifications,” dated November 14, 2024. Specifically, this proposed rule would replace the 15-year duration period for initial DCs and renewals with a 40-year duration period, both generically and for each DC currently in effect. For DCs currently in effect, the respective date of issuance or renewal (i.e., the start date by which a DC may be referenced) would remain unchanged by this proposed rule. Otherwise stated, the 40-year duration period would start upon the date of issuance or renewal of the DC.

Five DCs are currently in effect: appendix A to 10 CFR part 52, “Design Certification Rule for the U.S. Advanced Boiling Water Reactor,” appendix D to 10 CFR part 52, “Design Certification Rule for the AP1000 Design,” appendix E to 10 CFR part 52, “Design Certification Rule for the ESBWR Design,” appendix F to 10 CFR part 52, “Design Certification Rule for the APR1400 Design,” and appendix G to 10 CFR part 52, “Design Certification Rule for NuScale.” Two DCs have expired because no timely renewal applications were submitted in accordance with § 52.57, “Application for renewal.” These are appendix B to 10 CFR part 52, “Design Certification Rule for the System 80 + Design,” and appendix C to 10 CFR part 52, “Design Certification Rule for the AP600 Design.” Accordingly, this direct final rule applies to the five DCs currently in effect and does not apply to the two expired DCs.

IV. Discussion

The NRC is proposing to amend its regulations to revise the duration of DCs by replacing the 15-year duration for initial DCs and renewals with a 40-year duration period, both generically and for each DC currently in effect, as approved by the Commission in SRM-COMDAW-24-0001, “Revising the Duration of Design Certifications.”¹ The NRC is proposing to revise these regulations based on lessons

learned from carrying out the DC renewal process. These amendments would reduce unnecessary regulatory burden on applicants and save NRC resources without any reduction in safety or security.

As discussed in the 1989 final rule promulgating 10 CFR part 52, the 15-year duration for DCs was originally intended to allow actual operating experience with a given design to accumulate before the DC either expires or becomes eligible for renewal (54 FR 15372; April 18, 1989). However, experience has shown that the current 15-year certification period does not allow for sufficient time for such operating experience to accumulate prior to a DC either expiring or needing to be renewed to remain effective. In this situation, both the DC renewal applicant and the NRC expend resources involved with the submittal and review of a DC renewal application that does not reflect additional insights derived from the DC being referenced in the licensing context.

In addition, other existing regulations will continue to ensure that codified DCs and the plants referencing them meet safety and security requirements. With respect to generic changes to DC rules, the Commission has existing criteria under § 52.63(a)(1) for determining when it may modify, rescind, or impose new requirements on the certification information for a previously certified design. For example, one way the Commission may make changes to a DC rule is where the change is “necessary to provide adequate protection of the public health and safety or the common defense and security” (10 CFR 52.63(a)(1)(ii)). The Commission may change a DC rule either on its own motion or in response to a petition for rulemaking from any person, including design vendors, and such changes will provide for notice and opportunity for public comment (10 CFR 52.63(a)(2)(ii)). For potential plant-specific safety or security issues, the Commission may use plant-specific orders, subject to applicable issue finality provisions (e.g., § 52.63(a)(4) for Tier 1 information). In addition, licensees and applicants who reference a DC may also address potential safety or security concerns using the

departure process described in the associated DC rule. That is, all DC rules are codified in appendices to part 52 and are structured such that Section VIII of the associated DC rule appendix prescribes an appropriate process for evaluating potential departures from the DC rule, including via a request for a license amendment or exemption. If NRC approval is required, the NRC would evaluate the request using its typical processes.

Accordingly, the change in duration for DCs would provide more time for a design to be referenced in a license application and more time for the design vendor to accumulate construction and actual operating experience before a design vendor would need to submit a renewal application. In addition, it would reduce unnecessary burdens with no reduction in safety or security. Therefore, the NRC is proposing to amend its regulations to change the DC duration to 40 years generically in §§ 52.55, 52.57, and 52.61 as well as for DCs currently in effect in the applicable appendices to 10 CFR part 52.

V. 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).

VI. Paperwork Reduction Act

This proposed 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 3150-0151.

Public Protection Notification

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

VII. Regulatory Planning and Review (Executive Order 12866)

Executive Order (E.O.) 12866, as amended by E.O. 14215, provides that the Office of Information and Regulatory Affairs (OIRA) will determine whether a regulatory action is significant as defined by E.O. 12866 and will review significant regulatory actions. OIRA determined that this proposed rule is a significant regulatory action under E.O. 12866.

VIII. Availability of Documents

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

DOCUMENT	ADAMS Accession No. / Federal Register Citation
Environmental Assessment and Finding of No Significant Impact by the U.S. Nuclear Regulatory Commission Relating to Revising the Duration of Design Certifications, dated May 2025	ML25049A031
SRM-COMDAW-24-0001, "Revising the Duration of Design Certifications," dated November 14, 2024	ML24319A209

<i>Federal Register</i> notice—Final Rule, “Early Site Permits; Standard Design Certifications; and Combined Licenses for Nuclear Power Reactors,” dated April 18, 1989	54 FR 15372
<i>Federal Register</i> notice—Final Rule, “Licenses, Certifications, and Approvals for Nuclear Power Plants,” dated August 28, 2007	72 FR 49352
Presidential Memorandum, “Plain Language in Government Writing,” published June 10, 1998	63 FR 31885

The NRC may post materials related to this document, including public comments, on the Federal rulemaking website at <https://www.regulations.gov> under Docket ID NRC-2025-0018.

Endnotes:

¹ For Appendix D to Part 52, “Design Certification Rule for the AP1000 Design,” this rule would replace the 20-year duration (rather than 15-year duration) with a 40-year duration period. The initial duration period was previously extended from 15 years to 20 years for the AP1000 design by direct final rule (86 FR 52593; September 22, 2021).

List of Subjects in 10 CFR Part 52

Administrative practice and procedure, Antitrust, Combined license, Early site permit, Emergency planning, Fees, Inspection, Issue finality, Limited work authorization, Manufacturing license, Nuclear power plants and reactors, Probabilistic risk assessment,

Prototype, Reactor siting criteria, Redress of site, Penalties, Reporting and recordkeeping requirements, Standard design, Standard design certification.

Dated: June 30, 2025.

For the Nuclear Regulatory Commission.

/RA/

Michael King,
Acting Executive Director for Operations.