



## **POLICY ISSUE**

### **(Notation Vote)**

February 6, 2026

SECY-26-0014

FOR: The Commissioners

FROM: Michael F. King  
Executive Director for Operations

SUBJECT: RECOMMENDATIONS TO REVISE THE REACTOR OVERSIGHT  
PROCESS BASELINE INSPECTION PROGRAM

PURPOSE:

This paper seeks Commission approval to revise the Reactor Oversight Process (ROP) baseline inspection program and the inspection finding screening process for greater efficiency and effectiveness, as directed by the Accelerating Deployment of Versatile, Advanced Nuclear for Clean Energy Act of 2024 (ADVANCE Act), and as described in SECY-25-0045, "Recommendations for Revising the Reactor Oversight Process," dated June 5, 2025 (Agencywide Documents Access and Management System (ADAMS) Accession No. [ML25127A212](#)). The recommendations in this paper, if approved, also respond, in part, to Executive Order (EO) 14300, "Ordering the Reform of the Nuclear Regulatory Commission," Section 5(g), dated May 23, 2025, which directs the U.S. Nuclear Regulatory Commission (NRC) to revise the ROP and reactor security rules and requirements to reduce unnecessary burdens and be responsive to credible risks. While these proposals are responsive to EO 14300, Section 5(g), they only relate to the ROP baseline inspection program and the more-than-minor (MTM) criteria for the documentation of findings. Additional recommendations for revising the ROP may be submitted in the future as part of the staff's work on EO 14300, Section 5(g).

SUMMARY:

This paper provides the staff's recommendations for revising the baseline inspections of the ROP. The staff's recommendations, if approved, paired with the ROP revisions that the

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This SECY Paper, with the exception of enclosure 4, will be released to the public in **10** working days.

Commission approved in SECY-25-0045<sup>1</sup>, would result in a 38 percent reduction in direct inspection hours compared to current levels, marking the most substantial change to the ROP since its inception. The recommendations and their bases are derived from 25+ years of experience and lessons learned, as a continuous learning organization. They are consistent with the NRC's journey to be a more modern, risk-informed, and performance-based safety regulator, and they are complementary to the other ongoing changes at the agency to meet the moment presented by the ADVANCE Act and EO 14300. Effective oversight of the safety and security of the operating reactor fleet will be maintained with the implementation of these changes while making significant improvements to overall program reliability and efficiency. This paper includes proposed changes requiring Commission approval and planned changes requiring Commission notification before implementation, in accordance with the guidelines in Management Directive (MD) 8.13.<sup>2</sup>

Enclosure 1 contains a comprehensive list of baseline inspection procedure (IP) changes proposed by the staff, including resource comparisons for each IP, the resultant changes in resources usage, and cumulative totals for each inspection area. Enclosure 2 contains options that were considered during the review to revise the ROP baseline inspection program. Enclosure 3 contains a summary of the staff's evaluation of recommended changes to the MTM screening process. During the development of this paper, the staff considered an alternative view expressed through a non-concurrence regarding the MTM screening process. Enclosure 4 (non-public) provides this non-concurrence and the decision maker's resolution.

### ***Changes Requiring Commission Approval***

The staff seeks Commission approval of two recommendations. The recommendations are supported by improvements in industry performance, advancements in technology, and changing risk profiles of the operating reactor fleet over the ROP's 25-year history.

- 1) ROP Baseline Inspection Program: The staff recommends approving changes to the ROP baseline inspection program to include the reactor safety, emergency preparedness, radiation protection, and problem identification and resolution (PI&R) portions of the program. A detailed list of the proposed program changes, including samples and resource estimates for each IP, is included in Enclosure 1.
- 2) Issue Screening Guidance: The staff recommends approving changes to the ROP MTM issue screening criteria. These changes would embed the screening criteria in the significance determination process (SDP) and adjust the threshold for a MTM issue as described in this paper to promote more consistent application of the criteria.

Proposed revisions to the ROP baseline inspection can be achieved by consolidating essential inspection elements into a more efficient structure while maintaining coverage of all inspectable areas. Proposed updates to the inspection issue screening guidance only affect how the NRC documents inspection findings of very low safety significance and do not alter the requirement for licensees to correct noncompliances identified during NRC inspections.

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<sup>1</sup> Change in guidance to inspect to minimum samples instead of nominal samples to complete an inspection procedure, revision of the of Cybersecurity inspection periodicity from a 2 year to a 3 year cycle, and the revision of the Comprehensive Engineering Team Inspection (CETI) from a 7 person to a 6 person team are the revisions that reduced direct inspection effort.

<sup>2</sup> MD 8.13, "Reactor Oversight Process," dated January 16, 2018 ([ML17347B670](#)).

On October 21, 2025, staff submitted SECY-25-0087, "Recommended Revisions to the Baseline Security Significance Determination Process" ([ML25168A179](#)), which outlines a revision to the Baseline Security SDP and requires Commission approval. This paper involves thresholds for what would be considered Green SDP findings in the security cornerstone which the staff will need to re-evaluate if the Commission approves the changes to the MTM threshold described in this paper.

In parallel with this notation vote paper, the staff will submit to the Commission a separate notation vote paper proposing revisions to the security inspection program including elements related to how force-on-force exercises are conducted. To provide the Commission with a clear understanding of how the security baseline inspection program contributes to the ROP, this paper incorporates the resource estimates from the companion paper to illustrate the overall allocation of NRC oversight resources across an inspection cycle. The Commission approved changes in SECY-25-0045, and the planned security inspection program paper are not dependent on the recommendations in this SECY (and vice versa).

#### BACKGROUND:

Section 507 of the ADVANCE Act required the NRC to submit a report to Congress that identifies specific improvements to nuclear reactor and materials oversight and inspection programs. On July 10, 2025, the Commission submitted to Senator Shelley Moore Capito, Representative Brett Guthrie, and others, the NRC's report in response to Section 507 of the ADVANCE Act ([ML25077A245](#)). This report outlined the changes proposed in SECY-25-0045, including several near-term modifications to enhance the efficiency and effectiveness of the ROP, which were implemented on July 1, 2025.

On May 23, 2025, President Trump issued EO 14300. Section 5(g) directed the NRC to revise the ROP and reactor security rules and requirements to reduce unnecessary burdens and be responsive to credible risks.

Staff began its comprehensive review of the ROP with a focus on the current ROP performance indicators (PIs). Review of the ROP PIs was expected to yield efficiency gains to the NRC and licensees by providing a new set of PIs that enhanced and expanded coverage of each cornerstone area. The staff then planned to follow this with a risk-informed review of baseline IPs to validate, adjust, or eliminate samples based on remaining oversight program needs for the inspection areas not reasonably covered by the revised PIs.

Shortly after starting its review of the ROP PIs, which included meetings with industry stakeholders, the staff realized that wholesale revision of the PIs would not yield the previously anticipated benefits to the NRC or the industry. Industry feedback was that the staff already has access to plant data that can be used to risk-inform the ROP baseline inspection program without creating new PIs. The staff shifted its focus to the ROP baseline inspection program with a focus on ensuring inspection activities return maximum value. The staff's review considered findings identified by IPs, the safety significance of the inspectable area, the potential risk of not inspecting the area, and inspector survey data. The staff identified that a reduction in inspection effort was warranted due, in part, to the continued high overall performance of the industry, as discussed below. The staff intends to review current individual PIs on a case-by-case basis beginning in January 2026.

## DISCUSSION:

The NRC implemented the ROP in 2000 as a response to concerns with the agency's prior oversight framework, the systematic assessment of licensee performance (SALP) process, which was viewed as inconsistent, highly subjective, and lacking transparency. The foundation for the ROP was laid in SECY-99-007, "Recommendations for Reactor Oversight Process Improvements," dated January 8, 1999 ([ML992740074](#)), which proposed a more objective, risk-informed, and performance-based oversight approach to better reflect the actual safety significance of issues identified at nuclear power plants.

One of the central goals of SECY-99-007 was to ensure that NRC oversight activities focused on risk-significant areas of plant operations and that agency resources were applied consistently across all reactor sites. As part of this effort, the NRC redefined how inspection areas were developed and implemented with the creation of three strategic performance areas and seven associated cornerstones of safety, as follows:

### 1. Reactor Safety Strategic Performance Area

- *Initiating Events*: Preventing events that could challenge safety systems.
- *Mitigating Systems*: Ensuring safety systems can respond effectively to accidents.
- *Barrier Integrity*: Maintaining the integrity of fuel cladding, reactor coolant system, and containment.
- *Emergency Preparedness*: Ensuring the licensee can effectively respond to emergencies.

### 2. Radiation Safety Strategic Performance Area

- *Occupational Radiation Safety*: Protecting plant workers from unnecessary radiation exposure.
- *Public Radiation Safety*: Preventing radioactive material releases that could harm the public or environment.

### 3. Safeguards Strategic Performance Area

- *Physical Protection*: Securing the plant from sabotage or unauthorized access.

The above framework emphasized alignment with safety objectives, plant performance, and industry best practices taking into consideration factors such as operating experience, probabilistic risk assessments (PRAs), the NRC's regulatory requirements, and expert input from NRC staff, industry representatives, and external stakeholders.

Using the above framework, the NRC developed specific inspectable areas to systematically evaluate plant performance. Each cornerstone of safety was broken down into key activities or systems that contribute to safe plant operation, such as maintaining reactor coolant system integrity and ensuring safety system readiness. From this analysis, detailed IPs were developed for each area, clearly defining their objectives, scope, inspection methods, and resource estimates. Risk insights were then applied to prioritize the frequency and depth of inspections, ensuring that areas with the highest safety significance received the greatest attention and oversight.

Each of the seven cornerstones contains specific inspectable areas used to direct NRC inspectors to evaluate performance using established procedures. These inspectable areas make up the NRC's baseline inspection program and are conducted at every plant. Upon the inception of the ROP on April 1, 2000, the baseline inspection program nominally required approximately 2,165 inspection hours per reactor site annually,<sup>3</sup> ensuring a consistent and risk-informed level of oversight across the U.S. fleet. Currently, the NRC's baseline inspection program requires 2,012 annualized inspection hours per reactor site.<sup>4</sup>

To start the comprehensive review of the ROP, the staff reviewed SECY-99-007 to determine whether the foundational regulatory framework for the baseline inspection program remained valid. As part of this review, the staff carefully considered several critical factors. Operating experience and lessons learned from past and recent events served as the starting point to help identify the types of inspection and inspectable areas needed to mitigate or eliminate plant events. PRAs were employed to highlight high-risk plant systems and functions, helping to prioritize areas based on the likelihood and potential consequences of failures. Input from the NRC staff, industry representatives, and external stakeholders provided a diverse range of perspectives and technical expertise, which informed the staff's evaluation of the existing regulatory framework. In addition, the staff reviewed applicable regulatory requirements, including anticipated changes to NRC regulations, to ensure that the ROP continued to align with established safety and security standards.

In conducting its initial review of SECY-99-007, the staff concluded that while operational performance and changes in technology have necessitated the need for adjustments to the ROP, the existing three strategic performance areas and seven cornerstones of safety remained valid and adequately defined the performance areas needed to protect public health and safety. This conclusion was based on the staff's comparison of the existing design of the current fleet of commercial power reactors and the risk associated with those designs.

The staff also concluded that the basic inspectable areas outlined in SECY-99-007 and which are reflected in the current baseline inspection program continue to represent the areas warranting NRC oversight. While the staff concluded that the basic ROP framework remained valid and acceptable to protect public health and safety, the staff identified that the NRC's use of oversight resources warranted review and adjustment based on changes in industry performance, advancements in technology, and changing risk profiles of the operating reactor fleet. This review would allow the NRC to reduce regulatory burden while maintaining program effectiveness.

To determine a better distribution of oversight resources across the NRC's baseline inspection program, the staff conducted a comprehensive, methodical evaluation that integrated both retrospective analysis and forward-looking considerations. The resulting recommendations to the Commission were developed with the objective of ensuring that the inspection program remains risk-informed, efficient, and responsive to changes in industry performance and regulatory needs, while continuing to uphold the agency's mission of protecting public health and safety.

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<sup>3</sup> Inspection Manual Chapter (IMC) 2515 Appendix A, "Risk-Informed Baseline Inspection Program," dated September 12, 2000 (ML25072A253). Attachment 3 provides a reference source for determining year 2000 risk-informed baseline inspection program samples and resource estimates.

<sup>4</sup> The NRC's baseline inspection program provides resource estimates based on a reactor site (either a 1-unit, 2-unit, or 3-unit reactor site) with slight variances based on technology (e.g., either a pressurized water reactor or a boiling water reactor). The 2,012-hour resource estimate for the current baseline inspection program is based on nominal inspection hours for a 2-unit pressurized water reactor site.

The staff's evaluation was anchored in two foundational assumptions designed to preserve the structural integrity of the ROP and to maintain a robust, continuous NRC presence at each reactor site. First, the staff assumed that the NRC would continue to station at least two resident inspectors at every operating power reactor.<sup>5</sup> This core assumption recognizes the value of daily on-site observation, timely event response, and engagement in supporting early detection of emerging issues to foster effective and efficient regulatory engagement. To maintain full utilization of resident inspector resources considering proposed reductions to certain elements of the baseline inspection program, the staff proposed shifting a small amount of inspection activities, particularly those aligned with the technical expertise and capabilities of resident inspectors, from NRC regional to resident staff. This realignment is intended to preserve inspector proficiency, fully utilize inspection staff resources, sustain routine coverage of plant activities, and maintain the NRC's ability to independently verify licensee performance. To accomplish this, the NRC will, as schedules allow, utilize the resident inspectors as part of the revised engineering, emergency preparedness, security and licensed operator requalification inspections described later in this paper and in the companion paper involving changes to the baseline security inspection program.

Second, the staff assumed that the set of inspectable areas originally defined in SECY-99-007 would remain intact, thereby ensuring that, using appropriate sampling methods, all critical safety and security functions would continue to receive oversight. However, the distribution of inspection effort across these areas would be rebalanced to reflect current risk insights, improvements in industry performance, and changes in operational practices. This includes consideration of the increasing use of digital instrumentation, automation, and data analytics in both plant operations and NRC oversight. Under this approach, higher-risk or more dynamic areas would receive greater inspection focus, while lower-risk areas, particularly those with demonstrated sustained licensee performance, would receive fewer resources without compromising regulatory effectiveness.

To inform this assessment, the staff employed a multi-pronged methodology grounded in evidence, stakeholder engagement, and procedural analysis. A central component of this evaluation involved a thorough review of inspection findings and enforcement outcomes over the ROP's 25-year history. To begin, this review sought to identify trends in licensee performance, and included a comprehensive review of inspection findings, scrams, performance indicator data, and accident sequence precursor (ASP) events from the inception of the ROP in 2000 through the most recent available data.<sup>6</sup> This risk-informed review looked to identify long-term trends in licensee performance based on the frequency and severity of events and how this has changed since the original inspection program was laid out for the ROP to determine if reductions in the inspection program can be justified.

### ***Accident Sequence Precursor Events***

The staff reviewed the number of ASP events<sup>7</sup> from the beginning of the ROP to the present. ASP events were selected because the risk-informed criteria for classifying an event as a

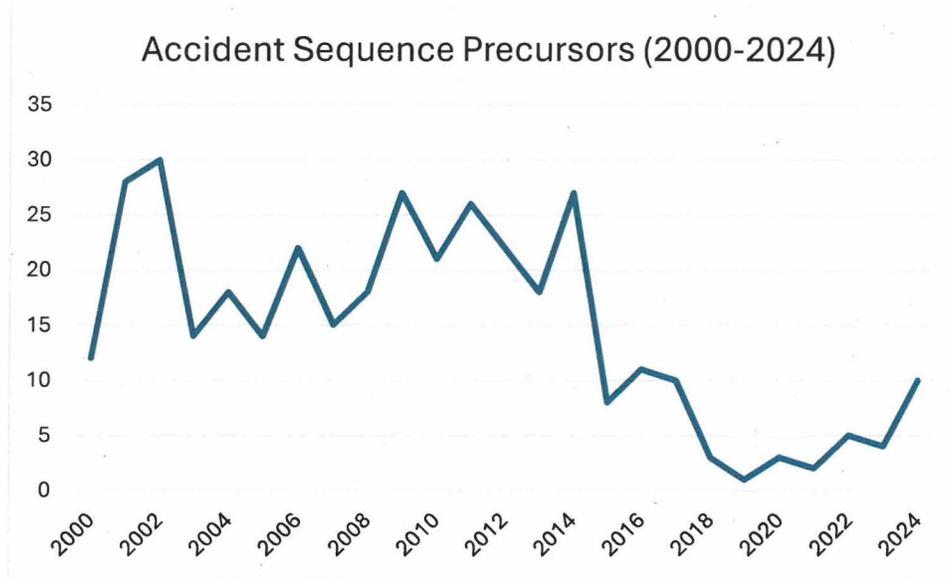
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<sup>5</sup> This assumption is only applied to the current fleet of large, light-water power reactors. The advanced reactor oversight program, currently under development, will determine the proper amount of NRC oversight, including if resident inspectors are needed, for the next generation of nuclear power reactor sites.

<sup>6</sup> Since 2000, 13 units have ceased operations, and four units restarted or came online for the first time. This had some impact on the absolute numbers of inspection findings, scrams, and precursor events, but the net fractional decline in operating units was small compared to the magnitude of the fractional changes in these parameters. Analysis on a per-operating-unit basis yields essentially the same results.

<sup>7</sup> An ASP is a subset of events that include either (1) a degraded plant condition characterized by the unavailability or degradation of

precursor have remained relatively consistent since the ROP's inception. The review found that even as the number of events in any given year will vary, over the past 25 years the number of ASP events each year has declined by approximately 60 percent. While not a measure of the performance of any given unit, the staff concluded that the downward trend in ASP events suggests an overall improvement in the performance of the U.S. nuclear fleet, particularly in reducing the number of higher-risk events most likely to impact public health and safety. This trend supports targeted oversight reductions, enabling the NRC to allocate its resources more efficiently while remaining responsive to credible risks, such as those like ASP events.



### **Reactor Scrams**

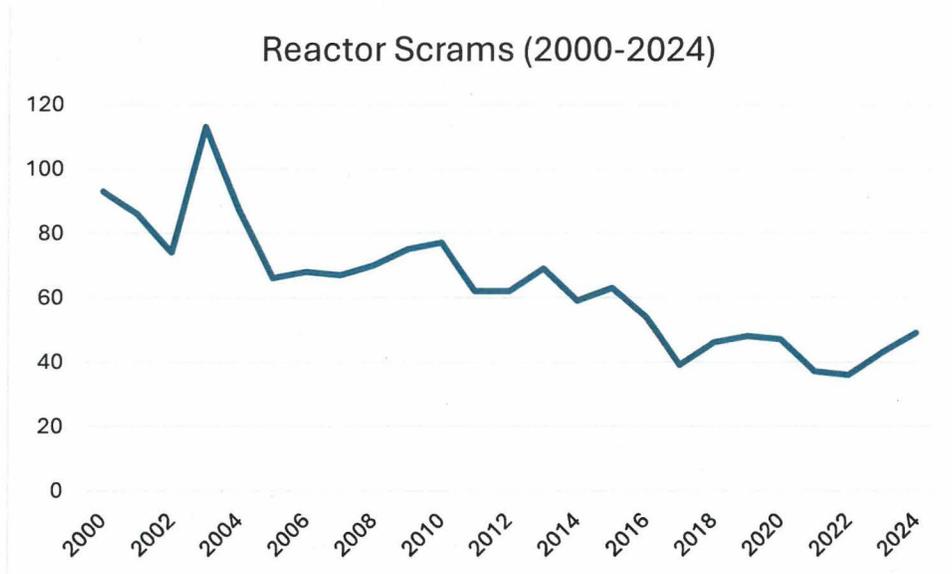
The staff analyzed the total number of reactor scrams from 2000 through to the most recent data available. Reactor scrams were selected as a meaningful indicator of plant performance because:

1. Events that disrupt plant stability (e.g., initiating events) can challenge safety systems and licensed operators, and
2. Reactor scram data is objective and generally not subject to interpretation.

The analysis showed that the average number of scrams per year since 2020 is roughly half of what it was during the first 5 years of the ROP. While not an absolute measure of performance and taking into account the slight upward trend in 2023 and 2024, this indicates improved fleet-wide performance over the past 25 years and supports the targeted reductions in oversight proposed in this paper, allowing the NRC to be more efficient with its resources with no impact on mission effectiveness.

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equipment without the occurrence of an initiating event, or (2) the occurrence of an initiating event, such as a reactor trip or a loss of offsite power, with or without any subsequent equipment unavailability or degradation. Information regarding the ASP program, including evaluation thresholds, can be found at <https://www.nrc.gov/about-nrc/regulatory/research/asp>.

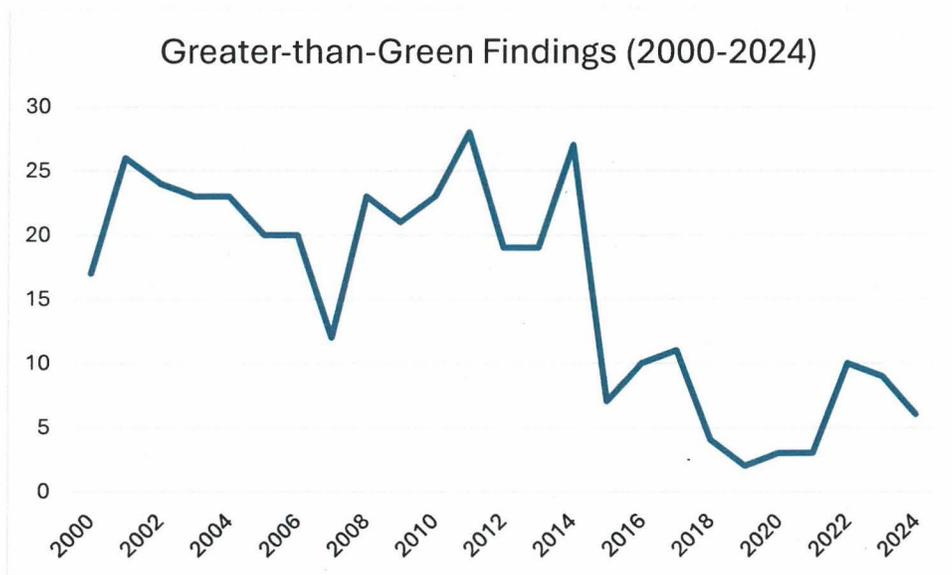


**Greater-than-Green (GTG) Findings and PIs**

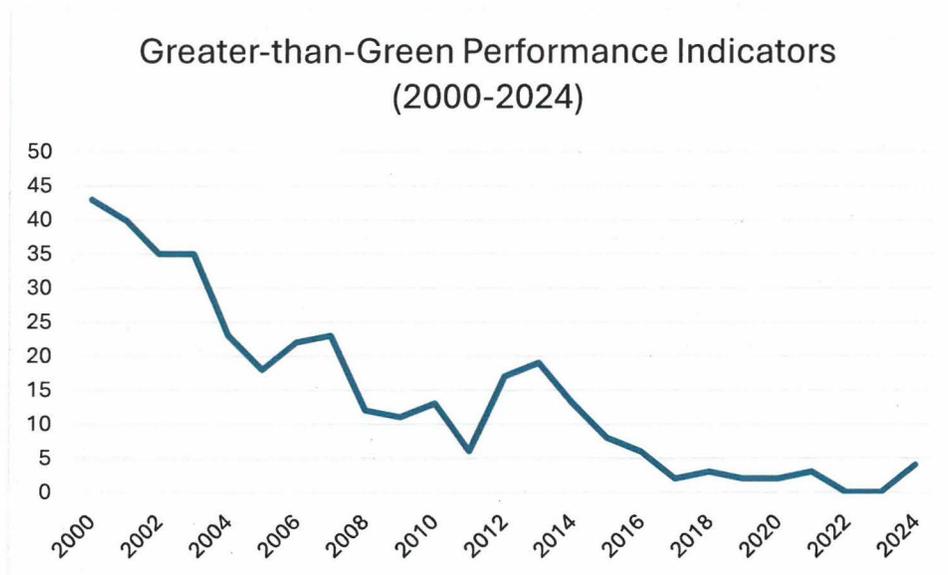
The staff reviewed the total number of GTG findings and PIs from the start of the ROP to the present. These were selected as indicators of plant performance because:

1. GTG findings use risk-informed thresholds and undergo a higher level of review and scrutiny than Green findings, resulting in greater consistency in the application of those thresholds, and
2. PIs generally involve minimal subjectivity.

The staff found that the average number of GTG findings per year since 2015 has been about 70 percent lower than it was from 2000-2014. While some of the decline is due to re-evaluation of deterministic thresholds in the Security cornerstone, much of the change can be attributed to plant modifications that resulted in improved risk outcomes for any given equipment failure.



PIs were implemented to provide objective plant data indicative of performance in each cornerstone. As the ROP matured, licensee performance improved as shown by a larger population of Green PIs. The staff noted an 86 percent drop in the average number of GTG PIs each year when comparing the past 10 years (2015-2024) to the previous 15 years (2000-2014). Further, every GTG PI in the past 10 years involved plant transients of the type that will continue to be inspected individually as part of routine event follow-up inspections. Maintaining these inspections ensures that the NRC remains responsive to the credible risk of plant transients.



Taken together, these trends indicate that overall licensee performance has improved since the initial development of the ROP baseline inspection program in 2000. The staff also found that the current resource estimates for the ROP baseline inspection program were largely consistent with those found in SECY-99-007. Specifically, on April 2, 2000, when the ROP was first launched, the baseline inspection program required approximately 2,165 hours of direct inspection to complete across all disciplines. In comparison, the current baseline inspection program takes 2,012 hours to complete, an approximately 7 percent reduction when comparing resources estimated from the first year of the ROP to the present. When compared to trends in industry performance, the staff concluded that improved performance has outpaced the changes in required NRC resources over the same period. Improved industry performance can be attributed to many factors, including plant modifications to reduce the plant risk profile, the reduction of single point vulnerabilities, improved maintenance programs, and the addition of equipment to improve defense in depth. While it is not possible to produce an exact correlation of the number of direct inspection hours needed to effectively assess plant performance based on these trends, the staff concluded that improved licensee performance warrants a reduction in regulatory burden and that this reduction can be accomplished without compromising the effectiveness of the NRC's oversight programs.

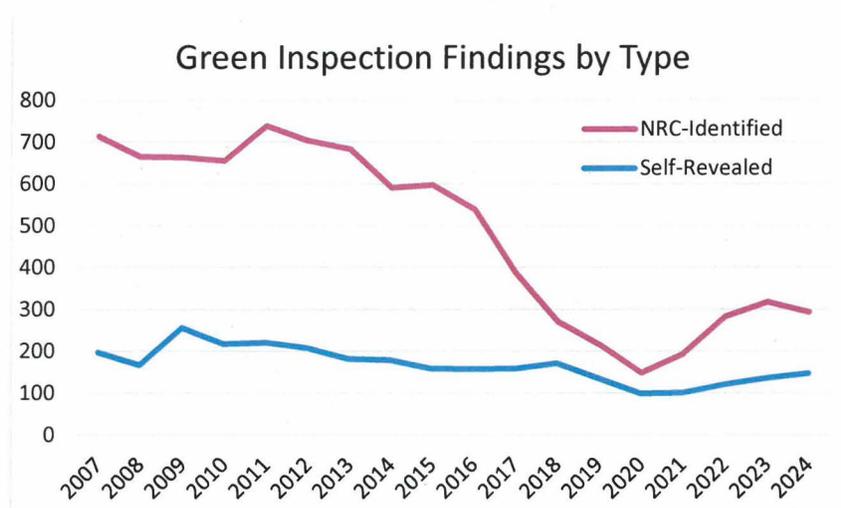
### ***Green Findings and MTM Screening***

A separate analysis was performed on Green inspection findings. Fleet performance over the last 25 years has resulted in less Green findings. However, this trend is less apparent than trends in ASP and GTG action matrix inputs described above. Shifts in the number of green findings over time were influenced by several other factors including: 1) how the MTM threshold

has been interpreted; 2) a major revision to the MTM examples in IMC 0612, “Issue Screening,” Appendix E, “Examples of Minor Issues” ([ML19247C385](#)), implemented in 2019; and, 3) revisions to the backfit process implemented in 2017.<sup>8</sup> Recognizing this, the staff relied more heavily on the more definitive data sources (ASP, reactor scrams, and GTG action matrix inputs) and less on Green findings when developing the recommendations in this paper. The

staff did use the trend in Green findings to help develop recommendations relative to the specific inspection procedure changes and revised MTM screening criteria described later in the paper.

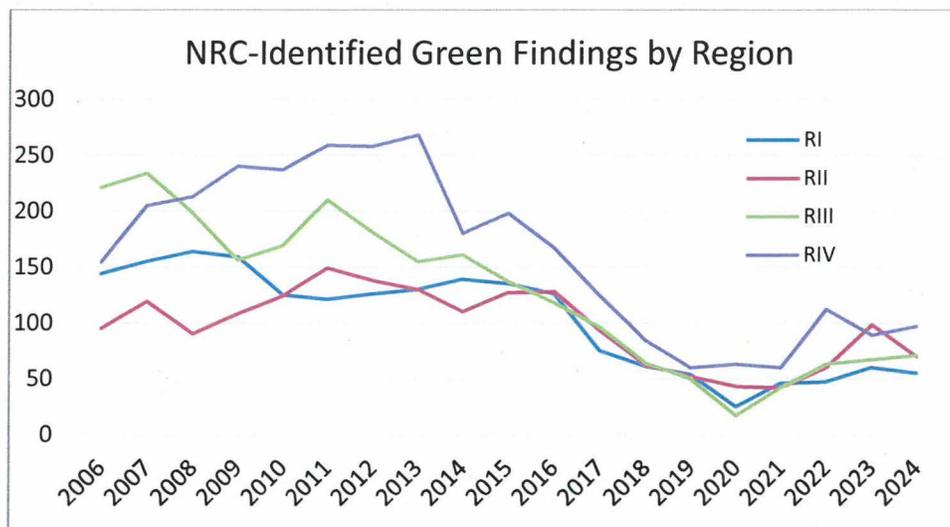
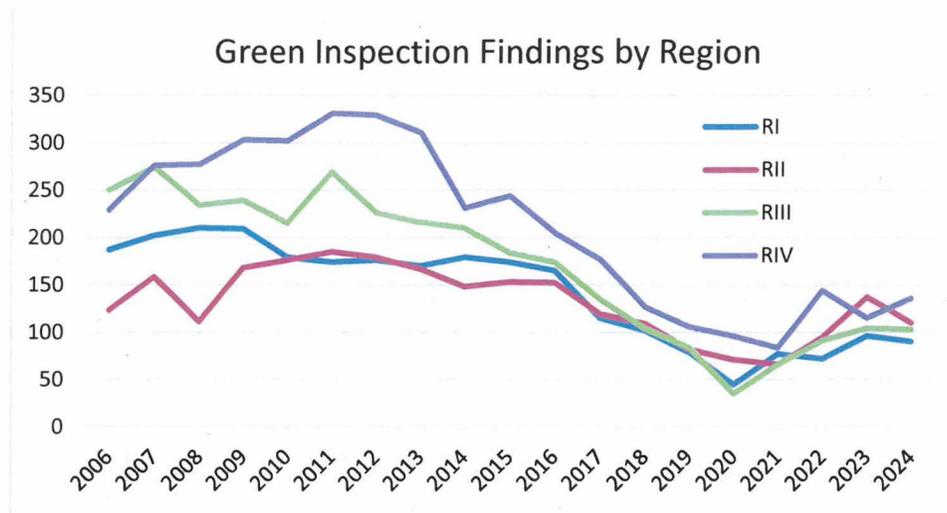
As shown in the graph below, the number of self-revealed findings (meaning plant equipment or operation was impacted) have dropped by a nominal percentage (between 25-50 percent depending on comparison points) over the last 20 years, while the number of NRC-identified findings, which are more dependent on how the MTM threshold was interpreted, exhibited a much more dramatic decline from 2015-2020, and a larger increase from 2021-2024, than the self-revealed findings. The low point in findings in 2020 was due to the inspection impacts of the COVID-19 public health emergency (PHE) and the subsequent increase in 2021-2024 was associated with recovery from the PHE.



Likewise, in the past, there was a disparity among the NRC regions in the number of Green findings documented with that disparity peaking in 2013.<sup>9</sup> In response to this disparity, the NRC provided guidance and training to better align the regions and individual inspectors on the application of the MTM threshold. These actions were one of many reasons that drove a decline in Green findings starting in 2015, and ultimately greater alignment among the regions.

<sup>8</sup> SECY-23-0032, “Reactor Oversight Process Self-Assessment for Calendar Year 2022,” dated April 7, 2023 ([ML23026A346](#)).

<sup>9</sup> GAO-13-743, “Nuclear Power – Analysis of Regional Differences and Improved Access to Information Could Strengthen NRC Oversight,” dated September 27, 2013 (<https://www.gao.gov/products/GAO-13-743>).



While the NRC’s 2015 actions to provide guidance and training to better align the regions and individual inspectors on the application of the MTM threshold did result in notable consistency improvements, the staff still viewed the MTM screening questions as susceptible to subjective interpretations. This is particularly true since the 2015 training was a one-time occurrence and as the NRC experiences turnover in inspection staff, the impact of that training diminishes. Further, the issue of variability in MTM screenings has been raised as a concern in multiple surveys and evaluations conducted from 2015 to 2023. Recognizing this as a possible weak point in the inspection finding screening process, the staff re-evaluated the MTM screening thresholds to produce more objective, risk-informed criteria. This evaluation and associated recommendation to the Commission are discussed later in this paper.

The staff’s review of Green findings also served as a foundational dataset for evaluating the effectiveness of individual inspection procedures. This analysis informed decisions about which inspection procedures may benefit from adjustment or consolidation. The staff assessed the total number of inspection findings associated with each procedure, as well as the number of findings per inspection hour. While inspections provide value even in the absence of findings, particular attention was given to procedures that consistently yielded few or no findings of regulatory significance. These trends may indicate opportunities to optimize or realign

inspection resources. Conversely, when findings are consistently identified, it affirms that the inspection samples are appropriately focused to uncover risk-informed safety or regulatory issues.

Recognizing that quantitative data alone cannot capture the full context of inspection efficacy, the staff also engaged a wide range of internal and external stakeholders to gain insight into the practical implementation of NRC inspection programs. The staff reviewed stakeholder recommendations for revising the ROP from the 2019 ROP Enhancement Project<sup>10</sup> and the COVID-19 Public Health Emergency Lesson Learned<sup>11</sup> to determine their potential for improving efficiency and effectiveness. Additionally, the staff revisited recommendations previously submitted to the Commission<sup>12</sup> to determine whether any of those recommendations should be reconsidered under the ROP revisions for Section 507 of the ADVANCE Act and Section 5(g) of EO 14300. The staff also considered information from all external and internal input including the input that was received in developing the ADVANCE Act Section 507 report to Congress.<sup>13</sup>

More recently, the staff sought input from both internal and external stakeholders to inform its evaluation and recommendations. Internal outreach efforts included presentations with opportunities for feedback at inspector counterpart meetings, surveys, and focus group discussions. External outreach activities to the industry, members of the public, nongovernmental organizations, and other public stakeholders consisted of public meetings on July 23, 2025 ([ML25216A005](#)), August 20, 2025 ([ML25230A048](#)), and September 18, 2025 ([ML25259A008](#)).

In parallel, the staff undertook a detailed review of the full suite of existing IPs, which included leveraging artificial intelligence tools, to identify redundancies, procedural overlaps, and opportunities to consolidate or streamline inspection activities without reducing their safety value. This review considered both the technical content of the procedures and the way in which different inspection elements interact, particularly between resident and regional inspections. In doing so, the staff identified areas where clearer delineation of responsibilities and better alignment with inspector expertise could yield more efficient and focused oversight.

Finally, the staff ensured that all proposed changes remained consistent with existing statutory and regulatory requirements, the Office of the Inspector General, and other Federal oversight bodies (e.g., the Government Accountability Office). This included reviewing prior Commission direction, past audit recommendations, and applicable elements of the Atomic Energy Act, the Energy Reorganization Act, and NRC regulations. Any changes to oversight practices were carefully evaluated to ensure that they did not compromise the NRC's ability to meet its legal obligations, while balancing the importance of stakeholder confidence.

Taken together, this comprehensive evaluation allowed the staff to identify a set of oversight adjustments that are informed by data, experience, and stakeholder input. The resulting

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<sup>10</sup> "Disposition of Recommendations to Enhance the Reactor Oversight Process," dated March 10, 2020 ([ML19101A334](#)).

<sup>11</sup> "Final Report for the Follow-on Review of the Lessons Learned, Best Practices, and Challenges During the COVID-19 Public Health Emergency," dated July 28, 2022 ([ML22172A159](#)).

<sup>12</sup> SECY-22-0087, "Recommendation for Problem Identification and Resolution Team Inspection Frequency," dated September 20, 2022 ([ML22145A448](#)).

<sup>13</sup> Letters received from the Nuclear Energy Institute (NEI) that were considered were the October 28, 2024, letter titled "NEI Input on Improvements to Licensing and Oversight Programs" ([ML24302A311](#)); the February 10, 2025, letter titled "NEI Input on Recent Executive Orders" ([ML25058A144](#)); and the July 31, 2025, letter titled "Industry Recommendations on Accelerating NRC Reform" ([ML25212A197](#)).

recommendations maintain the NRC's fundamental oversight framework, enhance the alignment of inspection resources with current risk, and preserve the agency's ability to effectively identify and respond to safety and security concerns in a changing operating environment. By retaining key inspection infrastructure while modernizing resource allocation, the NRC continues to demonstrate its commitment to regulatory excellence, transparency, and the highest standards of public health and safety.

It's important to note that the recommendations presented to the Commission in this paper build upon interim changes implemented in response to the ADVANCE Act Section 507. Specifically, as discussed in SECY-25-0045 and the ADVANCE Act Section 507 report to Congress, the staff revised inspection guidance to direct the use of minimum inspection samples. The previous guidance in the NRC's inspection manual established an expectation that the regions should normally complete a specified nominal (average) number of inspection samples between the minimum and maximum allowable samples identified in the IP. The revised ROP baseline inspection program retains the expectation to inspect to minimum samples and the resource estimate provided to the Commission in this paper reflects that expectation.

In parallel with the assessment of the inspection program areas, the staff assessed existing guidance related to issue screening. The staff considered process changes and redefined thresholds for minor issues. Proposed changes to the NRC's issue screening criteria are discussed in this paper after the proposed revision of the ROP baseline inspection program is presented.

#### **PROPOSED CHANGES TO ROP BASELINE INSPECTION PROGRAM:**

Revisions to the baseline inspection program were developed through three complementary approaches, which are collectively reflected in the recommendations below.

The first approach involves a shift from nominal to minimum inspection samples, implemented on July 1, 2025. This change marked the staff's initial action to reduce regulatory burden in response to Section 507 of the ADVANCE Act. It acknowledged that the NRC's previous sampling approach did not align inspector resource levels with the safety significance of the activities being inspected. Because this change fell within the scope of the existing ROP, it did not require Commission approval. However, the staff formally notified the Commission of this change through SECY-25-0045, and the change was also described in the Section 507 report submitted to Congress.

The second and third approaches, both requiring Commission approval, are the primary focus of this paper. The second approach involves eliminating certain IPs while transferring their risk-significant attributes and associated inspection hours into other existing IPs. This consolidation reduces redundancy and streamlines the program by integrating essential inspection elements into a more efficient IP structure.

The third approach retains certain IPs but reduces the number of samples and associated resource hours based on risk insights, fleet-wide operational performance, and other relevant factors.

The ROP baseline inspection program can be summarized as having two different types of inspection procedures, those IPs performed by the RIs and those performed by regional office inspectors either on an individual basis or in a team format. The first group of IPs that are

discussed in this paper are the proposed revisions to the RI baseline IPs and the second group are the proposed revisions to the regional inspector IPs.

### ***Reactor Safety Inspection Program - Resident Inspector Baseline Inspections***

The staff identified that the following IPs normally conducted by resident inspectors can be eliminated, with their risk-significant attributes or requirements shifted into other IPs. In general, the below IPs recommended for elimination have not identified many performance issues.

- IP 71111.06, "Flood Protection Measures," can be eliminated and attributes shifted to IP 71111.01, "Adverse Weather Protection," and IP 71111.04, "Equipment Alignment."

Basis – The staff identified redundancies between IP 71111.06, IP 71111.01 and IP 71111.04. Specifically, there is overlap between the inspection objectives and walkdown areas for the different procedures. As a result, the attributes of IP 71111.06 can be shifted to IP 71111.01 and IP 71111.04. This change will eliminate a redundant procedure while maintaining flexibility to inspect the flood protection measures historically covered by IP 71111.06 during equipment alignment or adverse weather inspections, if needed.

- IP 71111.07, "Heat Exchanger/Sink Performance," can be eliminated and attributes shifted to IP 71111.24, "Testing and Maintenance of Equipment Important to Risk."

Basis – The staff identified that based on industry performance, the maturity of the program, and inspector feedback, the inspection attributes of IP 71111.07 are better suited to be included as inspectable areas in IP 71111.24.

- IP 71111.12, "Maintenance Effectiveness," can be eliminated and select inspection requirements and attributes shifted to IP 71111.13, "Maintenance Risk Assessments and Emergent Work Control," and IP 71111.24.

Basis – The staff identified that based on industry performance, inspector feedback, and operating experience, the inspection attributes of IP 71111.12 that need to be maintained are better suited to be included as samples in IP 71111.13 and IP 71111.24. These IPs are closely related in purpose as they both include critical elements related to plant maintenance, including emergent work. This change will eliminate a redundant procedure while maintaining a proper focus on inspection of licensee maintenance practices.

- IP 71111.18, "Plant Modifications," can be eliminated and attributes shifted to IP 71111.04; IP 71111.11, "Licensed Operator Requalification Program and Licensed Operator Performance"; and a newly developed engineering IP, discussed below.

Basis – The staff identified redundancies between IP 71111.18 and IP 71111.04, IP 71111.11, and the proposed engineering inspection program. Specifically, some of the procedures overlap with respect to verifying that modifications to risk-significant systems, structures, or components (SSCs) do not introduce conditions that adversely impact the ability of SSCs to perform their design and licensing basis functions. In addition, review of plant modifications includes walkdowns to verify the modification installation, outstanding design issues, etc., as well as review of any impact to control

room indications and operator performance. As a result, attributes of IP 71111.18 can be added to IP 71111.04, IP 71111.11, and the proposed engineering inspection program. The proposed engineering inspection program will be designed to inspect risk-significant modifications on a timelier basis.

- IP 71151, "Performance Indicator Verification," can be eliminated and attributes shifted to IP 71152, "Problem Identification and Resolution (PI&R)," and IMC 2515 Appendix D, "Plant Status."

Basis – The staff recognizes that PIs are a foundational element of the ROP that serves as a key mechanism for assessing the safety performance of commercial nuclear power plants. Since the inception of the ROP, while there have been several frequently asked questions (FAQs) generated, very few violations or findings have been documented associated with the IP 71151 PI verification sample. Those that have occurred primarily involved issues with PI data validation and reporting and very few involved a change in PI threshold that resulted in Action Matrix movement. The staff has also received feedback from NRC inspectors that the time spent on this IP is not commensurate with the safety significance. The staff recommends sunsetting IP 71151 and incorporating its important attributes into IP 71152, IMC 2515 Appendix D, and the Emergency Preparedness inspection procedures for the Emergency Preparedness Cornerstone. This approach acknowledges that the verification of PIs represents a fundamental tenant of the ROP, but it allows flexibility for the inspector to focus on those aspects that are most relevant based on licensee performance.

The staff identified that the following IPs should be retained, either unchanged or with updates as described below. See Enclosure 1 for specific information on sample numbers and inspection hours per IP.

- IP 71111.01, "Adverse Weather Protection"

The staff recommends no substantial change to requirements or guidance due to operating experience, inspector surveys, and potential risk significance for numerous sites. As previously discussed, the staff recommends adding flood protection (IP 71111.06) attributes to the procedure. The staff recommends keeping the sample and resource estimates described in the current IP.

- IP 71111.04, "Equipment Alignment"

The staff recommends no substantial change to requirements or guidance due to the risk significance of the systems this activity inspects. As discussed, the staff recommends adding elements related to internal flood protection (IP 71111.06).

This change was based on a review of inspection findings, inspector feedback, and industry performance. The staff also recommends keeping samples as described in the current IP with an appropriate increase in resource estimates, recognizing that elements of IP 71111.06 are added to this procedure.

- IP 71111.05, "Fire Protection"

The staff recommends a slight reduction in inspection effort, described below, but maintaining a comprehensive inspection given the risk significance that internal fires pose to plant safety and the fact that the staff review of plant-specific PRAs revealed that internal fires represent a significant contributor to core damage frequency for the current reactor fleet. The staff does recommend that to enhance program efficiency, the inspection guidance for this procedure indicate that where possible, inspectors perform this inspection in conjunction with the equipment walkdown procedure IP 71111.04. The staff recommends that the sample range be reduced from 16-24 to 12-20. This recommendation is based on a review of inspection findings, industry performance in the fire protection area, and NRC experience involving the number of meaningful fire areas available for inspection, which indicated that a reduction in inspection activity is warranted. The staff also recommends that the fire brigade minimum inspection sample be reduced to one, with an option to conduct two, if necessary.

- IP 71111.08, "Inservice Inspection Activities"

The staff recommends no substantial change to this inspection procedure given the potential risk significance associated with the integrity of the fission product barriers that are reviewed by this inspection. However, based on survey data and industry performance, the staff recommends reducing the inspection hours for the boric acid corrosion review.

- IP 71111.13, "Maintenance Risk Assessments and Emergent Work Control"

The staff recommends no substantial changes to this inspection procedure based on operating experience and inspector survey results. The staff also recommends that based on the evaluation of the completed PRA configuration smart samples and feedback from the PRA configuration control working group, an optional PRA configuration control sample should be added to IP 71111.13. This action will complete the evaluation of PRA configuration control oversight. The staff recommends maintaining the current sample range of 12-22 with a small increase in inspection hours to account for portions of the eliminated IP 71111.12, which are not covered by other IPs.

- IP 71111.15, "Operability Determinations and Functionality Assessments"

The staff recommends no change to the requirements or guidance based on operating experience and inspector feedback.

- IP 71111.20, "Refueling and Other Outage Activities"

The staff recommends no change to the requirements or guidance based on operating experience and inspector feedback.

- IP 71111.24, "Testing and Maintenance of Equipment Important to Risk"

The staff recommends that inspection guidance be enhanced to include attributes from IP 71111.07 and IP 71111.12. No changes in inspection samples are recommended. As

a result, the projected inspection samples would remain the same, but there will be an increase in inspection hours.

- IP 71153, “Followup of Events and Notices of Enforcement Discretion”

The staff has already reduced the level of effort for this IP based on enhanced procedural guidance in the IP that clarifies when to shift from using IP 71153 to another baseline IP. Additionally, the revised guidance clarifies that events already inspected under a different IP should not be re-inspected using IP 71153. The estimated inspection effort for this procedure has decreased and inspection sample size was also clarified to be performed “as required.” The most recent revision of IP 71153, dated September 3, 2025, reflects this change.

As part of this review, the staff evaluated the expected workload of the NRC resident inspectors to ensure that personnel assigned to those positions would be fully utilized. Overall, the proposed changes to the resident inspector portion of the baseline inspection program result in a net reduction of 232 hours, after accounting for all relevant factors—including modest increases in plant status activities, to address PI verification not otherwise addressed in other IPs, and increased resources for IP 71111.04, IP 71111.13, and IP 71111.24.

To address this overall reduction, the staff anticipates that the resident inspectors will support the new engineering inspection (estimated at 40–80 hours annually), as well as other inspection activities such as emergency preparedness, security, licensed operator requalification, and independent spent fuel storage installations, which are collectively expected to require an additional 60 hours annually. For the remaining available time, the resident inspectors are expected to serve as surge capacity for broader ROP activities. This includes supplemental and reactive inspections, site backfill coverage, and, infrequently, implementation of above-minimum inspections when warranted by plant performance. The staff believes that leveraging the resident inspectors in this surge capacity role, which will be primarily in programs at their site that were inspected by regional personnel in the past, will be essential if the Commission approves the changes outlined in this paper. This is because the comprehensive revisions proposed are expected to affect regional staffing levels, thereby reducing the availability of inspection resources from the regions traditionally relied upon for oversight activities beyond the baseline inspection program. This revision, if approved, will be monitored closely when the new baseline inspection program goes into effect to ensure effective implementation of these expectations to optimize utilization of available RI time.

### ***Reactor Safety Inspection Program - Engineering Baseline Inspections***

The staff performed an assessment of the current engineering inspection program, which underwent significant changes just prior to the most recent inspection cycle that started in January 2023. The staff’s assessment included a review of the history of NRC engineering inspections<sup>14</sup>, feedback from NRC inspectors and licensees, and analysis of data collected from the current engineering inspections that include the Comprehensive Engineering Team Inspection (CETI) and three Focused Engineering Inspections (FEIs) occurring during a 4-year cycle.

NRC engineering inspections have historically aimed to ensure that licensee engineering activities do not unintentionally introduce hidden design flaws into safety-related systems. While

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<sup>14</sup> “History of Engineering Team Inspections” ([ML22129A127](#)).

these inspections have consistently focused on verifying design integrity, they have evolved over the past four decades based on operational experience and risk insights. Since the 1990s, the emphasis has shifted from checking compliance with original design bases to evaluating how well licensees maintain risk-significant equipment in line with design and operational requirements. The CETI and FEI both reflect this evolution, targeting current licensee activities and incorporating aging management, operating experience, and risk-informed insights. FEIs are different than the CETI and are not full program implementation reviews. FEIs are designed to verify the implementation of engineering programs in key technical areas.

While the NRC's current engineering inspection program has demonstrated strong effectiveness in meeting the agency's risk-informed oversight objectives, it remains highly resource intensive and, at times, is inefficient in its use of both NRC and licensee resources. The current engineering inspection program represents the most significant level of effort in the context of ROP inspections, with the CETI nominally resourced at 490 hours of direct inspection effort and the three FEIs nominally resourced at 210 hours of direct inspection effort each. This results in an average of 280 hours of engineering inspection each year and accounts for approximately 25 percent of the total reactor safety direct inspection resources for the ROP.

The CETI was developed to consolidate and streamline previous inspection efforts and eliminated multiple site visits for overlapping inspections. The CETI successfully reduced redundant activities while resulting in a comparable level of findings to prior cycles. However, the large team size and depth of review required for CETIs have proven difficult to manage, placing a significant burden on both NRC staff and licensee personnel. Feedback from regional offices and industry stakeholders consistently pointed to challenges in inspection preparation, scheduling coordination (especially for licensees with shared corporate resources), and the overall effort required to support these inspections. For the FEIs, the staff observed that many engineering areas had already been inspected in previous cycles, resulting in diminishing value from repeating inspections in certain engineering areas. These collective factors present an opportunity to refine the program, preserving its effectiveness while enhancing efficiency and long-term sustainability.

The staff undertook a comprehensive review of the engineering inspection program guided by three key principles: resource optimization, flexibility, and risk-informed oversight. Recognizing that overall licensee performance has significantly improved since the inception of the ROP, the staff proposed adjustments to better align inspection resources with current performance trends. This includes smoothing out resource demands to reduce the historical peaks and valleys in workload that accompany large team inspections. These changes acknowledge that improved licensee performance justifies a more efficient allocation of NRC resources and are consistent with the goals of ADVANCE Act Section 507 and EO 14300.

Feedback from regional offices emphasized the need for greater flexibility in inspection execution. The staff sought program revisions that would allow for broader sampling across engineering work products using targeted inspections by smaller and more agile teams. This approach enables the NRC to be more responsive to site-specific events and recent engineering activities by tailoring the inspection scope based on historical licensee performance. The revised program enables a more dynamic deployment of resources to better balance inspection depth with resource expenditures, ensuring continued safety while improving efficiency.

Based on the analysis described above, the staff recommends that the following IPs' attributes or requirements be shifted into a new IP that will be conducted annually utilizing an average of

2.5 inspectors over 2 weeks of direct inspection effort. The new IP will be developed so that a resident inspector could provide at least 40 hours of inspection effort:

- IP 71111.21M, “Comprehensive Engineering Team Inspection (CETI),” and Focused Engineering Inspections (FEI) (IP 71111.21N series).

Basis – The staff determined that based on industry trends, which emphasize the preservation of the existing plant design basis in lieu of plant modifications, a review of inspection results, and the concentration of licenses with a limited number of operating companies, a more flexible and innovative approach to engineering inspection activities is warranted. Accordingly, the staff recommends that the attributes of the current engineering inspection program procedures be consolidated into one procedure that will allow regional offices to adjust engineering inspection activities to individual site performance by making the IP more responsive to current licensee performance and recent engineering work. This adjustment will result in a decrease of 105 annualized inspection hours in the engineering program area. Currently, the engineering inspection is 280 annualized inspection hours. The proposed inspection will be 175 annualized inspection hours. The new IP will allow for continued risk-informed, in-depth inspection sample selections while maximizing inspector flexibility in sample selections based on plant-specific performance and recent engineering work. It will also reduce the size of the engineering inspection team from 3 people for an FEI and 6 people for a CETI to an average of 2.5 people for the annual inspection activity.

The staff also noted that in SRM-SECY-22-0053 the Commission directed the staff to evaluate the effectiveness of the revised inspection approach at the conclusion of the first 4-year cycle. This evaluation was intended to determine whether the changes achieved their intended benefits and to inform the Commission of the findings.

While the staff generally concludes that the CETI and FEI conducted on a quadrennial basis have met their safety objectives, they have not done so in a manner that optimizes the use of NRC or licensee resources, as envisioned by the ADVANCE Act and EO 14300.

The changes proposed in this paper would modify the engineering inspection program to both maintain its current safety effectiveness and do so in a more efficient manner. Occurring approximately 3 years into the first 4-year cycle, if approved by the Commission, these changes would supersede the need for the effectiveness review originally directed in the SRM for SECY-22-0053. Accordingly, the staff is requesting that the Commission suspend the previously scheduled effectiveness review, due after January 1, 2027, and instead approve a revised review to be conducted 24 months after implementation of the new engineering inspection program.

### ***Reactor Safety Inspection Program - Licensed Operator Requalification Baseline Inspections***

The staff performed an analysis of the baseline licensed operator inspection program for opportunities to improve efficiency and effectiveness, prioritize the inspection of licensee performance, and reduce unnecessary regulatory burden.

The staff recommends that the following adjustments be made to the annual and biennial inspection requirements contained in IP 71111.11, “Licensed Operator Requalification Program and Licensed Operator Performance”:

- The staff recommends eliminating the quarterly control room sample requirements in this procedure and reducing the number of training and operating test samples by 50 percent.

Basis – This change is based on insights from inspection data and feedback from inspectors, acknowledging that resident inspectors routinely observe operator performance in the control room as part of baseline IPs. As a result, allocating separate hours to this activity was deemed unnecessary.

- For the biennial inspection requirements of this procedure, the staff recommends maintaining the two-person team (in order to complete the inspection in one week) but having the option of pairing a resident inspector with one regional examiner to cover the other inspection requirements. If a resident inspector is used for this sample, they will conduct activities in this procedure that do not require substantial additional specialized training.

Basis – This change is an efficiency and effectiveness enhancement which recognizes that not all inspection requirements in the IP require the skill sets of an operator licensing examiner. It also acknowledges resident inspector workload decreases based on inspection program changes described in SECY-25-0045 and the additional proposed near-term modifications to enhance the efficiency and effectiveness of the ROP.

- The staff also recommends reducing the scope of the biennial section of IP 71111.11 focused on the licensed operator requalification program. The proposed revision to the scope would include reductions in the number of observations of portions of the annual operating test and in the amount of requalification examination material reviewed for quality. Other areas of reduction include the amount of simulator testing and medical records reviewed during the biennial inspection.

Basis – This change reflects the results from an analysis of inspection data and operating experience data, which indicate that performance issues have not been identified in this area. Therefore, a reduction in inspection in this area is warranted.

### ***Emergency Preparedness Inspection Program***

The staff performed an analysis of the baseline emergency preparedness (EP) inspection program for opportunities to improve efficiency and effectiveness, prioritize the inspection of licensee performance, and reduce unnecessary regulatory burden. Based on the analysis, the staff recommends that the following IPs be retained, updated, or eliminated:

- IP 71114.04, “Emergency Action Level and Emergency Plan Changes”; IP 71114.05, “Maintenance of Emergency Preparedness”; and IP 71114.06, “Drill Evaluation”

Basis – The staff recommends performing these IPs on a biennial frequency instead of on an annual frequency. As part of this recommended change, PI verification for the EP program will be conducted biennially using procedure IP 71114.05 instead of the previously utilized IP 71151. The staff determined that these procedures can be changed to a biennial frequency without impacting the ability of the staff to maintain effective oversight of the EP program. These changes reflect the results of an analysis of inspection data and operating experience data, which indicate that significant

performance issues have not been identified in these areas that would require conducting an inspection annually. Therefore, a reduction in frequency is warranted. Also, the staff determined that removing the PI verification requirements from IP 71151 and placing them in IP 71114.05 would maintain effective oversight of the EP PIs.

- IP 71114.01, "Exercise Evaluation," and IP 71114.07, "Exercise Evaluation - Hostile Action (HA) Event"

Basis - The staff recommends adding hostile action-based scenarios to IP 71114.01 and sunseting IP 71114.07 as it is unnecessary to have IP 71114.07 as a duplicative IP.

The staff recommends the following additional revisions in the EP baseline inspection program:

- Incorporate the consideration of fleet performance into applicable IPs to improve efficiency and to remove duplication of effort and provide guidance when certain inspection activities can be conducted remotely.
  - For EP inspections, licensee activities that have been centralized at the fleet level only need to be inspected once during the inspection period, e.g., no need to duplicate inspection resources for activities that are similar.
  - For EP evaluated exercises, this efficiency may also include not requiring inspection resources at centralized emergency response facilities, such as the emergency operations facility (EOF) or the joint information center (JIC) if they have already been inspected during the inspection period. However, the inspection team should make this determination during the review of the applicable scenario in support of the development of the site-specific inspection plan.
- Provide additional guidance for the consistent inspection of evaluated exercises. The staff determined that there is a significant resource savings opportunity to be obtained by providing additional guidance and direction for how to effectively evaluate exercises. The staff determined that providing additional guidance in this area would drive consistency in implementation and would also focus inspection efforts on those areas that would be the most risk-significant for the evaluation of the EP exercise.

The staff also notes that the EP Significance Determination Process (SDP) is being revised to incorporate SRM-SECY-22-0089, "Staff Requirements – SECY-22-0089 – Recommendation for Enhancing the Emergency Preparedness Significance Determination Process for the Reactor Oversight Process" dated February 9, 2023 ([ML23040A378](#)), and 10 CFR 50.47(b)(9) significance determination. This change better focuses the inspection program on issues that have the most significance on public health and safety and reduces inspection effort in areas that inspection experience has demonstrated is of lower value from a performance assessment perspective. This change also simplifies the EP inspection program by focusing resources and inspection effort on effectiveness reviews, and performance deficiency significance determination, for the most risk-significant planning standards.

### ***Radiation Protection Inspection Program***

The staff performed an analysis of the baseline radiation protection inspection program to identify opportunities to improve efficiency and effectiveness, to ensure inspection of areas most

indicative of licensee performance, and to reduce unnecessary regulatory burden. Although the radiation protection inspection program is a relatively small program that requires an estimated 101 annualized hours of inspection activity at a reactor plant site, the staff has identified several enhancements and improvements to the program. The revised radiation protection inspection program will have one IP conducted during each outage and three triennial IPs that will be sequenced to inspect certain aspects of the radiation protection program nominally once each year. The outage IP will focus on radiologically significant outage work.

- The staff recommends reducing the current number of radiation protection IPs from seven to four. Existing IP 71124.01, "Radiological Hazard Assessment and Exposure Controls"; IP 71124.03, "In-Plant Airborne Radioactivity Control and Mitigation"; IP 71124.04, "Occupational Dose Assessment"; IP 71124.05, "Radiation Monitoring Instrumentation"; IP 71124.06, "Radioactive Gaseous and Liquid Effluent Treatment"; IP 71124.07, "Radiological Environmental Monitoring Program"; and IP 71124.08, "Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation" would be combined into new IPs. The new IPs would be IP 71125.01, "Radiation Safety Refueling Outage"; IP 71125.02, "Radiation Protection"; IP 71125.03, "Occupational Radiation Safety Onsite Inspection"; and IP 71125.04, "Public Radiation Safety Onsite Inspection." IP 71125.01 would be conducted during a refueling outage and the other three IPs would be conducted on a triennial basis, nominally one per year. IP 71125.02 is designed so that all of the samples can be accomplished remotely.

Basis – This change better focuses the inspection program on issues that have the most radiological safety significance and reduces inspection effort in areas that inspection experience has demonstrated are of lower value from a performance assessment perspective. This change also simplifies the radiation safety inspection program because it would be composed of fewer procedures, minimizing regulatory burden on licensees by limiting outage-focused inspection effort and reducing the onsite inspection requirements. These enhancements are expected to result in a reduction of annualized hours of inspection activity at each reactor plant site.

- The staff recommends enabling inspectors to perform specified performance assessment and inspection tasks remotely, thereby permitting a reduction in on-site inspection sampling. This feature will enable flexibility to allow certain inspection requirements to be replaced by analysis of licensee performance within the predefined set of evaluative criteria and meets the intent of ADVANCE Act Section 507 on the use of travel resources.

Basis – One of the triennial IPs will be designed to be conducted remotely. This IP will consolidate inspection requirements that program implementation experience has shown relies almost exclusively on document reviews and data verification. These requirements include areas—such as internal dosimetry, dose calculations to support determination of public doses, and source term characterization—which remain important aspects of radiation safety programs; therefore, the staff recommends continuing their inspection albeit in a more efficient manner with a smaller regulatory burden on licensees. The IP will include the option to conduct virtual meetings with the licensee staff if inspectors determine these types of interactions are necessary to complete inspection objectives.

### ***Security Inspection Program***

Similar to the other ROP cornerstones, the staff conducted an analysis of the baseline security inspection program to identify opportunities to enhance efficiency and effectiveness, prioritize inspections based on licensee performance, and reduce unnecessary regulatory burden. The analysis determined that the current program primarily focuses inspection efforts on verifying licensee compliance with individual regulatory requirements rather than incorporating an integrated assessment of overall security risk in the program's design.

Because of additional structural changes proposed for the force-on-force (FOF) inspection program, and given the interconnected nature of FOF and other inspectable areas within the security baseline inspection program, the staff will present the full set of proposed changes for these elements of the ROP in a separate notation vote paper. To assist the Commission in understanding the contribution of the security baseline inspection program to the ROP, this paper and its enclosures include the resource estimates from that companion paper. These estimates illustrate how all NRC oversight resources, including those for security, will be allocated across an inspection cycle.

### ***Problem Identification and Resolution Inspection Program***

A fundamental goal of the ROP is to establish confidence that each licensee is effectively identifying, prioritizing, evaluating, and correcting problems in a manner that supports safe operations. Currently, this is accomplished by conducting: (1) routine reviews of licensee's implementation of their corrective action program, (2) semi-annual trend reviews, (3) annual follow-up of selected issues, and (4) biennial team inspection. For the comprehensive ROP re-baselining effort, the staff reviewed the most recent 10 years of inspection findings as well as the results of a comprehensive review of PI&R that was performed in 2019. There were 972 inspection findings identified under the PI&R procedure, the highest number of findings for a specific procedure. Of those, 12 findings were of White significance, and none of them were identified during the biennial team inspection. NRC residents and region-based inspectors are more likely to identify significant performance deficiencies during the daily conduct of the baseline inspection program and the annual follow-up of selected issues.

As a result of its review, the staff recommends that all inspection attributes of the biennial PI&R team inspection be consolidated into the PI&R annual samples:

- IP 71152, "Problem Identification and Resolution (PI&R)"

Basis – The staff identified that based on industry performance, inspection results, resident inspector workload decreases as a result of inspection program changes described in SECY-25-0045 ([ML25127A212](#)), and several near-term modifications to enhance the efficiency and effectiveness of the ROP, which were implemented on July 1, 2025, all of the attributes from the biennial PI&R team inspection could be consolidated into the resident inspector program area. Because of this change, the PI&R annual follow-up of selected issues sample resources will be increased slightly. The semiannual inspection hours will remain the same.

If this change is approved, regional offices would retain the ability to initiate a stand-alone PI&R team inspection if concerns are identified that suggest that there are issues with a licensee's corrective action program. Objective criteria will be developed and added to

IMC 2515, Appendix C, "Special and Infrequently Performed Inspections," regarding when a standalone PI&R team inspection should be performed. This new inspection procedure will be developed such that the agency response can be tailored to the specific concern in terms of inspection size, scope, and samples. A charter will be developed before the inspection begins to direct the team as to what parts of the IP they will be inspecting. This new PI&R team inspection IP will be different than the supplemental inspection program and will be designed to complement it if there is a concurrent movement of the licensee in Columns II, III, or IV of the Action Matrix.

The licensee's Safety Conscious Work Environment (SCWE) would continue to be monitored using IP 71152 either by the RI daily samples or a more in-depth annual sample of the licensee's SCWE. The Regional Administrator has the option to approve an IMC 2515 Appendix C IP 93100, "Safety Conscious Work Environment Issue of Concern Follow-up," or the new PI&R team inspection if more detailed inspection is required as a result of current IP 71152 oversight or the NRC's allegation program.

### ***Resource Impacts for Proposed Inspection Program Changes***

The following table provides a comparison of the total annualized resources for the current and the proposed programs with the corresponding percentage showing the total change in resource usage. Enclosure 1 contains a comprehensive list of all baseline IP changes proposed by the staff, including resource comparisons for each IP, the resultant changes in resources usage, and cumulative totals for each inspection area.

<b>Inspection Procedure Series</b>	<b>Current Program Annualized Hours</b>	<b>Proposed Program Annualized Hours</b>	<b>% Change Resource Usage</b>
<b>Reactor Safety Inspection Procedures (IP 71111 Series)</b>	<b>1145</b>	<b>797</b>	<b>-30%</b>
<b>Emergency Preparedness Inspection Procedures (IP 71114 Series)</b>	<b>144</b>	<b>63</b>	<b>-56%</b>
<b>Radiation Protection Inspection Procedures (IP 71124 Series)</b>	<b>115</b>	<b>71</b>	<b>-36%</b>
<b>Security Inspection Procedures (IP 71130 Series)<sup>15</sup></b>	<b>287</b>	<b>149</b>	<b>-48%</b>
<b>PI Review, PI&amp;R, Event Follow-Up Inspection Procedures</b>	<b>327</b>	<b>165</b>	<b>-49%</b>
<b>TOTAL</b>	<b>2018</b>	<b>1245</b>	<b>-38%</b>

### **PROPOSED CHANGES TO MORE THAN MINOR SCREENING CRITERIA:**

Separately, the staff undertook a review of the current inspection finding screening criteria used in the ROP. This review aligns with ADVANCE Act Section 507, which emphasizes the importance of ensuring that NRC regulatory oversight is risk-informed and performance-based. Currently, the staff uses "more than minor" (MTM) screening criteria described in IMC 0612, Appendix B, augmented by examples in IMC 0612, Appendix E, to determine if an inspection

<sup>15</sup> Resource estimates for security are based on those presented in a companion paper outlining all changes for the ROP's baseline security inspection program.

issue is MTM and warrants documentation in a report. The staff conducted a review of these screening criteria to evaluate whether the existing MTM criteria support consistency, predictability, and the appropriate thresholds for identifying issues warranting additional inspection, documentation, and potential enforcement action. This effort was undertaken in response to internal and external feedback that the current criteria may not be effectively serving their intended purpose and may be contributing to unintended inconsistencies in inspection outcomes.

To evaluate the current application of the MTM criteria, the staff performed an in-depth review of past inspection findings that had been screened and ultimately determined to be of very low safety significance (those categorized as Green findings in the ROP). The focus of this evaluation was on whether subjectivity in the current MTM criteria could lead to the same or similar issues being screened differently. This analysis also considered if the current threshold was set appropriately such that it communicates the proper risk significance of inspection findings. The staff determined that while IMC 0612 establishes a common framework, it could be improved to remove its more subjective elements.

In reviewing the current MTM screening criteria used in the ROP to determine when an inspection issue should be formally documented, the staff reviewed the enforcement policies of partner Federal agencies to determine how violations of very low significance are handled by those agencies. Specifically, the staff reviewed the enforcement policies and procedures of the U.S. Environmental Protection Agency, the Occupational Safety and Health Administration, the Federal Aviation Administration, the Food and Drug Administration, and the Federal Energy Regulatory Commission. All the programs reviewed appeared to emphasize the principle that regulatory agencies should focus their formal enforcement efforts on serious, willful, or repeated violations while encouraging a culture of voluntary compliance among their regulated communities, with most Federal programs having a process for informal enforcement using tools like warning letters, abatement, verbal warnings, or observation forms. The staff concluded that the NRC's approach, including the recommendations provided in this paper, would maintain consistency with the enforcement policies of partner Federal agencies. For example, when a low-level compliance issue is identified, a minor or non-cited violation communicates the issue to the licensee and will result in corrective actions to resolve the issue. The changes to the MTM screening criteria developed by the staff are limited to only the current threshold for documentation and not restoration of regulatory compliance. Disagreement regarding the validity of a minor violation will continue to be handled through existing provisions in the Commission's Enforcement Policy. Like partner Federal agencies, the NRC's Enforcement Policy allows for the escalation of non-compliances (even minor violations) that are not corrected or are willful.

The staff recommends that the MTM screening criteria be revised to reduce subjectivity, improve consistency, and better align enforcement actions with their actual impact to public health and safety. Such a change would support a more risk-informed, performance-based approach consistent with the principles of the ROP and the agency's strategic goals.

This change will revise the process for MTM determination by eliminating the existing questions and examples contained in IMC 0612, Appendix B, "Issue Screening," and Appendix E, and relocating the MTM determination to IMC 0609, "Significance Determination Process," and the IMC 0609 attachments and appendices. These documents provide a methodical approach to assign findings to an ROP cornerstone, route the finding to the appropriate IMC 0609 appendix based on the cornerstone, and screen the finding against objective criteria to determine whether it requires a detailed risk evaluation, screens to Green, or must be evaluated using a different

appendix. Currently, this process occurs following the minor determination and the staff recommends instead incorporating the minor determination into this process such that findings are screened to either a detailed risk evaluation, Green, or minor via the cornerstone-specific objective questions, which would be revised to include the minor determination. This approach is expected to significantly reduce the subjectivity associated with MTM determinations, reduce the focus and effort expended on issues of very low safety significance, and result in more efficient screening of performance deficiencies identified during inspections.

Further, the staff's recommendations will adjust the threshold for MTM violations to ensure that the population of very low safety significance (i.e., Green) findings that are documented in publicly available inspection reports more clearly communicate the impact of the finding on public health and safety. In adjusting this threshold, the staff applied the following basic concepts to establish the MTM criteria that would be imbedded in IMC 0609.

- For the initiating events cornerstone, for an issue to be MTM, there must be some actual impact (which will be defined in each IMC 0609 revision) to plant stability. For example, a performance issue that resulted in an unplanned plant trip/scram or significant transient would screen as MTM, but postulated issues that could challenge future reliability or stability would screen as minor.
- For the mitigating systems and barrier integrity cornerstones, for an issue to be MTM, there must be some actual impact on the performance of systems used to mitigate an accident or act as a radiological barrier. For example, the staff would include criteria that an structure, system, and component must be inoperable or unavailable for an issue of concern to be MTM. This criterion would include issues where mitigating system equipment or barriers do not function properly when called upon or where a presumption of operability or availability is lost because of errors in design or engineering analyses/calculations. Issues that result in losses of margin that don't challenge operability would screen as minor.
- For the occupational and public radiation safety cornerstones, for an issue to be MTM, there must be some actual impact such as (1) an unplanned or uncontrolled exposure situation or release of radioactive material to an unrestricted area, (2) a regulatory limit being exceeded or a realistic potential for overexposure, or (3) failure of a radiation protection program barrier, such as a compromised ability to assess dose. This threshold would include criteria to ensure that issues having a negligible impact on safety are screened as minor.
- For the EP cornerstone, for an issue to be MTM, there must be some actual impact to a licensee's ability to respond to an emergency that directly or indirectly impacts the functions associated with the risk-significant planning standards (e.g., if a performance deficiency would result in degrading or not meeting a risk-significant planning standard function, or one of the two planning standard functions necessary to effectively implement the risk significant planning standard functions). This is consistent with EP SDP revisions directed by SRM-SECY-22-0089. Less significant performance issues would screen as minor.
- For the security cornerstone, for an issue to be MTM, there must be some actual impact to a licensee's ability to respond to a contingency event or significantly compromise nuclear power plant access control requirements. For example, if a performance issue

would result in an inoperable security feature that would impact the licensee's ability to implement its protective strategy, the issue would screen as MTM. Less significant performance issues would screen as minor.

In developing the final option presented in this paper, the staff carefully evaluated a range of alternatives to ensure that the revised MTM criteria would preserve the agency's ability to proactively address licensee performance. This process involved balancing several competing priorities, including rigorous safety oversight, regulatory consistency, and public transparency. The evaluation yielded multiple viable paths, ranging from maintaining the status quo to eliminating all Green findings, before ultimately recommending a revised approach in which Green findings would be documented only for issues involving actual impact, as defined in the relevant inspection manual chapters. This approach was selected because it supports the NRC's broader shift toward a more risk-informed, performance-based regulatory framework, aligns with the foundational principles of the ROP, advances the agency's strategic goals, and responds to direction from external stakeholders, including Congress and the Administration. While the staff acknowledge that the proposed changes would likely reduce the number of Green findings in publicly available inspection reports, they concluded that the revisions would neither eliminate Green findings entirely nor diminish the effectiveness of NRC oversight or its influence on site performance over time. The key factors that informed the final proposal, along with the staff's evaluation of the revised MTM screening criteria, is provided in Enclosure 3.

### **COMMISSION APPROVAL ITEMS:**

#### **1. ROP Baseline Inspection Program**

The proposed changes to the ROP baseline inspection program include removing redundant inspection activities and balancing the use of inspection program resources based on licensee performance, thereby reducing effort needed to execute the ROP baseline inspection program by 38 percent. While some of the changes discussed to the Baseline Inspection Program IPs may not meet the MD 8.13 criteria for Commission approval, due to significance of the combined changes, the staff is bundling the changes for Commission approval and will continue to follow the guidance in MD 8.13 for any future IP revisions. The staff identified the following pros and cons that are common to each of the inspectable areas described in this paper.

##### Pros:

- Meets the intent of ADVANCE Act Section 507 and Executive Order 14300 to reduce regulatory burden.
- Overall reduction in inspection hours leads to more efficient use of NRC resources.
- Revises the ROP to be more performance-based and risk-informed.
- Enhancements allow inspectors to prioritize areas with the highest safety risk.
- Increased discretion in sample selection, remote inspection options, and smaller teams improve adaptability and reduce burden on both the NRC and licensees.
- Retains capability to evaluate real time performance issues at the site.
- New and amended inspection programs, including integrating resident inspectors into regional team inspections, encourage better interaction among site and regional staff and specialized teams.
- Responsive to industry feedback on the desire for reduction in level of oversight based on an assessment of industry performance.
- Updates reflect feedback from inspectors and licensees, aligning inspections with

current operational experience and best practices.

- Reduction in cost to licensees as less travel will be required.

Cons:

- Reduced team-based knowledge sharing as moving away from large, diverse inspection teams may hinder knowledge transfer and comprehensive reviews.
- Without large team inspections and deep dives in the licensing and design basis, some latent issues may be missed.
- Greater flexibility in sample selection can lead to inconsistent implementation across sites and NRC regions.
- Implementation of new procedures and inspection methods requires staff retraining and procedural revisions.
- Scaling back certain inspections (e.g., operator requalification, radiation protection, security, PI&R team) could be interpreted as deprioritizing important safety areas.
- Reduced inspection effort could result in a delay in identifying underlying precursors to degraded safety performance.
- Decentralized or revised inspection approaches may require more effort to integrate inputs and assess overall program effectiveness (e.g., tracking PI&R performance across inputs)

## 2. Issue Screening Guidance

The proposed changes to the issue screening guidance include eliminating the existing MTM screening questions and examples contained in IMC 0612, Appendices B and E and building the MTM determination into the existing SDP screening tools contained in IMC 0609 and its attachments and appendices. This will significantly reduce subjectivity in MTM decision-making and make the issue screening process more efficient.

Pros:

- Supports moving towards more objective criteria, thus reducing a significant portion of the subjectivity that exists with the current screening process.
- Utilizes a tool that the staff is already familiar with.
- Top-down approach that first questions whether an issue may be risk-significant and then screens the issue to Green or minor.
- Threshold for documenting Green findings is expected to rise, allowing more attention to be focused on issues of greater safety significance.
- Makes issue screening easier and less subject to debate anticipated to result in significant efficiency gains for the NRC and licensees.

Cons:

- Moderate level of effort necessary to incorporate MTM guidance into all SDP appendices and associated basis documents.
- Expected reduction in Green findings may affect other portions of the assessment process, such as cross-cutting issues.
- A reduction in the number of documented findings due to changes in the issue screening process may lead to a perception that staff inspection efforts are less impactful or valued.
- A noticeable reduction in the number of documented findings may lead to decreased stakeholder confidence in the transparency and rigor of the inspection program, particularly among external observers who view findings as a key indicator of effective regulatory oversight.

### POTENTIAL IMPACT OF PROPOSED CHANGES:

The staff determined that the ROP baseline inspection program and issue screening guidance revisions will result in an oversight program that is more fully aligned with the intent of the ADVANCE Act and EO 14300. After the implementation of the revised program, the staff will perform a self-assessment and effectiveness review to determine whether the changes were effective per IMC 0307, "Reactor Oversight Self-Assessment Program," with a targeted date for completion of December 2028.

### RECOMMENDATIONS:

The staff recommends that the Commission approve the following changes:

**Issue 1: ROP Baseline Inspection Program.** The staff recommends approving the changes to the ROP baseline inspection program to include the reactor safety, emergency preparedness, radiation protection, security, and PI&R portions of the program. A detailed list of the proposed program, including samples and resource estimates for each IP, is included in Enclosure 1.

If this recommendation is approved, the staff also recommends suspending the previously scheduled effectiveness review for the engineering inspection program as directed by Staff Requirements Memorandum (SRM)-SECY-22-0053, "Staff Requirements – SECY-22-0053 - Recommendation for Modifying the Periodicity of Reactor Oversight Process Engineering Inspections," dated July 21, 2022 (ML22202A507). Instead, the staff recommends conducting a revised review 24 months after implementation of the new engineering inspection program described in this paper.

**Issue 2: Issue Screening Guidance.** The staff recommends approving the changes to the ROP's MTM issue screening criteria. This change would embed the screening criteria in the SDP and raise the threshold for an MTM issue as described in this paper.

### RESOURCES:

The estimated resource savings when comparing ROP nominal resource estimates on January 1, 2025, to the new minimum hours for the proposed ROP is 38 percent. Specifically, the reactor safety portion of the baseline inspection program will have a resource reduction of 30 percent, the EP portion of the baseline inspection program will have a resource reduction of 56 percent, the radiation protection portion of the baseline inspection program will have a resource reduction of 36 percent, the security portion of the baseline inspection program will have a resource reduction of 44 percent, and other procedures which include PI&R inspections and performance indicator verifications will have a resource reduction of 49 percent. A detailed breakdown of current and proposed resource estimates is provided in Enclosure 1. Funding for fiscal year 2026 and beyond will be addressed through the annual planning, budgeting, and performance management process.

The staff acknowledges that the proposed changes could significantly impact the staffing levels required to carry out regional functions. Upon Commission approval of ROP changes, the staff will perform a review of the NRC's regional structure to determine whether changes are warranted. The staff will submit the results of this review to the Commission, along with any associated restructuring recommendations, within 90 days following approval of the ROP revisions described in this paper.

**COORDINATION:**

The Office of the General Counsel reviewed this package and has no legal objection. The Office of the Chief Financial Officer reviewed this package for resource implications and has no objections.



Michael F. King  
Executive Director  
for Operations

Enclosures:

1. Summary of IP Changes  
in Samples and Hours
2. Other Options Considered for  
ROP Re-baselining Program  
Areas
3. Summary of the Staff's Evaluation  
of the Proposed MTM  
Screening Criteria
4. NCP-2025-006 (Non-Public)

SUBJECT: RECOMMENDATIONS TO REVISE THE REACTOR OVERSIGHT PROCESS  
 BASELINE INSPECTION PROGRAM Dated: February 6, 2026

**ADAMS Accession Numbers: PKG: ML25247A048, , SECY: ML25247A050,  
 Encl 1: ML25247A052, Encl 2: ML25247A053, Encl 3: ML25282A007,  
 ML25329A170 (Non-Concurrence NCP-2025-006)**

<b>OFFICE</b>	NRR/DRO/IRAB	NRR/DRO/IRIB	D:NRR/DRO	OGC	OCFO
<b>NAME</b>	DAird	HJones	PMcKenna	JWachutka	LYee
<b>DATE</b>	9/5/2025	9/5/2025	9/12/2025	10/6/2025	10/1/2025
<b>OFFICE</b>	RI	RII	RIII	RIV	D:NSIR
<b>NAME</b>	DCollins	JLara	JGeissner (non-concur)	JMonninger	KWilliams
<b>DATE</b>	10/6/2025	9/29/2025	10/7/2025	9/25/2025	9/23/2025
<b>OFFICE</b>	D:OE	QTE	DD:NRR	D:NRR	OEDO
<b>NAME</b>	BPham		JGroom	GBowman	DCurtis
<b>DATE</b>	9/24/2025	10/14/2025	10/14/2025	10/28/2025	11/12/2025
<b>OFFICE</b>	GC	DEDO	EDO		
<b>NAME</b>	DTaggart NLO	SAtack	MKing		
<b>DATE</b>	12/11/2025	1/7/2026	02/03/2026		

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