

Reactor Oversight Process Enhancement

Questions and Answers

1. What type of enhancements are being considered?

The nuclear power industry provided recommendations to improve the ROP, as did NRC staff members, through the NRC Transformation Initiative. The recommendations were binned into eight themes, including: licensee assessment, performance indicators, ROP inspection, significance determination process (SDP), radiation protection, independent spent fuel storage installations (ISFSI), security, and emergency preparedness (EP). Major enhancements being considered are several improvements to the ROP Inspection Program, changes in how the NRC addresses White inspection findings, and changes to the Cross-Cutting Issues Program.

2. Why is ROP Enhancement important?

ROP Enhancement is important towards ensuring the attention of the ROP given nuclear industry performance trends over the last 20 years and NRC's experience and insights on implementing the ROP since it began. Continuing to align the ROP with the NRC Strategic Plan and Principles of Good Regulation are key tenants to the success of the program. The NRC is proactively taking steps to be a more modern and risk-informed regulator.

3. Why is there so much emphasis on enhancement now?

Although NRC staff already are engaging the nuclear power industry to develop enhanced regulatory guidance and approaches in several areas, it is recognized that without additional updates to the ROP, the current program may not take into account improved licensee performance, technological advances and overall efficiencies gained through expertise and experience.

As NRC strives for excellence in ensuring the safe and secure use of nuclear materials in the 21st century, it must adapt its practices to keep pace with new and emerging advanced technologies and embrace enhancement to improve the ROP in a manner which supports NRC Principles of Good Regulation.

4. Will this enhancement initiative reduce cost to the NRC and ultimately plant owners and operators?

The overall goal of ROP Enhancement initiative is not cost reduction, but rather to better risk-inform and performance-base the ROP while at the same time look for ways to improve the ROP's efficiency and effectiveness.

5. How will ROP Enhancement impact NRC's safety and security mission?

The NRC safety and security mission remains unchanged. The overall goal of the enhancement initiative is to improve the efficiency and effectiveness of the ROP and continue to align with NRC Principles of Good Regulation.

6. Will NRC staff have an opportunity to provide input to the enhancement initiative and will the Commission be made aware of staff's input?

Yes. NRC cannot underestimate the importance of staff input. Employees' extensive training and breadth of experience are critical to better understand what is necessary to further advance the ROP. Consistent with the NRC mission, its Principles of Good Regulation and Values, NRC will seek feedback from staff and external stakeholders, which will be shared with the NRC Commission.

7. Will industry/members of the public have an opportunity to provide input?

Yes. Industry, stakeholder, and public feedback is critical to successful development of enhancement initiatives. NRC uses numerous tools available to gather and analyze stakeholder feedback. Over 15 public meetings have been held to capture industry/members of the public's perspectives. In addition, the NRC conducted a Regulatory Information Conference panel session in 2019 and issued a Federal Register Notice to further gather public feedback where 90 comments were received from a wide array of external stakeholders. And an improved external public web page provided below was developed to provide status on ROP Enhancement.

<https://www.nrc.gov/reactors/operating/oversight/rop-enhancement.html>

8. Who decides on what changes get implemented?

For substantive changes, the NRC Commission must approve. SECY-19-0067 was submitted to the Commission in June 2019 for approval of the first group of recommendations. Several changes, such as re-baselining the inspection program, removing the four-quarter requirement for greater-than-Green inspection findings to remain on the Action Matrix, require Commission approval. Other changes, such as relabeling White and Yellow inspection findings to low and moderate safety significance, respectively, require Commission notification. Other changes, such as ensuring the baseline inspection program does not unnecessarily expand, will be accomplished by the normal procedure change protocols.

9. Can you give examples of improved licensee performance and nuclear safety over the last 20 years?

Numerous enhancements have been made over the last 20 years such as decreases in occupational radiation dose, improved plant security systems post 9/11, reduction in the number of reactor scrams/trips, increased reliability of important safety systems, hardware improvements such as FLEX equipment, reductions in plant core damage frequencies for internal events, improved licensee programs for identifying and correcting problems, better plant outage risk management, and improved understanding of plant fire risk through adoption of NFPA 805.

10. Now that the Commission paper (SECY-19-0067) was submitted in June 2019 to the Commission, is the ROP Enhancement project completed?

No. There are several actions being considered to address the recommendations made by internal and external stakeholders. It is likely that medium-term actions

(those planned for completion in 2020) will continue to be managed by ROP Enhancement. Other longer-term work may include changes to the Cross-Cutting Issues Program, improving the efficiency of the decision-making process for greater-than-Green inspection findings, and possible changes to the Problem Identification and Resolution Inspection Program. It is anticipated that these longer-term changes will be addressed using normal work management practices.

11. What does the NRC believe are the most important actions being taken in the nearer term to enhance the ROP?

NRC would like to improve its response to White inspection findings and several aspects of the inspection program by making both these important actions more risk-informed and performance-based. Both these initiatives require approval by the NRC Commission.

12. Taking into account that the NRC staff has recommended a modest reduction in the Baseline Inspection Program, what will the inspectors do with their extra time?

The changes being proposed are relatively small considering that over 2,500 hours of inspection hours are performed every year at each reactor site in the U.S. NRC inspections at nuclear power plants are performed by both resident and region-based inspectors who inspect a broad range of areas that have been determined to be the most important from a safety and security perspective. All the inspectable areas will continue to be inspected with several adjustments proposed to the number of inspection samples performed for selected inspections. These adjustments were deemed appropriate after a close examination by experienced inspectors based on nearly 20 years of oversight experience and improved industry performance. The extra time that inspectors will have will be to respond to emerging and/or complex issues yielding an increased degree of flexibility to ensure their time is appropriately focused on the most important safety and security issues. The NRC is confident that these small adjustments will not affect the NRC's ability to provide effective oversight to protect public health and safety and the environment.