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**Annual
Evaluation
Plan**
Fiscal Year 2025

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Abstract

The U.S. Nuclear Regulatory Commission (NRC or the agency) is an independent agency established by the Energy Reorganization Act of 1974. The NRC began operations in 1975 as a successor to the Atomic Energy Commission. The agency is required by the Foundations for Evidence-Based Policymaking Act of 2018 (Evidence Act) to develop an annual evaluation plan. This iteration of the annual evaluation plan provides summary information on evaluations that the NRC plans to initiate in fiscal year (FY) 2025, as well as the status of evaluations initiated in previous fiscal years. The Evidence Act defines an “evaluation” as “an assessment using systematic data collection and analysis of one or more programs, policies, and organizations intended to assess their effectiveness and efficiency.” The evaluations being conducted will assist in answering priority questions established in the Evidence-Building Plan, addressing mitigating strategies for findings discussed in the NRC Capacity Assessment, or meeting other evaluation needs determined to be significant, such as those required by statute or those of high value to the agency. This evaluation plan includes the discussion of two newly planned evaluations to be initiated in FY 2025: an evaluation of the NRC’s external stakeholder engagement practices and an evaluation of the NRC Future-Focused Research Program. This evaluation plan also provides a summary of other evaluations that are either planned or currently in progress, as discussed in the NRC’s evaluation plans for prior fiscal years.



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Annual Evaluation Plan

Fiscal Year 2025

Foundations for Evidence-Based Policymaking Act of 2018

The Foundations for Evidence-Based Policymaking Act of 2018 (Evidence Act),¹ signed into law January 14, 2019, emphasizes collaboration and coordination to advance data and evidence-building functions in the Federal Government. The Evidence Act statutorily mandates Federal evidence-building activities, open Government data, confidential information protection, and statistical efficiency. Evidence includes fact finding, performance measurement, policy analysis, and program evaluation used to make critical decisions about program operations, policy, and regulations and to gain visibility into the impact of resource allocation on achieving program objectives. “The Evidence Act builds on longstanding principles underlying Federal policies and data infrastructure investments supporting information quality, access protection, and evidence building and use.”² The Evidence Act requires all Chief Financial Officers Act, which includes the U.S. Nuclear Regulatory Commission (NRC), to develop an annual evaluation plan. This report is the NRC’s Fiscal Year (FY) 2025 Annual Evaluation Plan and identifies significant evaluations to be initiated between October 1, 2024, and September 30, 2025.

About the NRC

Congress created the NRC (or the agency) as an independent agency in 1974. Its mission is to license and regulate the Nation’s civilian use of radioactive materials, to provide reasonable assurance of adequate protection of public health and safety, to promote the common defense and security, and to protect the environment. The NRC regulates commercial nuclear power plants, nuclear fuel cycle facilities, decommissioning of licensed facilities and sites, nuclear waste, and other uses of nuclear materials, such as the medical, industrial, and academic use of radioactive materials. The NRC conducts its regulatory activities through licensing, inspection, and enforcement of its requirements.

Purpose of the Annual Evaluation Plan

This report fulfills the NRC’s requirement to complete an annual evaluation plan, as established by Section 101(a)(2) of the Evidence Act.³ The Annual Evaluation Plan provides summary information on evaluations being initiated in FY 2025, as well as updates to planned and ongoing evaluations discussed in the FY 2024 Annual Evaluation Plan.⁴ The Evidence Act defines an “evaluation” as “an assessment using systematic data collection and analysis of one or more programs, policies, and organizations intended to assess their effectiveness and

¹ Pub. L. No. 115-435, 132 Stat. 5529 (2019).

² Office of Management and Budget Memorandum M-19-23, “Phase 1 Implementation of the Foundations for Evidence-Based Policymaking Act of 2018: Learning Agendas, Personnel, and Planning Guidance,” July 10, 2019, pp. 1–2.

³ 5 U.S.C. § 312(b).

⁴ NRC annual evaluation plans are available at <https://www.nrc.gov/about-nrc/plans-performance/evidence-building-and-evaluation/annual-evaluation-plan.html>.

efficiency.”⁵ Generally, evaluations are performed for organizational learning and improvement purposes and to enhance the agency’s efficiency and effectiveness in accomplishing its mission and meeting the strategic goals outlined in the NRC Strategic Plan.⁶ The evaluations planned and currently being conducted will assist in answering priority questions established in the NRC Evidence-Building Plan, addressing mitigating strategies for findings discussed in the NRC Capacity Assessment, and/or meeting other evaluation needs determined to be significant, such as those required by statute or those of high value to the agency.⁷ The evaluation plans are subject to change and will continue to be refined as new information or insights are identified.

The NRC is committed to meeting the intent of the Evidence Act by evaluating the efficacy and efficiency of its programs to help the agency achieve its mission. Evaluations and other evidence-building activities conducted by the NRC are expected to adhere to the standards discussed in the NRC’s “Evidence-Building and Evaluation Policy Statement.”⁸

Requirements

The Evidence Act requires the following information to be included in the annual evaluation plan:

- a description of key questions for each significant evaluation study that the agency plans to begin in the next fiscal year
- a description of key information collections or acquisitions that the agency plans to begin in the next fiscal year
- any other information included in guidance issued by the Director of the Office of Management and Budget

Evaluation Factors

The NRC uses several factors to identify significant evaluations. Generally, significant evaluations have the following characteristics:

- They have the potential for broad impacts, meaning evaluation results could be widely applicable and provide valuable information to a varied set of stakeholders, including Congress, the public, and other Federal agencies and organizations, as well as informing enhancements to existing NRC programs.
- They support NRC mission-related regulatory programs and activities and are likely to yield actionable and useful evidence to support agency decision-making on priority actions in a timely manner.
- They yield opportunities for significant change or improvement to the NRC’s programs, policies, or organization.

⁵ 5 U.S.C. § 311(3).

⁶ The NRC’s Strategic Plan for Fiscal Years 2022–2026 is available at <https://www.nrc.gov/about-nrc/plans-performance/strategic-planning.html>.

⁷ OMB Memorandum M-20-12, “Phase 4 Implementation of the Foundations for Evidence-Based Policymaking Act of 2018: Program Evaluation Standards and Practices,” dated March 10, 2020.

⁸ 86 FR 29683 (June 3, 2021).

- They strengthen agency risk management by identifying new or expounding on known programmatic risk areas.
- They retain the broad support of agency leadership and are prioritized in response to legislative requirements or evolving external factors that have the potential to affect strategic priorities and objectives.

Sources for significant evaluations may come from various activities and programs across the agency such as the Reactor Safety, Nuclear Materials and Waste Safety, and Corporate Support Programs; priority questions from the Evidence-Building Plan; research; financial management; information technology; statutory requirements; and audit recommendations from the Government Accountability Office and the Office of the Inspector General.

Evaluation Process

1 Build Knowledge

Front-load planning efforts with open communication, kickoff meetings and informational interviews, background research, and review of existing documents

2 Design

Develop a clear, practical evaluation plan relying on utilization-focused, participatory, and equity-centered approach

3 Implement

Implement high-quality, practical, and methodologically sound evaluations

4 Support

Provide technical assistance and support data-informed change management and continuous improvement efforts

The NRC's Evaluation Process

The NRC has adopted a four-phased approach to conduct evaluation activities, with each phase resulting in development of a final product. Phase 1 results in the development of a logic model that is used to inform the design of the evaluation. Phase 2 results in the development of a detailed evaluation plan, which fully outlines the methodologies, evaluation questions, and other details regarding the evaluation to be conducted. Phase 3 results in a final evaluation report, once the evaluation plan has been carried out and collected data and results have been analyzed. Phase 4 results in an established strategy for the implementation of recommendations stemming from the evaluation and effective change management throughout implementation.

Logic Model Development



Status of the NRC’s Organizational Capacity for Conducting Evidence-Building Activities

In support of Title I of the Evidence Act, the NRC has been working to build its organizational capacity to perform evaluations and other evidence-building activities by establishing a dedicated team in the Office of the Executive Director for Operations. This dedicated team is intended to provide a sustainable capacity to implement the requirements of the Evidence Act and will serve as an agencywide resource for evidence building and evaluation, strategic planning, innovation and continuous learning, business analytics and solutions, and collaboration and communications on activities across the agency. Centralizing this resource is intended to avoid silos and duplication of efforts across the agency.

The NRC is in the process of hiring and onboarding program evaluators with expertise in behavioral sciences, organizational dynamics, statistics and data analysis, and program and process improvement. The NRC has also contracted with Pacific Research and Evaluation, LLC, to conduct evidence-building and evaluation work over a 5-year period. These staff and contractors will conduct a variety of evidence-building activities, such as those intended to address priority questions identified in the NRC Evidence-Building Plan and findings in the NRC Capacity Assessment. This team will provide a focused effort to ensure that the agency is building the capacity necessary to develop evidence to make evidence-based decisions.

Significant Evaluations Planned for Fiscal Year 2025

The evaluations discussed in this section represent newly planned evaluation activities that the NRC intends to initiate in FY 2025. The NRC will provide updates to these planned evaluation activities in its evaluation plans for future fiscal years. All publicly available documents associated with the following discussions can be accessed through the NRC’s Agencywide Documents Access and Management System (ADAMS).

Evaluation of the NRC’s External Stakeholder Engagement Practices

The NRC Evidence-Building Plan,⁹ first published in FY 2022, included the following priority question: “How can the NRC improve external engagement to inspire stakeholder confidence?”

The NRC Evidence-Building Plan also discusses key actions, methods, and analytic approaches to answer this question, including the following:

- Identify and assess the current methods of stakeholder communication in terms of frequency, type, and level of engagement.
- Research engagement practices in industry and government associated with high stakeholder confidence, and conduct a comparative analysis with NRC practices.
- Identify and assess communications with stakeholders, including NRC documents released to the public and information shared on the NRC public web page.

⁹ The NRC Evidence-Building Plan (Learning Agenda) is available at <https://www.nrc.gov/about-nrc/plans-performance/evidence-building-and-evaluation/learning-agenda.html>.

- Conduct benchmarking with other Federal agencies on their engagement with stakeholders.
- Survey NRC stakeholders to determine a baseline for stakeholder confidence in the agency's current methods of engaging with the public.

This evaluation—along with other planned activities, as discussed below—will address this priority question and the associated key actions, methods, and analytic approaches.

Summary

The NRC has identified “inspiring stakeholder confidence” as a key agency priority, capturing this priority as a strategic goal within the agency Strategic Plan for Fiscal Years 2022–2026. The NRC strives to promote transparency and openness in its regulatory activities and demonstrate that the agency is a capable, independent, reliable, trustworthy, and objective regulator. To achieve these goals, the NRC works to provide stakeholders with clear and accurate information and to offer them a meaningful role in the agency's regulatory processes.

The NRC carries out several programs and conducts numerous activities in its engagement with external stakeholders, such as the following:

- holding public meetings to discuss regulatory topics of interest and soliciting feedback from meeting participants
- responding to stakeholder inquiries and proactively seeking opportunities for meaningful, accessible stakeholder interactions
- testifying before congressional bodies and briefing congressional staff
- posting and maintaining information on the NRC's public website
- issuing news reports and meeting with members of the press to provide information
- issuing reports on activities such as licensing actions, inspections, and audits
- maintaining a database of publicly available agency records
- soliciting stakeholder input on rulemaking and licensing actions
- soliciting stakeholder input through periodic surveys (such as the NRC External Stakeholder Feedback Survey on Transformation)
- posting news and developments via social media outlets
- hosting the annual Regulatory Information Conference
- meeting with licensees and other stakeholders for scheduled drop-in meetings
- participating in technical and research conferences

The NRC will evaluate its stakeholder engagement practices, programs, and processes to assess their efficiency and determine their overall effectiveness in inspiring confidence among

external agency stakeholders. The evaluation will include activities such as measuring levels of engagement with various NRC information-sharing platforms, gathering information from knowledgeable NRC staff, reaching out directly to both internal and external stakeholders to obtain feedback on NRC activities, and benchmarking NRC stakeholder engagement practices against those used by other Federal agencies, as well as those employed by other groups (e.g., private companies, nongovernmental organizations, etc.). Insights from this evaluation will help the NRC to determine whether any of its existing practices should be modified or enhanced, as well as whether any new practices should be adopted.

Before conducting this evaluation in FY 2025, the NRC plans to engage in several activities in FY 2024 related to external stakeholder engagement, which may further inform the FY 2025 evaluation. These activities include the following:

- In late FY 2023, the NRC commenced a literature review intended to identify leading practices for effective stakeholder engagement. The FY 2025 evaluation will build on the findings of that literature review by assessing the NRC's stakeholder engagement practices and determining whether they are aligned with identified best practices.
- In FY 2024, the NRC plans to develop and implement a new survey tool that can be used to gather feedback from stakeholders on their perception of NRC performance and its stakeholder engagement practices. The design of this survey tool will leverage insights from the literature review discussed above and will support the NRC in determining whether it is effectively engaging in identified leading practices. The FY 2025 evaluation will incorporate input from the survey tool, and the evaluation will also provide further insights that could be leveraged to enhance the survey tool.
- Throughout FY 2024, the NRC will be considering potential improvements to its performance management program, conducting an in-depth assessment of agency performance indicators, including those related to the NRC's stakeholder engagement strategic objectives. Results from this FY 2025 evaluation may provide further insights into measures that can be used to monitor the effectiveness of the agency's engagement activities with the goal of inspiring stakeholder confidence. Such insights could serve to further inform the optimization of related agency performance indicators.

Evaluation Objective

The objective is to evaluate the effectiveness of the NRC's external stakeholder engagement practices and to identify potential improvements to NRC practices, processes, and programs that may help to engage with stakeholders in a manner that better inspires confidence in the NRC. Results and insights from this evaluation will also provide insights to improve the NRC's measurement and monitoring of the effectiveness of its external stakeholder engagement practices moving forward.

Key Questions

Key questions, as identified below, are intended to guide the initial direction of the evaluation. Addressing the following key questions can result in the identification of areas of strength as well as opportunities for improving the NRC's external stakeholder engagement practices:

- To what extent are the NRC's practices and programs for external stakeholder engagement inspiring confidence in the NRC?

- What stakeholder engagement practices or approaches are associated with higher levels of stakeholder confidence? How do these relationships vary depending on the different stances on matters of regulatory interest held by different stakeholders?
- What leading practices for stakeholder engagement does the NRC currently use? What additional leading practices are used by other agencies/organizations?
- To what extent are the NRC's performance indicators for external stakeholder engagement effective in measuring and monitoring the effectiveness of the agency's programs? What indicators do other agencies/organizations use to measure and monitor their programs?
- What tools/techniques do other agencies/organizations use to measure stakeholder confidence (either continuously or periodically)?

Data Needs and Sources

This evaluation will require a combination of qualitative and quantitative data associated with the effectiveness of the NRC's practices and programs for external stakeholder engagement. The NRC will leverage existing data that reflects feedback from stakeholders, such as responses to NRC-issued surveys, public reports (e.g., news articles and editorials), official reports on assessments of NRC performance (such as audit reports issued by other government bodies), transcripts from a selection of public meetings, engagement with NRC social media outlets, and other available data and documentation. The NRC will solicit input directly from a variety of external stakeholders (e.g., licensees, members of the public, nongovernmental organizations, etc.). The agency will also gather input from knowledgeable NRC staff regarding existing NRC practices, processes, and programs, as well as perceptions regarding their effectiveness. Additionally, the NRC will obtain information from other Federal agencies regarding their practices, programs, and processes for engaging with external stakeholders. The strategies for analyzing data will rely on statistical tools, where necessary, and will also incorporate visual or graphic representations of data to support findings and conclusions.

Evaluation Methods

Leveraging information from a preliminary literature review and from conducting benchmarking, the NRC will identify leading practices for stakeholder engagement and assess the extent to which the NRC uses those practices. The NRC will assess stakeholder perceptions of the effectiveness of its current programs and practices. The agency will leverage existing data and will solicit additional input from external stakeholders and knowledgeable NRC staff using such means as surveys, interviews, and focus groups. The NRC will also research established methods for measuring and monitoring stakeholder confidence and the effectiveness of stakeholder engagement activities.

Stakeholder Engagement

In conducting this formative evaluation, the NRC will engage with and seek input from a variety of external stakeholders, including licensees, nongovernmental organizations, members of the public, and other Federal agencies. The NRC will also seek input from internal NRC staff.

Challenges and Mitigating Strategies

The NRC's external stakeholders hold a wide variety of opinions and interests, which are not always aligned with one another. An individual stakeholder's particular opinions and interests may affect their perceptions of the effectiveness of NRC performance and decision-making. To mitigate this, the NRC will prioritize its Principles of Good Regulation (independence, openness, clarity, efficiency, and reliability) when identifying effectiveness measures, and the agency will consider relevant discussion contained in the literature regarding effective, objective measures of stakeholder confidence.

Use and Dissemination

Findings from this evaluation will be shared with agency staff and management to inform decisions that may influence the agency's stakeholder engagement practices, programs, and processes. The evaluation findings will be made publicly available, as appropriate, in a report or will be posted on the NRC's website.

Evaluation of the NRC's Future-Focused Research Program

The NRC's FY 2022 Capacity Assessment included a finding that the NRC's Future-Focused Research Program is critical to ensuring that the agency is prepared for emerging research topics. The assessment found that the program would therefore benefit from an evaluation to ensure that it is achieving its intended outcomes and that it is adequately supporting the NRC's preparedness for technological advances.

Summary

The NRC's Office of Nuclear Regulatory Research administers the Future-Focused Research Program, in which agency staff can propose topics for investigation by NRC research groups. The program is designed to supply needed resources to important projects with longer term horizons to support transformation and the vision of becoming a more modern, risk-informed regulator. Proposals submitted for consideration under the program are reviewed by a panel of advisors, who may work with submitters to refine their ideas to better align with NRC needs. Ideas selected for funding under the program are then monitored by the program manager to assess the overall performance of approved projects and whether the program is meeting its objectives. The main objectives of the program are to (1) improve the NRC's future capabilities, (2) improve foundational knowledge important to future decision-making, and (3) address recognized research gaps.

This formative evaluation will focus on the Future-Focused Research Program's effectiveness in achieving its intended objectives, identifying potential areas for improvement, and developing performance indicators to gauge and monitor the effectiveness of the program over time. The evaluation will include activities such as process reviews, effectiveness reviews, assessing projects that have been developed as part of the program, engaging with internal and external stakeholders, and benchmarking against other Federal agencies. Ideally, the evaluation will reveal aspects of the program that are working effectively and should be emphasized, as well as potential areas in which improvements could be made to enhance the effectiveness and efficiency of the program.

Evaluation Objective

The objectives are to evaluate the effectiveness of the NRC's Future-Focused Research Program to ensure that it is meeting its intended goals, identify potential opportunities for program improvement, and identify performance indicators that can be used to gauge and monitor the effectiveness of the program over time.

Key Questions

Key questions, identified below, are intended to guide the initial direction of the evaluation. Addressing the following key questions can result in the identification of areas of strength as well as opportunities for improving the NRC's Future-Focused Research Program:

- To what extent is the Future-Focused Research Program effective in achieving its intended objectives?
- To what extent are proposals selected and funded through the program aligned with the NRC's needs?
- To what extent are proposals submitted through the program processed in a timely manner?
- To what extent are the products/activities resulting in funded proposals aligned with the intended outcomes, as communicated in the proposals?
- What do stakeholders consider to be positive aspects of the Future-Focused Research Program? Where do stakeholders see potential opportunities for program improvement and/or enhancement?
- To what extent are internal and external communications associated with the program achieving their intended results?
- What similarities/differences are there between the NRC's program and similar staff-driven research programs at other Federal agencies?
- What indicators (measures and targets) do other agencies/organizations use to gauge and monitor the effectiveness of similar programs?
- To what extent do agency limitations, such as available resources, affect the NRC's ability to act on recommendations provided through the program?

Data Needs and Sources

This evaluation will require a combination of qualitative and quantitative data associated with the Future-Focused Research Program. The NRC will review data associated with the administration of the program, including the submittal and selection process. The NRC will also review data associated with a selection of projects that have been developed as part of the program. The agency will also review and/or collect data associated with the experiences and perspectives of internal and external stakeholders, including the NRC staff who coordinate the program and those who have submitted proposals through the program, as well as those not directly involved with the program. The NRC will also review both publicly and internally

available information and past communications associated with the program. Additionally, the NRC will obtain information from other Federal agencies with similar programs. The strategies for analyzing data will rely on statistical tools, where necessary, and will also incorporate visual or graphic representations of data to support findings and conclusions.

Evaluation Methods

The NRC will assess the effectiveness and efficiency of the Future-Focused Research Program in achieving its intended objectives. The agency will analyze available program data and gather input from stakeholders through such means as interviews, surveys, and/or focus group discussions. The NRC will assess the degree to which proposals selected for funding under the program align with NRC needs (such as those outlined in NRC strategic objectives). The agency will analyze the efficiency and timeliness of the proposal submittal and selection processes. The NRC will analyze a sampling of products, activities, and/or other outputs resulting from funded proposals, assessing whether proposals met their intended objectives. The NRC will analyze input from stakeholders to gauge their perceptions of program performance and identify areas where the program is considered to be effective and areas where there may be opportunities for improvement. The NRC will also consider information from staff who have not been directly engaged with the program, to assess general staff awareness and perceptions of the program, along with the quality and effectiveness of communications associated with the program. The agency will also assess the extent to which external communications about the program are meeting the needs of external stakeholders. Additionally, the NRC will conduct benchmarking against other Federal agencies that have programs similar to the NRC's Future-Focused Research Program, as well as agencies that do not.

Stakeholder Engagement

In conducting this evaluation, the NRC will engage and seek input from external stakeholders, internal NRC staff, and other Federal agencies.

Challenges and Mitigating Strategies

The NRC may be challenged by a limited number of external stakeholders and agency staff who have experience with and/or knowledge of the program. To mitigate this challenge, the agency will conduct research into available data to identify individuals who have supported or participated in the program and/or interacted with communications associated with the program, and the NRC may use chain-referral (snowballing) sampling techniques to identify sampling participants.

Also, because the program is relatively new (with project proposals first solicited in FY 2020), available data on the actual impact of completed research projects may be limited. To mitigate this, the NRC will assess completed projects to the fullest extent possible, while also leveraging results from the evaluation to establish criteria for measuring project impacts in the future.

Use and Dissemination

Findings from this evaluation will be shared with agency staff and management to inform decisions that may influence the Future-Focused Research Program. The evaluation findings

will be made publicly available, as appropriate, in a report or will be posted on the NRC's website.

Status Update for Ongoing and Planned Evaluations

This section summarizes the NRC's significant evaluation activities planned for FY 2024 and prior fiscal years. The NRC will continue to provide updates on these evaluation activities within its evaluation plans for future fiscal years, until they are completed. All publicly available documents associated with the following discussions can be accessed through ADAMS.

Evaluation of the NRC's Strategic Workforce Planning Process

Additional details on this evaluation, beyond those discussed in the following sections, can be found in the NRC's Annual Evaluation Plan for Fiscal Year 2023.¹⁰

Summary

The goal of the NRC's Strategic Workforce Planning (SWP) process is to formulate strategies and action plans that enable the NRC to recruit, retain, and develop the workforce required to address emerging needs and workload fluctuations. The SWP process supports agency efforts to better forecast the amount and type of work, now and in the future, and the workforce needed to perform this work. The SWP process also helps staff understand the future direction of the agency's work and enables them to better inform their professional career development. The NRC will perform an evaluation that assesses the effectiveness and efficiency of the current SWP processes and will compare estimated workloads and staffing projections against actual results. The NRC will engage with internal stakeholders using the SWP process and benchmark against other Federal agencies.

Evaluation Objective

The objective is to evaluate whether the NRC's approach to workforce planning, including associated processes and procedures, is effective in meeting its intended goals and whether it is being implemented efficiently.

Evaluation Status

In March 2023, the NRC evaluation team—together with its contractor, Pacific Research & Evaluation, LLC—finalized a detailed evaluation plan and entered into Phase 3 of the evaluation, during which the evaluation team will conduct interviews, surveys, and focus group sessions; analyze available datasets; formulate results and conclusions; and issue a final evaluation report. The final evaluation report is expected to be completed in the second quarter of FY 2024.

¹⁰ NRC annual evaluation plans are available at <https://www.nrc.gov/about-nrc/plans-performance/evidence-building-and-evaluation/annual-evaluation-plan.html>

Evaluation of the NRC's Knowledge Management Program

Additional details on this evaluation, beyond those discussed in the following sections, can be found in the NRC's Annual Evaluation Plan for Fiscal Year 2024.¹⁰

Summary

The NRC defines knowledge management (KM) as a continuous, disciplined, and timely process of identifying, collecting, and using information to better accomplish the job. In 2006, with the establishment of a formal KM Program, the NRC initiated a more structured and systematic approach to KM than it had taken previously. Since then, the NRC has established over 37 Communities of Practice that serve to create opportunities for learning, building capability, and sharing knowledge. The agency has also established KM tools like Nuclepedia, the KM Toolkit for Supervisors, other Office of the Chief Human Capital Officer toolkits, the Career Mentoring Program, weekly KM sessions for inspectors, the annual KNOWvember KM campaign, and Design Your KM Approach.

In 2017, the KM Program's focus shifted to address how the agency can better integrate KM practices and approaches into daily operations and do so systematically. The NRC developed a KM Strategy covering 2018–2022, which included a KM Program goal to "Maintain NRC's regulatory and technical excellence by ensuring critical knowledge is captured, available and used by all NRC staff, present and future." The agency updated the KM Strategy for 2023–2027 (ADAMS Accession No. [ML22259A022](#)) and defined the following expected outcomes or desired state of the KM Program for 2027:

- KM becomes routine and is integrated into daily work activities and work processes by employees who have a shared understanding of what it means and how it applies to their jobs.
- Knowledge is captured at all levels of the organization which results in improved productivity, allowing people to do their jobs more effectively.
- Knowledge is consistently managed and readily accessible and used, improving the organization's ability to execute operations more efficiently.
- KM progress is effectively measured, applied, and evaluated.

In April 2022, the NRC issued its Strategic Plan for Fiscal Years 2022–2026 ([ML22067A170](#)), which included Strategic Objective 2.2:

Enable the workforce to carry out the agency's mission by leveraging modern technology, innovation, and knowledge management to support data-driven decisions in an evolving regulatory landscape.

Additionally, the Strategic Plan included Strategy 2.3.4:

Improve knowledge management by identifying and capturing critical information and leveraging the agency's investment in modern information management and technology to enhance information accessibility and searchability.

This further emphasizes how the KM Program is vital for the NRC to accomplish its mission.

Additionally in April 2022, the NRC issued its FY 2022 Capacity Assessment ([ML22066B054](#)), which included a finding that “KM tools are not utilized to their fullest extent to ensure successful capture and transfer of knowledge to staff,” along with the insight that KM is expected to influence agency performance over the next 5 years, given the percentage of the NRC’s workforce that either is or will be eligible to retire within that timeframe. The FY 2022 Capacity Assessment determined that, as part of the mitigating strategies to address this finding, the NRC should evaluate its KM program to better align the efforts with expected outcomes.

Discussion of the recommended mitigating strategy stated that the proposed evaluation should consider methods to increase KM engagement with the NRC’s senior level staff. This discussion also stated that the evaluation should include a cost-effectiveness analysis to better understand the cost compared to the expected outcomes, and that the evaluation should recommend performance indicators to monitor program effectiveness moving forward.

As a result of the FY 2022 Capacity Assessment finding and the proposed mitigating strategy, the NRC is conducting an evaluation of its KM program.

Evaluation Objective

The objective is to evaluate whether the NRC’s approach to capturing and transferring knowledge is effective in meeting its intended goals and whether the approach is being implemented efficiently.

Evaluation Status

In March 2023, the NRC evaluation team—together with its contractor, Pacific Research & Evaluation, LLC—finalized a detailed evaluation plan and entered into Phase 3 of the evaluation, during which the evaluation team will conduct interviews, surveys, and focus groups; analyze available datasets; formulate results and conclusions; and issue a final evaluation report. The final evaluation report is expected to be complete in the second quarter of FY 2024.

Evaluation of the NRC’s Licensing Actions

Additional details on this evaluation, beyond those discussed in the following sections, can be found in the NRC’s Annual Evaluation Plan for Fiscal Year 2023.¹¹

Summary

To receive an NRC license or certification; or to amend, renew, or transfer an existing license; an entity or individual must submit a licensing application to the agency for review and approval. The NRC reviews licensing applications to ensure that the application meets the relevant regulatory requirements and that the proposed activities will be conducted safely and in accordance with the common defense and security. License reviews use evidence, such as analyses, to support decisions in a manner that ensures that the NRC is accomplishing its mission.

¹¹ NRC annual evaluation plans are available at <https://www.nrc.gov/about-nrc/plans-performance/evidence-building-and-evaluation/annual-evaluation-plan.html>.

The NRC will perform an evaluation that analyzes licensing actions associated with licensing programs for which the agency has developed generic milestone schedules, as required by the Nuclear Energy Innovation and Modernization Act.¹² The evaluation will determine whether licensing actions performed by the NRC are becoming more or less resource intensive over time and whether there have been any changes in work product quality. This evaluation will provide a better understanding of the effectiveness and efficiency of the licensing programs based on expended resources and quality of the work products for similar licensing actions. The evaluation may provide key insights to further risk-inform the agency's licensing programs.

Evaluation Objective

The objective is to ensure that the NRC's licensing review and certification process is data driven, evidence based, and risk-informed and that it reflects an appropriate and reasonable expenditure of resources to complete, based on the requested activity.

Evaluation Status

The NRC plans to initiate this evaluation in FY 2024.

Evaluation of the NRC's University Nuclear Leadership Program

Additional details on this evaluation, beyond those discussed in the following sections, can be found in the NRC's Annual Evaluation Plan for Fiscal Year 2024.¹³

Summary

The NRC's University Nuclear Leadership Program awards funding to universities for research and development, fellowships, scholarships, and faculty development grants. The program is intended to develop a workforce capable of supporting the design, construction, operation, and regulation of nuclear facilities and the safe handling of nuclear materials. The NRC will evaluate the University Nuclear Leadership Program to identify opportunities to leverage university grants to support NRC research needs, as well as the capabilities of the nuclear workforce and the nuclear industry. The evaluation will include activities such as internal and external stakeholder engagement, process reviews, and benchmarking against other Federal agencies. Ideally, the evaluation will reveal strategies for more effective use of research funding in the future.

Evaluation Objective

The objective is to evaluate the effectiveness of the NRC's University Nuclear Leadership Program to ensure that it is meeting its intended goals and identifying program improvements.

Evaluation Status

The NRC plans to initiate this evaluation in FY 2024.

¹² Pub. L. No. 115-439, 132 Stat. 5565 (2019).

¹³ NRC annual evaluation plans are available at <https://www.nrc.gov/about-nrc/plans-performance/evidence-building-and-evaluation/annual-evaluation-plan.html>.

Evaluation of the NRC's Regulatory Analysis Process for Rulemaking

Additional details on this evaluation, beyond those discussed in the following sections, can be found in the NRC's Annual Evaluation Plan for Fiscal Year 2024.¹⁴

Summary

As part of its rulemaking process, the NRC uses regulatory analyses to consider preferred alternatives from the potential courses of action studied. A regulatory analysis contains estimates of costs and benefits with a conclusion as to whether the proposed regulatory action is cost beneficial and documents the analysis in an organized and understandable format. The evaluation of the NRC's regulatory analysis process will systematically assess how agencies that perform retrospective reviews of past rulemaking implementation undertake that work, including methods, data needs, and costs, as well as how agencies apply the results of these reviews to subsequent rulemaking. This information will inform the NRC's approach to testing retrospective reviews with the aim of improving the effectiveness of the agency's regulatory analysis process. If the initial information gathering indicates that the benefits of performing the retrospective review would outweigh the resource costs, then the NRC may pilot this approach to better understand its benefits for the organization. Such a review would focus on whether the rulemaking implementation was reasonably estimated within the regulatory analysis, including the costs and benefits to the NRC and affected entities to support agency decision-making.

Evaluation Objective

The objective of the evaluation is to determine the extent to which retrospective reviews of past rulemakings and their implementation could enhance the NRC's regulatory analysis process.

Evaluation Status

The NRC plans to initiate this evaluation in FY 2024.

¹⁴ NRC annual evaluation plans are available at <https://www.nrc.gov/about-nrc/plans-performance/evidence-building-and-evaluation/annual-evaluation-plan.html>.



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11. ABSTRACT

The U.S. Nuclear Regulatory Commission (NRC or the agency) is an independent agency established by the Energy Reorganization Act of 1974, which began operations in 1975 as a successor to the Atomic Energy Commission. The NRC is required by the Foundations for Evidence-Based Policymaking Act of 2018 to develop an annual evaluation plan. This iteration of Annual Evaluation Plan provides summary information on evaluations that the NRC plans to initiate in fiscal year (FY) 2025, as well as the status of evaluations initiated in previous fiscal years. The Evidence Act defines an evaluation as an assessment using systematic data collection and analysis of one or more programs, policies, and organizations intended to assess their effectiveness and efficiency. The evaluations being conducted will assist in answering priority questions established in the Evidence-Building Plan, addressing mitigating strategies for findings discussed in the NRC Capacity Assessment, or meeting other evaluation needs determined to be significant, such as those required by statute or those of high value to the agency. This evaluation plan includes the discussion of two newly planned evaluations to be initiated in FY 2025: an evaluation of the NRC's external stakeholder engagement practices and an evaluation of the NRC Future-Focused Research Program. This evaluation plan also provides a summary of other evaluations that are either planned or currently in progress, as discussed in the NRC's evaluation plans for prior fiscal years.

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