



POLICY ISSUE (Notation Vote)

December 31, 2020

SECY-21-0001

FOR: The Commissioners
FROM: Margaret M. Doane
Executive Director for Operations
SUBJECT: RULEMAKING PLAN —TRANSFORMING THE NRC'S ENVIRONMENTAL REVIEW PROCESS

PURPOSE:

The purpose of this paper is to request Commission approval to initiate a rulemaking to revise and update the U.S. Nuclear Regulatory Commission's (NRC's) regulations in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions." Through these regulations, the NRC carries out its responsibilities under the National Environmental Policy Act (NEPA). In this proposed rulemaking, the staff plans to streamline and enhance the flexibility of the NRC's NEPA environmental review process and to update or otherwise conform certain provisions in 10 CFR Part 51 to reflect NRC staff practice, while ensuring the appropriate consideration of potential environmental impacts. Additionally, this rulemaking would provide greater alignment between the environmental review process and the safety reviews for commercial advanced nuclear reactors pursuant to the proposed 10 CFR Part 53 rulemaking that the staff is developing in response to the Nuclear Energy Innovation and Modernization Act (NEIMA).¹ Additionally, the Council on Environmental Quality (CEQ) promulgated a final rule on July 16, 2020 amending its NEPA-implementing regulations,² and the staff proposes to consider the changes to CEQ's regulations as part of this rulemaking.

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Enclosure 1 transmitted herewith contains Official Use Only – Sensitive Internal Information. When separated from Enclosure 1, this transmittal document is decontrolled.

¹ Pub. L. 115-439, 132 Stat. 5565 (2019).

² Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act, 85 FR 43,304 (July 16, 2020).

SUMMARY:

This paper provides the staff's recommendation to initiate a rulemaking to revise and update the regulations in 10 CFR Part 51. The recommended rulemaking would streamline the staff's environmental review process; assist the Commission and the staff, as appropriate, in focusing on the relevant environmental issues in their decision-making; maintain openness with the public; and reduce the burden on applicants, licensees, and the NRC.

BACKGROUND:

The regulations in 10 CFR Part 51 require staff to assess the potential environmental impacts that may result from proposed NRC licensing and regulatory actions. Specifically, 10 CFR Part 51 requires the staff to prepare either an environmental impact statement (EIS) or an environmental assessment (EA) to consider the potential environmental impacts of a proposed licensing or regulatory action, unless the proposed action is categorically excluded under 10 CFR 51.22.³ An EIS is required for those proposed actions that are likely to result in a significant environmental impact. In accordance with 10 CFR 51.20(b), the Commission has determined that certain categories of licensing actions require the preparation of an EIS or supplemental EIS, such as the issuance or renewal of a license to operate a nuclear power reactor. The staff may prepare an EA if the proposed action is not one of the actions listed in 10 CFR 51.20(b). Under NEPA, the purpose of the EA is to assist the agency in determining whether it needs to prepare an EIS.

The 10 CFR Part 51 regulations also require that applicants for certain NRC licenses prepare and submit an environmental report (ER) as part of the license application.⁴ The staff then relies upon the applicant's ER as the starting point for its own independent analysis in preparing its EIS or EA.

Several external and internal drivers have informed the staff's recommendation for this proposed rulemaking. The external drivers include the following:

- Title 41 of the Fixing America's Surface Transportation Act (FAST-41), signed into law on December 4, 2015, and Executive Order (EO) 13807, "Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects," dated August 15, 2017, both of which seek to promote a more efficient and expedited environmental review and permitting process under NEPA;
- the Retrospective Review of Administrative Requirements (RROAR)⁵ initiative, which was initiated to support Executive Order 13771, Reducing Regulation and Controlling Regulatory Costs, dated February 3, 2017, which is intended to ensure that the NRC's regulations remain current and effective, provide a link to the executive branch's efforts to streamline application processes, and reduce burdens on stakeholders;

³ A categorical exclusion is a category of proposed actions that the agency has determined will not result in a significant environmental impact unless "extraordinary" or "special" circumstances are present. An agency's list of categorical exclusions must be established by notice and comment rulemaking. The NRC's list is at 10 CFR 51.22.

⁴ The primary regulation is 10 CFR 51.45, "Environmental report," which sets forth the generic requirements for the preparation of the ER. Later sections of 10 CFR Part 51 set forth additional report preparation requirements specific to the license sought or regulatory action being considered. See 10 CFR 51.49, "Environmental report—limited work authorization," through 10 CFR 51.68, "Environmental report—rulemaking."

⁵ 82 FR 9339; February 3, 2017

- NEIMA, which requires the NRC to develop a licensing process for advanced nuclear reactors and to establish, by December 31, 2027, a new “technology-inclusive regulatory framework” for optional use by commercial advanced reactor⁶ license applicants; and
- CEQ’s July 16, 2020, final rule that comprehensively updates its NEPA-implementing regulations at 40 CFR Parts 1500 through 1508, with the stated intent to enhance the efficiency of the NEPA process, to clarify key NEPA terms and requirements that have been the subject of litigation, and to provide greater certainty and predictability in NEPA implementation.⁷

The internal drivers include the following:

- “NRC Vision and Strategy: Safely Achieving Effective and Efficient Non-Light Water Reactor Mission Readiness,” issued December 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16356A670) to prepare the NRC to review and regulate a new generation of non-light water reactors; and
- the Environmental Center of Expertise’s self-initiated Transformation Initiative, which identified several provisions in Part 51 that can be revised to improve the NRC’s environmental review process, including those concerning scoping and public meetings.

Currently, the NRC has several rulemakings and associated guidance updates planned or in progress that pertain to the regulations in 10 CFR Part 51, including:

- the 10-year update to Appendix B, “Environmental Effect of Renewing the Operating License of a Nuclear Power Plant,” to Subpart A, “National Environmental Policy Act—Regulations Implementing Section 102(2),” of 10 CFR Part 51 (NRC-2018-0296);⁸
- SECY-20-0065, “Categorical Exclusion from Environmental Review,” (NRC-2018-0300), rulemaking plan dated July 20, 2020 (ADAMS Accession No. ML20021A158 (Pkg));
- updating and revising the environmental review guidance for nuclear reactors (NUREG-1555, “Environmental Standard Review Plan: Standard Review Plans for Environmental Reviews for Nuclear Power Plants,” Revision 1, issued July 2007); for materials (NUREG-1748, “Environmental Review Guidance for Licensing Actions Associated with NMSS Programs,” issued August 2003); and for non-power production and utilization facilities (NPUFs) (NUREG-1537, “Guidelines for Preparing and Reviewing Applications for the Licensing of Non-Power Reactors,” Parts 1 and 2, issued February 1996; and the interim staff guidance augmenting NUREG-1537, issued October 2012); and
- developing a generic environmental impact statement (GEIS) and preparing a rulemaking to codify the findings of that GEIS for advanced reactors as directed in

⁶ An advanced nuclear reactor is a nuclear fission or fusion reactor, commercial or prototype, with significant improvements over the current operating fleet, such as inherent safety features, lower waste yields and greater fuel utilization, fuels other than uranium, and greater thermal efficiency. Advanced reactors include light-water and non-light water small modular reactors (SMRs) generating between 20 and 300 MW of electricity (20-300 MWe); and microreactors generating less than 20 MWe. Other advanced reactors may be larger reactors generating more than 300 MWe.

⁷ 85 FR at 43,306.

⁸ According to the preamble to Appendix B to Subpart A of 10 CFR Part 51, “[o]n a 10-year cycle, the Commission intends to review the material in this appendix and update it if necessary.” Appendix B codifies the findings of NUREG-1437, “Generic Environmental Impact Statement for License Renewal of Nuclear Plants,” issued May 1996, into generic (Category 1) and site specific (Category 2).

SRM-SECY-20-0020, "Results of Exploratory Process for Developing a Generic Environmental Impact Statement for the Construction and Operation of Advanced Nuclear Reactors," dated September 21, 2020 (ADAMS Accession No. ML20265A112).

This rulemaking is intended to meet the requirements of FAST-41, EO 13807, and CEQ's July 2020 final rule, while continuing to ensure that the NRC fully complies with NEPA requirements. In addition, the proposed rulemaking is intended to be consistent with the NEIMA requirements related to improving the licensing process for advanced nuclear reactors—in particular, by identifying certain advanced reactor licensing actions that would not, within a set of prescribed parameters, require the default preparation of an EIS, but rather the less resource-intensive and time-consuming EA (the staff would only prepare an EIS if the staff could not make the requisite finding of no significant impact). The goal of this proposed rulemaking is to achieve these outcomes with no increase in burden to applicants, licensees, or the NRC while still meeting NEPA requirements.

DISCUSSION:

Title

"TRANSFORMING THE NRC'S ENVIRONMENTAL REVIEW PROCESS"

Regulation

10 CFR Part 51

Regulatory Issue

In response to efforts to update and streamline the 10 CFR Part 51 regulations consistent with the external and internal drivers listed above, the staff has identified potential revisions to 10 CFR Part 51. The staff's work has also been informed by best practices from previous reviews, comments, and submittals from industry groups and licensees in identifying additional potential revisions that would reduce both the duration and the complexity of environmental reviews for licensing actions.

For example, the staff has identified 10 CFR 51.20(b) as a candidate for potential streamlining revisions. In 10 CFR 51.20(b), the NRC lists several categories of licensing actions that the Commission has determined require the preparation of an EIS. Based upon over 40 years of NRC regulatory experience, the staff has determined that preparation of a less resource-intensive and less time-consuming EA may be sufficient to meet NEPA requirements to fully evaluate and disclose the environmental impacts for some categories or subcategories of licensing applications presently falling within the scope of 10 CFR 51.20(b), such as license renewals for the current fleet of nuclear power reactors. In those site-specific instances in which the staff could not make the requisite finding of no significant impact, the staff would then prepare an EIS.

Additionally, due to its experience with environmental reviews of large LWRs, the staff has determined that an EA may be appropriate for some advanced reactor and NPUF applications with limited environmental impacts, such as those involving the deployment and operation of micro-reactors. Furthermore, some regulations in 10 CFR Part 51, such as 10 CFR 51.51(a) (Table S-3) and 10 CFR 51.52 (Table S-4), are premised upon large light-water power reactors being the primary technology used by the industry. The staff recommends considering amendments to make these regulations technology-inclusive to support environmental reviews

of current or potential advanced reactor and NPUF applications. This change would allow the staff to make a determination on a case-specific basis whether an EA is appropriate.

The staff has also identified several 10 CFR Part 51 regulations for which readability and clarity can be improved (e.g., combining the two 10 CFR Part 51 definitions sections, 10 CFR 51.4 and 51.14, into one) and has determined that the requirement for paper copies of environmental documents can be eliminated. The staff has also determined that these rulemaking changes would improve the NRC's environmental review process; reduce the review time for new licensing actions; and reduce the resource burden on applicants, licensees, and the staff.

In reviewing the CEQ final rule, the staff has identified several changes that merit further consideration as potential revisions to 10 CFR Part 51, including the following:

- establishing schedule and page limits for EISs and EAs;
- deleting the definition of and striking references to "cumulative impacts;"
- establishing a definition for "reasonable alternatives" that includes consideration of technical and economic feasibility;
- allowing applicants to prepare an environmental assessment or environmental impact statement; and
- various administrative changes related to document distribution, indexing, and electronic notification.

If rulemaking is approved, then as part of the regulatory basis development process, the staff would evaluate whether the regulations in 10 CFR Part 51 should be changed to align with CEQ's July 2020 final rule, or alternatively, address the CEQ rule changes in guidance. In preparing a regulatory basis, staff will perform preliminary cost benefit analyses and seek stakeholder input.

Existing Regulatory Framework

The NRC sets forth its regulations for implementing NEPA in 10 CFR Part 51. These regulations provide the requirements for applicants' ERs and for the staff's preparation and issuance of EAs, draft and final EISs, and other associated NEPA documents, such as a notice of intent. In addition, these regulations include requirements for scoping, public participation, and the publication of agency decision documents, namely, a finding of no significant impact for an EA and a record of decision for an EIS.

The NRC's final rule, dated March 12, 1984 (49 FR 9352), established the current 10 CFR Part 51 regulatory framework. The 10 CFR Part 51 regulations are based, to a large extent, on CEQ's NEPA-implementing regulations, which were promulgated in 1978.⁹ With respect to its role as an independent regulatory agency, the NRC's regulations state:

The regulations in this subpart implement section 102(2) of NEPA in a manner which is consistent with the NRC's domestic licensing and related regulatory authority under the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and the Uranium Mill Tailings Radiation Control Act of 1978, and which *reflects the Commission's announced*

⁹ CEQ's NEPA-implementing regulations are set forth in 40 CFR Parts 1500–1508.

policy to take account of the regulations of the Council on Environmental Quality published November 29, 1978 (43 FR 55978-56007) voluntarily, subject to certain conditions.¹⁰

The Commission further stated in the Statements of Consideration for the 1984 rule that the NRC, “as an independent regulatory agency,” was bound only by those CEQ NEPA regulations that are “procedural or ministerial in nature” and that the “NRC is not bound by those portions of CEQ’s NEPA regulations which have a substantive impact on the way in which the Commission performs its regulatory functions.”¹¹

On July 16, 2020, CEQ published a final rule streamlining its NEPA regulations.¹² The effective date of the CEQ rule is September 14, 2020, and CEQ requests that agencies issue proposed rules that would conform their NEPA implementing regulations to CEQ’s final rule by September 14, 2021.¹³ The staff will review the CEQ final rule and consider the merits of adopting appropriate revisions based on the final rule into this 10 CFR Part 51 rulemaking, if the Commission approves the staff’s recommendation to initiate rulemaking. In this regard, the staff notes that some provisions in CEQ’s regulations may be inconsistent with judicial interpretations of NEPA and have specifically been challenged in pending lawsuits on CEQ’s final rule, including CEQ’s deletion of the term “cumulative impacts” from its regulations and deletion of the requirement to analyze reasonable alternatives outside the agency’s jurisdiction. If the Commission approves rulemaking, the staff, in consultation with the Office of the General Counsel (OGC), will make a recommendation to the Commission to propose inclusion of the CEQ provisions in question or to follow existing judicial interpretations of NEPA in the proposed rule provided to the Commission. In the staff’s preparation of the proposed rule, the staff will review any judicial decisions rendered in the pending lawsuits to inform the staff’s proposal to the Commission.

Further, on November 2, 2020, the Office of Management and Budget (OMB) issued memorandum M-21-01, “Budget and Management Guidance on Updates to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act,” (<https://www.whitehouse.gov/wp-content/uploads/2020/11/M-21-01.pdf>). The memorandum requested agencies submit a plan to OMB outlining the agency’s plan to initiate, propose, and finalize new or updated agency NEPA Procedures within 30 days and submit additional status reports by March 15, 2021 and August 1, 2021. Agencies were also instructed to identify any funding needs for this effort in their FY 2023 budget submissions to OMB. The memorandum also stated that agencies must consult with CEQ in the development of their new or revised agency NEPA procedures consistent with 40 CFR 1507.3. The staff intends to inform OMB of the NRC’s plans when the Commission provides direction on this rulemaking plan.

Additionally, the NRC has issued numerous guidance documents to inform applicants, licensees, the public, and the staff about its environmental review process. Enclosure 2 to this rulemaking plan provides a complete list of the guidance documents with a nexus to 10 CFR Part 51.

Explanation of Why Rulemaking Is the Preferred Solution

As described above, the staff identified the key reasons to revise the regulatory language in 10 CFR Part 51 as updating and streamlining the staff’s environmental reviews as well as

¹⁰ 10 CFR 51.10(a) (emphasis added).

¹¹ 49 FR at 9352 and, 9356.

¹² 85 FR 43304; July 16, 2020.

¹³ 40 CFR 1507.3(b)); see also 85 FR, at 43340.

reducing the burden on applicants preparing ERs. Through rulemaking, the staff will develop technology-inclusive regulatory language for the reactor-based 10 CFR Part 51 regulations, including provisions that concern advanced reactors and NPUFs. The staff expects certain changes can be made through guidance; but with others, rulemaking is warranted (e.g., to avoid granting large numbers of exemptions). As part of its evaluation of how best to achieve these objectives, the staff considered the three alternatives described below.

Alternative 1: No Action (Status Quo)

The NRC would not make any revisions to 10 CFR Part 51 or any changes to its NEPA guidance for the purposes of streamlining or otherwise making the staff's NEPA reviews more efficient. Under Alternative 1, staff would continue to prepare EISs for all new reactor applications and reactor license renewals.

Pros:

No resources would be expended on rulemaking or guidance development activities.

Would maintain the current, well understood framework.

Would ensure all environmental reviews for new reactor applications and reactor license renewals would receive the full public engagement and analysis associated with an EIS.

Would allow any litigation associated with the new CEQ regulations to be adjudicated before undertaking rulemaking.

Cons:

The current regulation in 10 CFR 51.20(b) requires the preparation of an EIS for certain specified categories of licensing actions, although the less resource-intensive and time-consuming EA may be sufficient to comply with NEPA for these categories of licensing actions. The no-action alternative does not address this issue. Similarly, the no-action alternative requires an applicant to continue developing a more complex ER to inform the staff's preparation of an EIS.

The no-action alternative would continue the existing environmental review process associated with the licensing of new and advanced reactor designs, leading to potential unnecessary burdens on both applicants and the staff through the more complex and resource-intensive and time-consuming EIS process, along with potentially needing to process exemption requests to enable the staff to complete an EA in lieu of an EIS, when justified. The current Part 51 regulations also impose an unnecessary burden on the NRC for the publication and distribution of hard copies of environmental documents, when a more efficient and cost-free electronic distribution process can be readily accessed for most who request documents.

The CEQ final rule, published on July 16, 2020, and effective on September 14, 2020, extensively revises CEQ's NEPA-implementing regulations. Agencies may apply the previous CEQ regulations to environmental reviews begun before the effective date, but the new rule calls for Federal agencies to bring their environmental regulations into alignment with the CEQ final rule by September 14, 2021. As an independent regulatory agency, the NRC is not bound by CEQ's regulations that have a substantive impact on the way in which the Commission performs its regulatory functions. Still, the no-action

alternative would place the NRC in a position of nonalignment with some of CEQ's NEPA-implementing regulations that otherwise would be reasonable for the NRC to adopt.

Alternative 2: Enhanced Guidance (Revise NEPA Guidance, No Rulemaking): Continue to use the regulations in 10 CFR Part 51 without changes and instead revise guidance for applicants and staff.

Under Alternative 2, staff would continue to prepare EISs for all reactor applications.

Pros:

Revised guidance could resolve some environmental review issues, such as setting page limits and timeframes, and making other minor process changes. Such revisions would reduce the resource burden on applicants and the NRC staff and would most likely shorten the duration of the staff's environmental reviews.

Guidance could be updated more quickly than rulemaking and any ensuing benefits would be realized sooner.

Resource expenditures to revise guidance would be less than for a rulemaking.

Cons:

This alternative does not amend 10 CFR Part 51 to address advanced reactor and NPUF designs. Applicants and staff would incur an unnecessary additional burden under 10 CFR 51.20(b), in time and resources to prepare EISs for some advanced reactor environmental reviews that could be done through an EA. Likewise, this alternative would not eliminate the burden associated with processing exemption requests to complete an EA in lieu of an EIS, when justified. Furthermore, to the extent that environmental reviews are a required part of any application process, this alternative is not supportive of the NEIMA goal of establishing predictable, efficient, and timely reviews for advanced reactor applications. This alternative also would not align 10 CFR Part 51 with certain provisions of CEQ's July 2020 final rule that otherwise would be appropriate for the NRC to adopt.

Resource expenditures for the development of guidance materials would be less than for a rulemaking effort, but the current 10 CFR Part 51 regulations would still result in inefficiencies and unnecessary costs to both applicants and the staff.

Additionally, although certain process improvements being considered by staff or otherwise directed by the CEQ July 2020 rule (e.g., placing page limits on EISs) do not necessarily require rulemaking and could potentially be made in guidance, guidance is not binding. To the extent that the NRC wants to ensure internal compliance, greater rigor, and consistency between staff elements for a given process improvement, that item should be placed into regulatory language, thus requiring an exemption for any deviation.

Alternative 3: Rulemaking: Conduct a rulemaking to revise the NRC's NEPA-implementing regulations in 10 CFR Part 51

Pros:

The staff has already identified revisions to the current 10 CFR Part 51 regulations that could save staff resources by allowing faster, shorter, and less expensive environmental reviews without compromising NRC's NEPA responsibilities. Other revisions to enhance efficiency, flexibility, and transparency could be identified through the rulemaking process.

This alternative would allow alignment of 10 CFR Part 51 with certain provisions of CEQ's July 2020 final rule that would be appropriate for the NRC to adopt.

Revisions to 10 CFR 51.20 would facilitate greater flexibility in allowing the staff to prepare an EA rather than an EIS, where appropriate, for certain categories or subcategories of licensees and revisions to other 10 CFR Part 51 regulations would increase the efficiency and decrease the cost and the duration of the environmental review for new and advanced reactor and NPUF applications, thereby reducing the burden to applicants and the staff and avoiding potential exemption requests.

A rulemaking to revise 10 CFR Part 51 regulations would be consistent with ongoing agency efforts to comply with new Federal requirements (e.g., NEIMA, FAST-41) as they relate to the NRC's environmental reviews, allow flexibility to address advanced reactor designs and new technologies, and codify best practices and lessons learned that could reduce staff and applicant burdens when preparing environmental documents.

Cons:

Resources would be needed for rulemaking.

It may take longer to implement and realize the benefits from certain changes.

It may decrease staff flexibilities.

Litigation challenges to the CEQ July 2020 final rule introduce a factor of uncertainty to any NRC rulemaking that intends to conform with the challenged CEQ provisions.

Description of Rulemaking: Scope

The purpose of this rulemaking is to perform substantial revisions to 10 CFR Part 51 that would align 10 CFR Part 51 with the NRC's efforts to streamline and update the NRC's NEPA process as well as incorporate relevant and appropriate conforming changes from CEQ's July 2020 final rule.

Description of Rulemaking: Estimated Schedule

If the Commission approves this rulemaking, the following estimated schedule provides the rulemaking timeline:

- Deliver regulatory basis: 12 months after the Commission issues its Staff Requirements Memorandum.

- Deliver proposed rule to the Commission: 12 months after the completion of the regulatory basis comment period.
- Deliver final rule to the Commission: 12 months after the proposed rule comment period closes.

Description of Rulemaking: Preliminary Recommendation on Priority

Based on the Common Prioritization of Rulemaking methodology, updated September 2018 (ADAMS Accession No. ML18263A070), the preliminary priority for Alternative 3, Rulemaking, is medium. This rulemaking is estimated as a medium priority because (1) it would be a low contributor toward the NRC Strategic Plan safety goal, (2) it would be a significant contributor toward the Strategic Plan's Principles of Good Regulations, (3) it would be a significant contributor to supporting the NRC's mission for conformance with external regulations and NRC licensing initiatives, and (4) it would be a significant contributor to reduce regulatory burden.

Description of Rulemaking: Estimate of Resources

The staff estimates that the proposed action would result in a high magnitude of costs savings. The staff estimates that implementation of this rulemaking would require 3 years to complete. The estimated savings (averted costs) over 20 years to reactor licensees, advanced reactor applicants/licensees, and the NRC as a result of this rulemaking would be approximately \$73 million dollars (7-percent discount rate). This savings is net of the administrative costs for the rulemaking, including contractor dollars. Based on an estimate of this order of magnitude, the cost of this rulemaking request is justified.

The staff estimates that the proposed action would provide the following benefits:

- **Power Plant License Renewals:** The preliminary cost analysis assumes that the four remaining operating power plants operating under their original licenses will submit a license renewal within the timeliness requirements to do so. In some instances, the NRC expects that each licensee would realize approximately \$1 million (undiscounted) in savings through the submittal of an ER in support of NRC's development of an EA instead of a more complex EIS. The NRC expects a similar amount of savings under these conditions for the agency.
- **Subsequent License Renewals:** Based on a 2020 survey by the Nuclear Energy Institute, licensees intend to submit subsequent license renewal applications for 39 reactor units.¹⁴ The NRC estimates that each licensee would realize a savings of approximately \$1 million (undiscounted) through the submittal of an ER intended to support the NRC preparation of an EA rather than an EIS. The NRC anticipates a similar amount of cost savings for the agency through the preparation of a streamlined EA rather than a supplemental EIS.
- **Power Plant Licenses:** This rulemaking would accommodate the licensing of any nuclear power reactor design, including any potential micro-reactor and/or small modular reactor applications. At present, the staff does not anticipate submittal of new large light-water reactor applications any time soon. With respect to advanced reactor applications, the staff is reviewing one application and anticipates receiving an unknown number of

¹⁴ Although there are 39 reactor units intended, some of these units are located at the same site. These collocated units that apply to renew their licenses at the same time would be subject to one environmental review, which would reduce the number of reviews to less than 39.

additional construction permit/operating license/combined license applications in the future. Based on the U.S. Department of Energy's advanced reactor demonstration program,¹⁵ the staff assumes that two advanced reactor applications would be submitted in the 2022-2023 timeframe; license renewal for these two advanced reactors is outside the scope of this cost analysis. If this rulemaking is approved, once the rule is issued, the staff estimates that one advanced reactor license applicant would save approximately \$1.3 million (undiscounted). The NRC anticipates a similar amount of cost savings during the preparation of the EIS.

- **Testing Facility Licenses:** Initial licensing and license renewal for testing facilities, which currently require an EIS, could benefit from the rulemaking because experience has shown that the potential environmental impacts of testing facilities could be adequately assessed by an EA. Based on the current interest in new testing facilities to support the U.S. Department of Energy's advanced reactor demonstration program and the one existing NRC-licensed testing facility, the NRC estimates that about 5 applicants would realize a savings of approximately \$1 million (undiscounted) through the submittal of an ER in support of NRC's development of an EA instead of a more complex EIS.
- **Materials Licenses:** At present, the staff does not expect any near-term licensing actions requiring EISs for fuel cycle facilities, decommissioning, spent fuel storage, or uranium recovery facilities. Specifically, the staff anticipates completing an EIS for one fuel facility license renewal applicant in 2021 and an EIS for a new fuel cycle facility before 2024; the remaining fuel cycle facilities will not need to renew their licenses within the 20-year time horizon associated with this rulemaking plan. The staff is developing EISs for two spent fuel consolidated interim storage facilities (CISFs) anticipated to be completed in 2021. Other than these two proposed CISFs, the staff does not anticipate any interim spent fuel storage facilities to be built outside of a reactor site, nor does it anticipate any applications to do so within the 20-year time horizon associated with this rulemaking plan. The staff is developing an EIS for decommissioning activities at the United Nuclear Corporation Church Rock uranium mill site. New uranium recovery license applications are expected to follow a number of economic indicators including the spot price of uranium. Because the spot price of uranium is currently low due to various factors in the market, the NRC has no current license applicants or indications of new applicants for such licenses in the near future. At present, the staff does not expect any significant near-term impact on materials licensees associated with this rulemaking plan. Should this 10 CFR Part 51 rulemaking affect materials licensees, the staff anticipates that additional cost savings would be realized.

Use of a streamlined environmental review process would reduce unnecessary text in environmental documents and improve efficiency without reducing NRC's NEPA requirements. The benefits of this rulemaking significantly outweigh the costs.

Cumulative Effects of Regulation

The anticipated revisions to 10 CFR Part 51 affect applicants, licensees, and the NRC staff. A preliminary assessment of the cumulative effects of this rulemaking indicates there will be a substantial reduction in burden to both industry and the NRC. The rulemaking would also better facilitate the licensing process for new and advanced reactors by updating and streamlining the environmental review process for those applications.

¹⁵ <https://www.energy.gov/ne/nuclear-reactor-technologies/advanced-reactor-demonstration-program>, accessed July 20, 2020.

Agreement State Considerations

NEPA applies only to Federal agencies. As such, the regulations in 10 CFR Part 51 are not required for the Agreement States, and they will not need to make conforming changes to their regulations. Therefore, no consideration of impacts to Agreements States is needed.

Guidance

Enclosure 2 to this plan lists the guidance documents that may be affected by the proposed revisions to 10 CFR Part 51. For many of these documents, the staff is already in the process of updating, streamlining, and providing language for new and advanced reactor designs and subsequent license renewals. The staff intends to collaborate closely with the working groups performing these revisions to ensure consistency with either a Part 51 rulemaking effort or guidance update, if the Commission approves either of those alternatives.

Advisory Committee on Reactor Safeguards Review

Because this rulemaking would not involve reactor safety, the staff recommends that the Advisory Committee on Reactor Safeguards (ACRS) not conduct a review.

Committee to Review Generic Requirements Review

Because the rulemaking would not have any backfitting implications, the staff recommends that the Committee to Review Generic Requirements (CRGR) not conduct a review.

Advisory Committee on the Medical Use of Isotopes Review

Because this rulemaking would not have any impact on the medical uses of isotopes, the staff recommends that the Advisory Committee on the Medical Use of Isotopes (ACMUI) not conduct a review.

Analysis of Legal Matters

The Office of the General Counsel (OGC) has reviewed this rulemaking plan and has not identified any issues necessitating a separate legal analysis at this time.

COMMITMENT:

If the Commission approves initiation of the rulemaking, in accordance with SECY-16-0042, "Recommended Improvements for Rulemaking Tracking and Reporting," dated April 4, 2016 (ADAMS Accession No. ML16075A066), the staff will add the rulemaking activity to the agency's list of funded rules at the next appropriate budget cycle.

RECOMMENDATION:

For the reasons provided above, the staff recommends that the Commission approve initiation of a rulemaking to revise and update 10 CFR Part 51 (Alternative 3) to enhance the efficiency and flexibility of the agency's environmental review process, create consistency across rulemaking efforts, and provide technology-inclusive language suitable for the environmental review of advanced reactors. If approved, this rulemaking would streamline and increase the flexibility of the staff's environmental review carried out under NEPA.

The staff also recommends that the Commission approve its recommendations not to conduct ACRS, CRGR, and ACMUI reviews.

RESOURCES:

Enclosure 1 of this rulemaking plan provides an estimate of the resources NRC expects would be needed to support this effort.

COORDINATION:

The Office of the General Counsel has no legal objection to this rulemaking plan and its enclosures. The Office of the Chief Financial Officer has reviewed this paper and has no concerns with the resource estimate in the Enclosure 1.



Roberts, Darrell signing on behalf
of Doane, Margaret
on 12/31/20

Margaret M. Doane
Executive Director
for Operations

Enclosures:

1. Estimated Resources (Non-publicly available)
2. NRC Environmental Guidance

SUBJECT: RULEMAKING PLAN —TRANSFORMING THE NRC'S ENVIRONMENTAL
REVIEW PROCESS, DATED: December 31, 2020

SRM-EOP200716-5
ADAMS Accession Number: PKG: ML20212L389

*via email

OFFICE	PM:NMSS/REFS/ENR*	RS:NMSS/REFS/RRPB*	BC:NMSS/REFS/RRPB*
NAME	DMussatti	GLappert	IBerrios
DATE	07/21/2020	7/30/2020	8/11/2020
OFFICE	BC:NMSS/REFS/RASB*	BC:NMSS/REFS/ERMB*	BC:NMSS/REFS/ENRB*
NAME	CBladey	JQuintero	KErwin
DATE	8/6/2020	8/11/2020	8/11/2020
OFFICE	BC:NMSS/REFS/ELRB*	BC:NRR/DORL/LPL1*	BC:NMSS/DUWP/URMDB*
NAME	RElliott	DMorey	BVTill
DATE	8/4/2020	8/5/2020	8/6/2020
OFFICE	DD:NRR/DANU*	DD:NRR/DORL*	DD:NMSS/REFS*
NAME	MShams	CErlanger	JTappert
DATE	8/31/2020	8/17/2020	8/25/2020
OFFICE	DD:NMSS/DUWP*	OGC*	OD:NMSS*
NAME	PHolahan/BPham	APessin	JLubinski
DATE	8/24/2020	9/21/2020	10/26/2020
OFFICE	OD:NRR*	CFO*	EDO
NAME	HNieh	RAllwein	DRoberts for MDoane
DATE	12/16/2020	09/02/2020	12/31/2020

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