

**Evidence  
Building  
Plan**

**Fiscal Year 2022**

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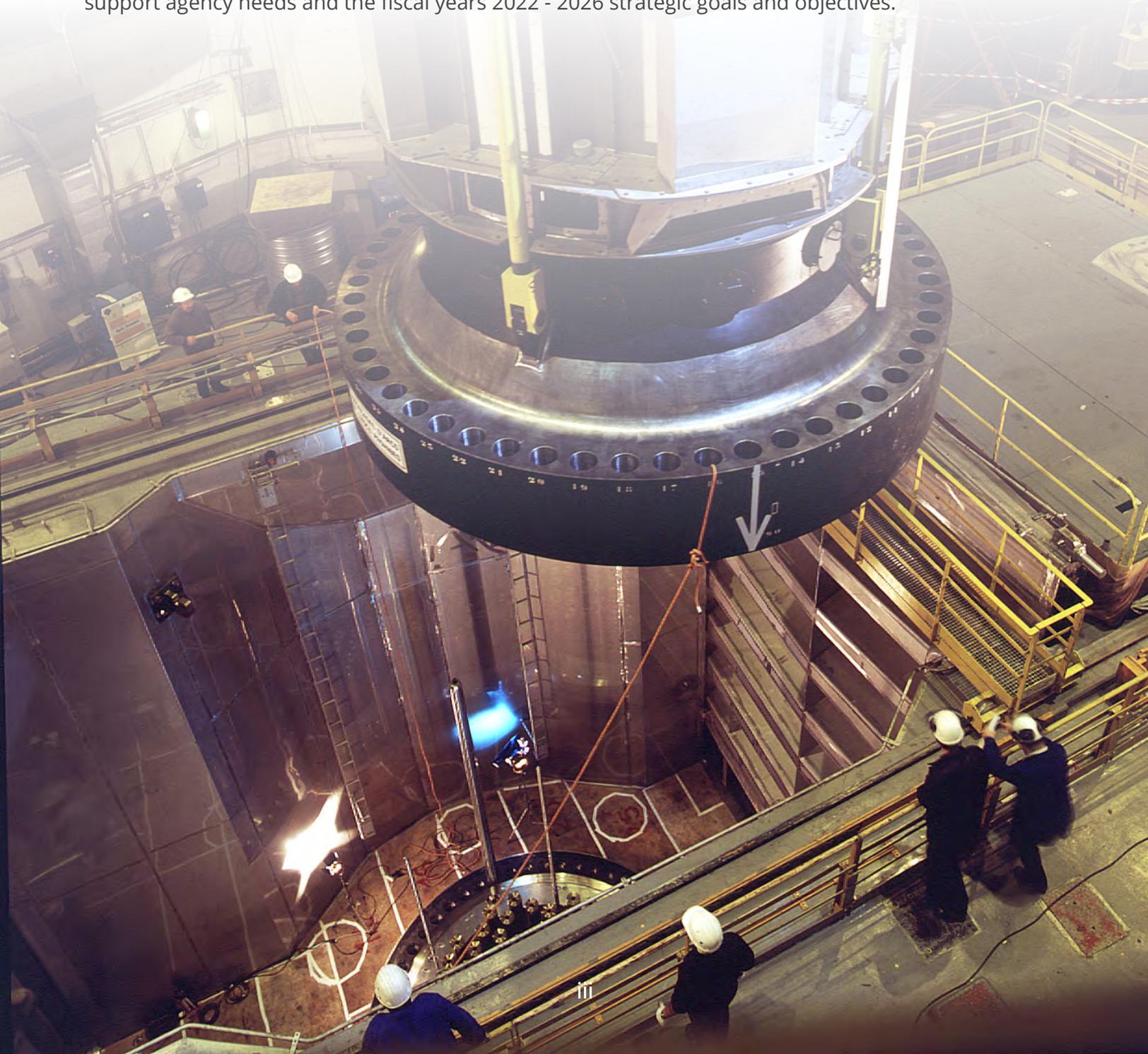
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## Abstract

The U.S. Nuclear Regulatory Commission (NRC or the agency) is an independent agency established by the Energy Reorganization Act of 1974, 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 agency evidence-building plan. An evidence-building plan is a systematic approach for identifying and addressing priority questions relevant to the agency's programs, policies, and regulations. More broadly, it is a coordination tool to engage stakeholders in evidence planning and building to help achieve an agency's mission. The evidence-building plan is intended to emphasize and foster an agency culture of learning and continuous improvement. Once an evidence-building plan is implemented, decisionmakers can use the resulting evidence to guide choices to improve the agency programs, policies, and regulations. The evidence-building plan includes nine priority questions to support agency needs and the fiscal years 2022 - 2026 strategic goals and objectives.





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# Evidence Building Plan

Fiscal Year 2022



## Foundations for Evidence-Based Policymaking Act of 2018

The Foundations for Evidence-Based Policymaking Act of 2018 (Evidence Act),<sup>1</sup> 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.”<sup>2</sup> The Evidence Act requires the U.S. Nuclear Regulatory Commission (NRC), as a Chief Financial Officers Act agency, to develop an evidence-building plan.

### About the NRC

Congress created the NRC 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, and 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 use of radioactive materials, through licensing, inspection, and enforcement of its requirements.

The NRC is committed to meeting the intent of the Evidence Act by evaluating the effectiveness and efficiency of its programs and their contributions to achieving the agency’s 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” (86 Fed. Reg. 29,683; June 3, 2021).

### Purpose

The evidence-building plan is a systematic approach for identifying and addressing priority questions relevant to the agency’s programs, policies, and regulations.<sup>3</sup> More broadly, it is a coordination tool to engage stakeholders in evidence planning and building to help achieve

<sup>1</sup> Pub. L. No. 115-435, 132 Stat. 5529 (2019).

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

<sup>3</sup> 5 U.S.C. § 312(b).

an agency's mission. The evidence-building plan is intended to emphasize and foster an agency culture of learning and continuous improvement. Once an evidence-building plan is implemented, decisionmakers can use the resulting evidence to guide choices to improve the agency programs, policies, and regulations. The priority questions in the evidence-building plan include key areas to support agency needs and the fiscal years (FYs) 2022 – 2026 strategic goals and objectives.

## Methodology

The priority questions for the evidence-building plan were solicited from internal and external stakeholders using multiple approaches. Internally, the NRC used a crowd-sourcing platform to solicit potential priority questions and feedback from the NRC staff. The NRC staff submitted potential priority questions with topics ranging from automating data generation to improving agency processes. Externally, the NRC solicited stakeholder input to develop the strategic plan, including the priority questions for the evidence-building plan. In September 2020, representatives of various stakeholder groups (e.g., industry, the public) participated in a public meeting and provided comments in response to a Federal Register notice. The input the NRC received was reviewed and combined with the input provided by the NRC staff to develop a set of proposed priority questions that align with the agency's strategic priorities. The NRC's Data Governance Board, comprising senior agency officials, further refined, added new questions, and endorsed the proposed priority questions.

## Evidence-Building Plan Priority Questions

Priority questions help the agency focus, drive planning activities, and prioritize improvements with the greatest impact on agency programs, policies, and regulations by using evidence to make informed decisions. Below are the NRC's priority questions for the evidence-building plan, categorized by topic. A summary accompanies each priority question and includes the purpose of the question and the type of evidence-building activity anticipated. For each question, the associated evidence-building activity uses data and information to develop evidence that allows decisionmakers to make informed decisions. Information such as status, resources, analytical approaches, and key questions will be updated for each priority question on the Evidence-Building Activities Web page.<sup>4</sup>

Each priority question includes the following:

**Key Actions, Methods, and Analytic Approaches:** Clearly written, actionable, and time dependent actions the NRC will take to answer the priority questions, including the methods and analytic approaches.

**Anticipated Data Needs and Tools:** Summary of the expected data needs and tools to answer the priority questions. Additional data needs may emerge as the priority question is being answered.

**Anticipated Challenges:** Summary of challenges or obstacles that may be encountered during the process.

**Benefits:** Summary of incremental and overall benefits for the agency as key actions are completed.

Priority questions are related to the strategic goals in the NRC's Strategic Plan for FYs 2022 – 2026 as shown below.

<sup>4</sup> The Evidence-Building Activities Web page is available at <https://www.nrc.gov/about-nrc/plans-performance/evidence-building-and-evaluation/agencywide-evidence-building-activities.html>

## Strategic Plan Goal 1 – Ensure the safe and secure use of radioactive materials

**Priority Question 1:** How can the NRC improve the agency's licensing and oversight programs based on recent operational experience and lessons learned from the COVID-19 pandemic?

**Priority Question 2:** What data received and maintained would be most beneficial for use in advanced analytical tools (e.g., machine learning, artificial intelligence) to support NRC decisionmaking?

**Priority Question 3:** To what extent are the NRC's computer codes capable of supporting independent analysis of the safety of advanced reactor designs and operations?

## Strategic Plan Goal 2 – Continue to foster a healthy organization

**Priority Question 4:** To what extent are licensing actions performed by the NRC becoming more or less resource intensive over time and have there been any changes in work product quality?

**Priority Question 5:** To what extent are NRC's workforce planning processes adequately accommodating potential workload fluctuations?

**Priority Question 6:** What process improvements can be implemented to make the NRC a more modern, risk-informed regulator and how are they aligned with performance indicators?

**Priority Question 7:** How can the NRC better leverage research conducted through NRC-sponsored university research and development grants?

## Strategic Plan Goal 3 – Inspire stakeholder confidence in the NRC

**Priority Question 8:** How can the NRC improve external engagement to inspire stakeholder confidence?

**Priority Question 9:** To what extent are the NRC's programs, policies, and activities addressing environmental justice?



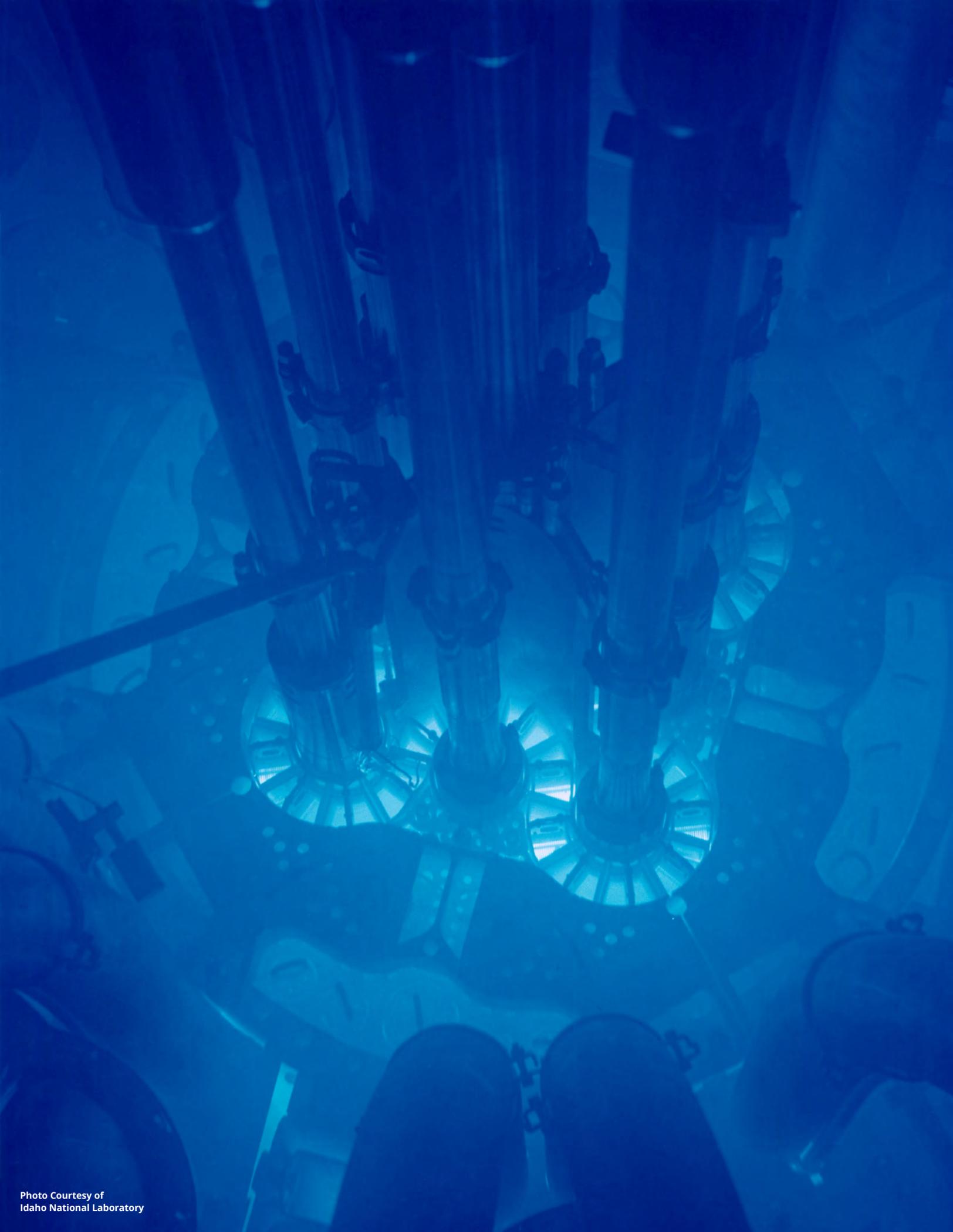


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## Priority questions for Strategic Plan Goal 1 – Ensure the safe and secure use of radioactive materials

### Priority Question 1: How can the NRC improve the agency's licensing and oversight programs based on recent operational experience and lessons learned from the COVID-19 pandemic?

#### Summary

Gathering lessons learned and incorporating best practices from recent licensing and oversight activities could help the NRC staff to focus on the activities most important to safety. In response to the challenges of the COVID-19 pandemic, the NRC quickly identified temporary alternative and risk-informed methods for conducting licensing and oversight activities while continuing to provide reasonable assurance of adequate protection of public health and safety. Some of these temporary changes could potentially streamline processes for licensing and oversight activities in the long term while continuing to adequately protect public health and safety. The NRC will identify lessons learned and collectively document temporary changes made to agency licensing and oversight processes in response to the COVID-19 pandemic. The NRC will further analyze these and other lessons learned to determine potential efficiencies to the agency's licensing and oversight processes.

#### Key Actions, Methods, and Analytic Approaches

- 1) Complete a review of NRC licensing and oversight programs, analyzing data such as licensing actions, exemption requests, inspections, performance assessment, enforcement, allegations, investigations, and incident response.
- 2) Perform an assessment to determine what approaches to licensing and oversight were most effective during the COVID-19 pandemic.
- 3) Conduct benchmarking with other Federal agencies and international nuclear regulators in support of the assessment.
- 4) Assess whether modifications should be made to adjust schedules or periodicity, streamline activities, or perform activities remotely.
- 5) Analyze how the licensing and inspection programs leverage technology and identify opportunities to use technology to improve programmatic efficiency and effectiveness.
- 6) Identify guidance, processes, and regulations that could be modified to incorporate improvements based on recent operational experience and lessons learned from the COVID-19 pandemic.

## Anticipated Data Needs and Tools

Licensees and public stakeholder groups and organizations provided extensive communications to the NRC during the COVID-19 pandemic related to requests for flexibility including modifications to or exemptions from established scheduled and regulatory requirements. The staff will use existing data and solicit new information from stakeholders, through surveys and Federal Register notices, to support the analysis.

## Anticipated Challenges

It may prove difficult to fully assess the temporary actions taken in response to the COVID-19 pandemic in a way that translates the lessons learned into potential regulatory reform, given the unique and unprecedented challenges presented by the COVID-19 pandemic.

## Benefits

With respect to incremental benefits, actions that the NRC has taken during the COVID-19 pandemic can be reviewed to determine if there is a benefit to modifying the processes and procedures in the agency's Pandemic Plan or Continuity of Operations Plan to ensure effective and efficient plans for future emergency situations.

**Priority Question 2: What data received and maintained would be most beneficial for use in advanced analytical tools (e.g., machine learning, artificial intelligence) to support NRC decisionmaking?**

## Summary

The NRC receives information from stakeholders in various formats through mandatory and voluntary information collections. This information is used in agency activities to support the safety and security mission. The NRC relies heavily on individual employee analysis in the review of items such as licensee submittals, licensing basis documents, reporting requirements, and rulemaking activities. By improving how the NRC collects data and information, advanced analytical tools can be used more readily and potentially make decisionmaking easier, faster, and more efficient. Receiving data and information in formats that readily allow analysis through modeling or calculations allows for a more effective use of resources for both the NRC and licensees. These data improvements will also benefit members of the general public, as well as universities performing academic research in these areas.

## Key Actions, Methods, and Analytic Approaches

- 1) Identify agency information collections and conduct an analysis to determine how the information collections as a whole support the agency's decisionmaking process and if additional data are needed.
- 2) Conduct an analysis to determine which decisionmaking processes could benefit from modifying information collections for use in advanced analytical tools.
- 3) Establish, through a comparative analysis, whether there is a change in burden for the information collection using an analysis-ready submittal format.
- 4) Prioritize the information collections that would have the most significant impact on agency decisionmaking, analytical tool use, and stakeholder use.

## Anticipated Data Needs and Tools

- Inventory of agency activities that could benefit from improved information collections.
- For each NRC information collection, the purpose of the information collection, the specific data collected, the format, and the method of submittal to support the review.
- Current resource burden for stakeholders submitting information to the NRC and estimated resource burden for potential format and submission changes to support a comparative analysis.
- Benchmarking other agencies' use of electronic submission for information collections to inform the NRC's review.

## Anticipated Challenges

- Developing universal prioritization criteria for datasets used by different program areas may be a challenge.
- Licensees that submit data to the NRC may not see the benefit in submitting in different or more structured formats. They may not see the benefit in openly sharing data with other stakeholders or be engaged with the NRC to provide useful feedback on implementing open data sharing. Any potential change to the format for information submittal will need to be examined and implemented consistent with all applicable laws, including the agency's backfitting regulations.

## Benefits

- The identification of current agency information collections will assist in fulfilling the Evidence Act requirement of developing a comprehensive data inventory and contribute to the NRC's open data plan for datasets that can be made publicly available.

## Priority Question 3: To what extent are the NRC's computer codes capable of supporting independent analysis of the safety of advanced reactor designs and operations?

### Summary

The NRC routinely uses scientific computer codes and analytical tools to perform confirmatory, sensitivity, and uncertainty analyses to independently analyze the safety of advanced reactor designs. These codes and tools help examine safety margins inherent in the design, commensurate with the risk and safety significance of the phenomena related to specific reactor designs. The NRC will perform analysis and research to (1) identify the computer codes, analytical tools, information, and data for reactor-systems-analysis that the staff may need to analyze the safety of non-light water reactor (non-LWR) designs, (2) assess the existing capability of computer codes, analytical tools, and supporting information, (3) identify gaps in both analytical capabilities and supporting information and data, and (4) interact with both domestic and international organizations working on non-LWR technologies to enhance collaboration and cooperation. The NRC will engage stakeholders including the U.S. Department of Energy, the Electric Power Research Institute, the national laboratories, reactor vendors, utilities, and the international community on issues related to computer codes and analytical tools, to share knowledge and collaborate on solutions.

### Key Actions, Methods, and Analytic Approaches

- 1) Identify, through a needs assessment, near-term advanced reactor submittals to understand which systems and components will need to be modeled and assessed using computer codes and analytical tools.
- 2) Identify, through a needs assessment, the computer codes, analytical tools, information, and data for reactor-systems-analysis that the staff may need to analyze the safety of non-LWR designs.
- 3) Review near-term advanced reactor submittals to identify unique features and areas of interest, group and prioritize designs by technology type, and determine the computer codes and data needed to perform the safety analyses for each reactor design.

- 4) Assess the existing capability of computer codes, analytical tools, and supporting information and identify gaps in analytical capabilities and data (e.g., areas of large uncertainties relative to key safety limits or the operation of novel reactor design features).
- 5) Interact with both domestic and international organizations working on non-LWR technologies to identify opportunities to collaborate and cooperate in recognizing and closing gaps.

## Anticipated Data Needs and Tools

- List of near-term advanced reactor designs to support the review.
- Operational and experimental data used to develop advanced reactors (e.g., normal operation, transient information, basic physics data) to support the review.

## Anticipated Challenges

- The staff may not have access to advanced reactor design information prior to formal licensing and topical report submittals.
- There may be limited access to information, models, and data for those non-LWR designs that are less mature, with designs that are currently conceptual in nature and lack the details to allow for a full understanding of the reactor design and its operations.

## Benefits

- These activities will increase the NRC's overall capacity to perform modeling and simulation.
- Through these activities, the NRC staff will gain early familiarity with new reactor designs and have a better understanding of the limits of modeling and simulation in comparison to actual results.
- Establishing the agency's baseline capabilities for computer code modeling will allow the NRC to identify additional research that will increase the capabilities of the agency's computer codes and analytical tools.
- Completing these evidence-building activities will give the NRC an understanding of the extent to which its computer codes for reactor systems analysis and analytical tools can be used to evaluate the safety of non-LWR designs.

## Priority Questions for Strategic Plan Goal 2—Continue to foster a healthy organization

### Priority Question 4: To what extent are licensing actions performed by the NRC becoming more or less resource intensive over time and have there been any changes in work product quality?

#### Summary

Data-driven and evidence-based license reviews are essential to ensuring the NRC is accomplishing its mission. To answer this question, the NRC will evaluate licensing actions associated with licensing programs for which the NRC has developed generic milestone schedules, as required by the Nuclear Energy Innovation and Modernization Act (NEIMA).<sup>5</sup> The evaluation will (1) determine if similar licensing actions have become more or less resource-intensive over time; (2) identify resource variances between similar licensing actions; (3) identify the factors contributing to the increase, decrease, and variance of resources for each type of licensing action; and (4) determine if there were any changes to the quality of the work products. The NRC will engage internal and external stakeholders to conduct this assessment. This evaluation will produce a better understanding of how resources are being used for similar licensing actions and may provide key insights to further risk-inform the agency's licensing programs.

#### Key Actions, Methods, and Analytic Approaches

- 1) Complete a process evaluation of licensing actions to determine if resource needs have become more or less extensive over time. The evaluation will use a combination of methods that include a comparative analysis, trend analysis, quality assessment, and a needs assessment.
- 2) Assess which factors contributed to the increase or decrease of resource needs for each type of licensing action.
- 3) Conduct a quality assessment of work products associated with licensing actions.

#### Anticipated Data Needs and Tools

- Financial information from the license application reviews to establish a baseline level of effort for license reviews.
- Quality assessment documentation for license application reviews.

<sup>5</sup> The NRC established generic milestone schedules for different types of licensing actions for requested activities of the Commission that involve the issuance of a final safety evaluation as required by Section 102(c) of NEIMA. (Pub. L. No. 115-439, tit I, § 102(c), 132 Stat. 5570 (2019)). The NRC's generic milestone schedules can be found on the Web site at <https://www.nrc.gov/about-nrc/generic-schedules.html>.

- Categorized licensing actions to assess the different types of reviews to support comparative analysis.
- Product quality surveys completed by internal and external stakeholders to contribute to establishing the quality baseline.
- Prior related evaluation and audit reports by the NRC and other Government organizations.

## Anticipated Challenges

- Not all available data are at the level of detail or quality the NRC requires to perform an accurate evaluation.
- Earlier financial data are not necessarily in the same format as later data; data inconsistencies and formatting do not allow for ease of processing and evaluation or for comparison and analysis over longer periods of time.
- Licensing actions may be heterogeneous to a degree that inhibits comparisons.

## Benefits

- Establishing baseline data points for staff and contract effort expended on license reviews for similar licensing actions will help with future workforce planning projections.
- Identifying and assessing the quality of requests for additional information from licensees can be useful in enhancing the quality of regulatory guidance.
- Developing a quality baseline with defined criteria for assessing licensing work products will help the NRC consistently measure quality in the future.

## Priority Question 5: To what extent are NRC's workforce planning processes adequately accommodating potential workload fluctuations?

### Summary

The goal of Strategic Workforce Planning (SWP) 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 empowers staff to plan 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.

## Key Actions, Methods, and Analytic Approaches

- 1) Conduct an evaluation for the SWP process to assess effectiveness and efficiency, as well as identify areas for improvement, if any, to maximize the agency's efforts. Conducting a formative evaluation of the NRC's SWP process will require the agency to comprehensively assess multiple aspects of the overall approach to workforce planning as implemented on an agencywide basis. The formative evaluation will use a combination of methods that include an implementation assessment and a needs assessment. This evaluation will inform a subsequent outcome-focused evaluation to assess the cost-effectiveness of the SWP process. This evaluation will determine whether the workforce planning process
  - a) results in dependable future workload projections; and
  - b) is effective and efficient in light of the accuracy of the workload projections.
- 2) Conduct benchmarking with other Federal agencies.
- 3) Perform an analysis to determine whether the cost of conducting the SWP process is effectively balanced against the desired outcomes.

## Anticipated Data Needs and Tools

- Compatible data for projected and actual workloads to support the comparative analysis.
- Documentation of the processes used to develop the projected workloads.
- Prior related evaluations and assessments of workforce needs as performed by the NRC and by external organizations.
- Data from interviews and focus groups to support the evaluation.

## Anticipated Challenges

Resources expended by staff and management to support the SWP process may be aggregated and tracked with other generic administrative activities. Resources may need to be estimated based on discussions with staff and management.

## Benefits

With respect to incremental benefits, assessing the efficiency of the actual workforce planning and its comparison to projections, as well as benchmarking with other Federal agencies, will provide the NRC with insights to improve in workforce planning, recruiting, and retention practices that the agency can leverage in its internal workforce planning program.

## Priority Question 6: What process improvements can be implemented to make the NRC a more modern, risk-informed regulator and how are they aligned with performance indicators?

### Summary

Processes and procedures are vital to ensure consistency, clear expectations, performance measurement, and established roles and responsibilities consistent with established policy. The NRC operates with structured processes and procedures, such as management directives and office instructions. The NRC uses a performance management framework that clearly and directly links program goals with the NRC Strategic Plan and institutionalizes the use of performance information in decisionmaking. These processes and procedures and the NRC's performance management framework will move the agency toward being a more modern, risk-informed regulator.

### Key Actions, Methods, and Analytic Approaches

- 1) Identify and prioritize agency processes based on the level of potential improvement or benefit to the agency, measured by frequency of use and level of effort, while factoring in potential risks (e.g., loss of transparency, reduced stakeholder engagement).
- 2) Identify agencywide process gaps that could be improved or benefit from procedure development using business analytics.
- 3) Conduct a process evaluation to determine which processes are not working as intended or can be further improved or enhanced for effectiveness, efficiency, quality, and agility.
- 4) Analyze the agency's performance indicators to determine if they—
  - a) provide meaningful outcomes;
  - b) provide a hierarchical structure that allows consistent reporting; and
  - c) should be discontinued, modified, or replaced with new performance indicators that provide more meaningful results.

### Anticipated Data Needs and Tools

- Documentation of the processes and procedures within the agency, to ensure that the prioritization for process improvement encompasses all agency processes and procedures.
- Baseline of current process effectiveness and efficiency related to time, quality, resources, and level of staff and management effort, to use in a comparative analysis.
- Feedback from internal and external stakeholders on the NRC's processes and procedures to inform the evaluation.

- Performance indicator data including results and their relationship to office and agency priorities, and their importance or relevance to internal and external stakeholders, to inform the evaluation.
- Documented process and structure for discontinuing, modifying, or replacing performance indicators.
- Feedback from internal and external stakeholders on the performance indicators to support establishment of a baseline.

## Anticipated Challenges

- The staff may be challenged to establish the baseline of current process effectiveness and efficiency in order to measure quality and level of effort.
- It may be difficult to secure subject matter expertise in performance management to perform an objective assessment of the agency's performance indicators.
- There may be resistance to discontinuing, modifying, or replacing performance indicators with indicators that provide more meaningful results.

## Benefits

- Process mapping will result in a fully documented end-to-end process flow and may facilitate the identification of processes that could benefit from an automated workflow.
- Identifying and mapping processes will give staff a holistic view of processes, which will allow them to clearly identify duplication and ensure consistency between overlapping processes.

## Priority Question 7: How can the NRC better leverage research conducted through NRC-sponsored university research and development grants?

### Summary

The NRC's University Nuclear Leadership Program awards funding to universities for research and development (R&D) 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. The evaluation will include activities such as internal and external stakeholder engagement, process reviews, and benchmarking with other Federal agencies. Ideally, the evaluation will reveal strategies for more effective use of research funding in the future.

## Key Actions, Methods, and Analytic Approaches

- 1) Conduct a formative evaluation to assess effectiveness and efficiency, as well as identify areas for improvement, if any, to maximize the agency's efforts. The evaluation will determine the extent to which:
  - a) The University Nuclear Leadership Program is achieving the intended benefits for the NRC's workforce development and research needs.
  - b) Current processes for awarding funding are effective and efficient in meeting the program objectives.
  - c) Improvements to the program can be made to better leverage the NRC-sponsored research and development grants.
- 2) Conduct an analysis that identifies the University Nuclear Leadership Program's effect on universities and the nuclear industry.

## Anticipated Data Needs and Tools

- Qualitative and quantitative data associated with effects on universities and the nuclear industry (e.g., job creation, academic interest) as a result of the University Nuclear Leadership Program.
- Benchmarking information from other Federal agencies on their grant programs, award criteria, and agency benefits, to support a comparative analysis.

## Anticipated Challenges

Because the R&D grant program is relatively new, sufficient data may not be readily available.

## Benefits

- Sharing and publicizing the NRC funded R&D grants will allow NRC stakeholders to leverage the outcomes of the research projects.
- Determining if the NRC's grant program is achieving its workforce development objectives will help the agency make continuation or modification decisions.
- Benchmarking University Nuclear Leadership Program grant practices with other Federal agencies will provide the NRC with insights on whether it needs to modify its grant programs.

## Priority Questions for Strategic Plan Goal 3 – Inspire stakeholder confidence in the NRC

### Priority Question 8: How can the NRC improve external engagement to inspire stakeholder confidence?

#### Summary

The NRC takes an active role in the Open Government Initiative by ensuring that the public is informed about and has a reasonable opportunity to meaningfully participate in the NRC's regulatory processes. The NRC will assess the agency's current practices for external engagement to determine the effectiveness of these methods and to establish a baseline for stakeholder confidence. The assessment will include reviewing readily available information, such as results of the Federal Employee Viewpoint Survey and Safety Culture and Climate Survey, public comments on rulemakings and policy statements, participation in public meetings, engagement in social media platforms, and inquiries received through the NRC public Web page. The NRC will conduct an analysis that accounts for equity, diversity, and inclusion; identifies areas for improvement; and develops recommendations to inspire stakeholder confidence in areas where it may be lacking.

#### Key Actions, Methods, and Analytic Approaches

- 1) Identify and assess the current methods of communication with stakeholders in terms of frequency, type of communication, and how engaged the stakeholders are in the communication.
- 2) Research engagement practices in industry and government that are associated with high stakeholder confidence, and conduct a comparative analysis with NRC engagement practices.
- 3) Identify and assess communications with stakeholders, including NRC documents released to the public and information shared on the NRC public Web page.
- 4) Conduct benchmarking with other Federal agencies on their engagement with stakeholders.
- 5) Survey NRC stakeholders to determine a baseline for stakeholder confidence in the agency's current methods of engaging with the public.

## Anticipated Data Needs and Tools

- Documentation and data associated with previous surveys that measured openness to support the review and contribute to establishing a baseline for stakeholder confidence in the NRC's commitment to public engagement and methods for engaging with the public.
- Information on public meetings, both in person and virtual, including the number of attendees, grouped by topic area, to support the review.
- Sample set of written and verbal communications, including social media communications, for benchmarking.
- Statistics from visitors to the NRC public Web site and social media platforms such as site visitors, searches, and followers.
- Results of existing surveys related to public confidence in Federal agencies (and the basis for such results), to support the review and benchmarking analysis.

## Anticipated Challenges

The staff may be challenged by difficulty in identifying the appropriate groups of stakeholders to survey and by the need to develop multiple surveys for different groups.

## Benefits

As an incremental benefit, the staff can gain insights into the perspectives of different groups of stakeholders at different locations and identify key reasons for the lack of confidence of each location's stakeholders in the NRC's commitment to public engagement and methods for engaging with the public. This information can be used to improve engagement and practices for future communications with each stakeholder group.

## Priority Question 9: To what extent are the NRC's programs, policies, and activities addressing environmental justice?

### Summary

Executive Order (EO) 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," dated February 11, 1994, states that Federal agencies "shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations...." Independent agencies, such as the NRC, are not bound by the terms of the EO, but, as stated in the order,

are requested to comply with its provisions. The Commission has committed to the general goals of the EO. In its “Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions” (69 FR 52040; August 4, 2004), the Commission stated that the NRC will consider and integrate environmental justice matters as part of its National Environmental Policy Act review process.

The NRC will systematically review how the agency’s programs, policies, and activities address environmental justice. As part of its review, the staff will evaluate recent EOs and assess whether environmental justice is appropriately considered and addressed in the agency’s programs, policies, and activities, such as adjudicatory procedures and environmental reviews, given the agency’s mission. The NRC will benchmark practices of other Federal, State, and Tribal agencies and assess whether the NRC should incorporate environmental justice beyond implementation through the National Environmental Policy Act. The NRC will review the adequacy of the 2004 “Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions.” The NRC staff will also consider whether establishing formal mechanisms to gather external stakeholder input would benefit any future environmental justice efforts. The NRC will engage with internal and external stakeholders representing a broad range of perspectives to solicit their views. The staff will leverage institutional knowledge and use NRC transformation initiatives, where practicable, to inform the review.

## **Key Actions, Methods, and Analytic Approaches**

- 1) Assess how agency programs, policies, and activities address environmental justice, and compare them to EOs or other Executive Branch activities that discuss environmental justice, as appropriate.
- 2) Benchmark NRC environmental justice activities against the environmental justice activities of other Government agencies.
- 3) Analyze the legal or other limits of applying environmental justice concepts to additional aspects of the agency’s programs, policies, and activities.
- 4) Identify potential formal mechanisms to gather input from external stakeholders and other interested persons and determine whether these formal mechanism(s) could be improved through any future NRC environmental justice efforts.

## **Anticipated Data Needs and Tools**

- Compilation of environmental justice benchmarking information to help draw comparisons and distinctions.
- Documentation of interagency coordination efforts and compilation of existing guidance to agencies for implementing environmental justice programs.

- Development of a resource comparing and outlining goals of EOs that address environmental justice (e.g., EO 14008, “Tackling the Climate Crisis at Home and Abroad,” dated January 27, 2021) against which to assess agency programs, policies, and activities, as appropriate.
- Compilation of examples of formal environmental justice mechanism(s) from Federal, State, and Tribal agencies.
- Collection and compilation of the views of, and information from, stakeholders and other interested persons.

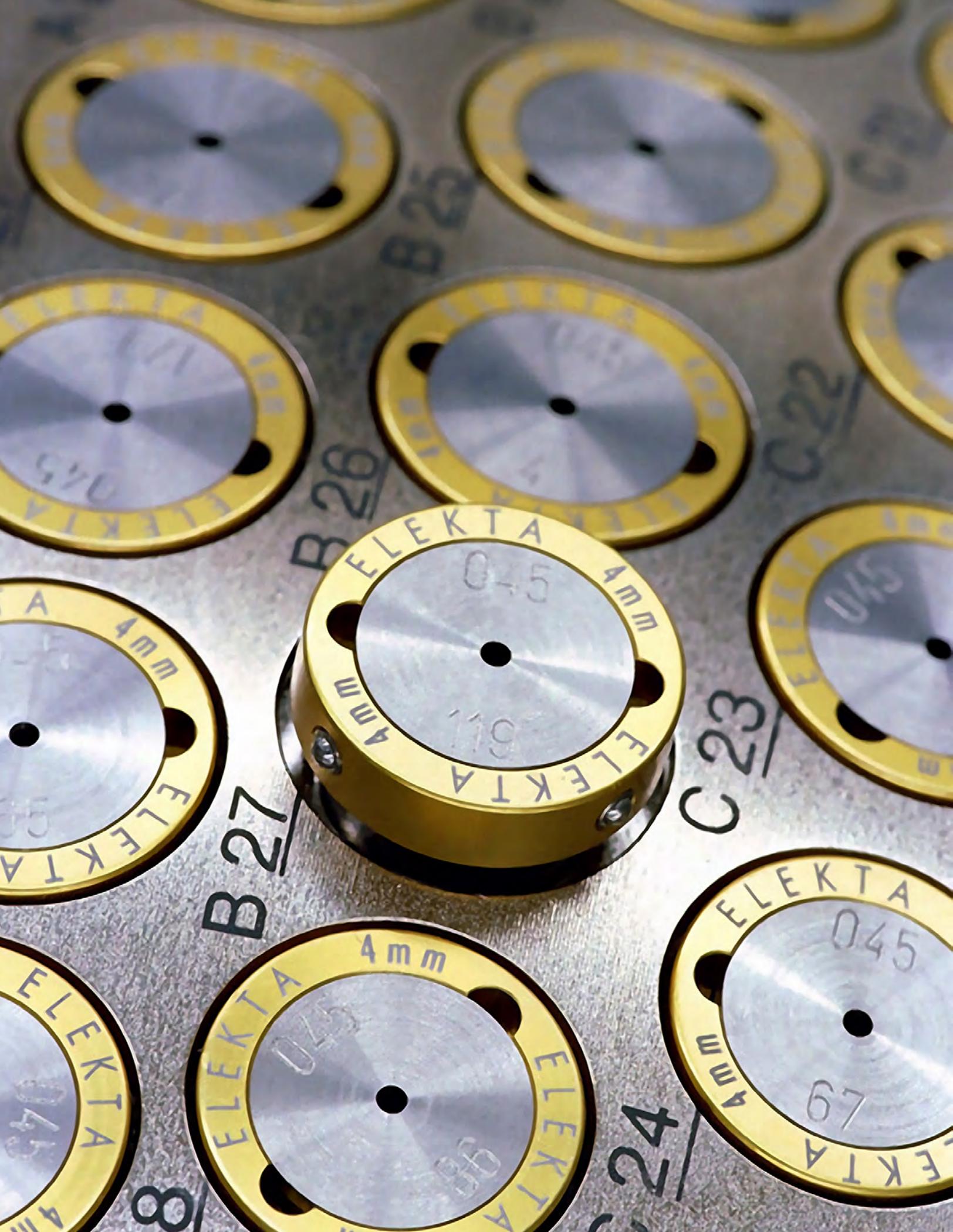
## Anticipated Challenges

The staff may be challenged in (1) determining the appropriate depth and breadth of agency programs, policies, and activities to review, (2) consistently determining and quantifying potential benefits and impacts (concrete quantitative information will likely be difficult to find), and (3) dispositioning or reconciling conflicting feedback from stakeholders and other interested persons.

## Benefits

Carrying out the activities above and developing a better understanding of considerations for the social-economic demographics around NRC-licensed facilities will allow the NRC to better engage minority and low-income communities.





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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 agency evidence-building plan. An evidence-building plan is a systematic approach for identifying and addressing priority questions relevant to the agency's programs, policies, and regulations. More broadly, it is a coordination tool to engage stakeholders in evidence planning and building to help achieve an agency's mission. The evidence-building plan is intended to emphasize and foster an agency culture of learning and continuous improvement. Once an evidence-building plan is implemented, decisionmakers can use the resulting evidence to guide choices to improve the agency programs, policies, and regulations. The evidence-building plan includes nine priority questions to support agency needs and the fiscal years 2022 - 2026 strategic goals and objectives.

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