



August 31, 2026

U.S. Nuclear Regulatory Commission
Office of the Secretary
Attn: Rulemakings and Adjudications Staff
Washington, DC, 20555-0001

Subject: “Reforming and Modernizing the NRC’s Radiation Protection Framework” [NRC-2025-1140]

To all concerned:

The State of New York appreciates the opportunity to comment on the U.S. Nuclear Regulatory Commission’s (NRC’s) proposed rule “Reforming and Modernizing the NRC’s Radiation Protection Framework” (NRC-2025-1140) published in the Federal Register on July 15, 2026. The proposed rule includes changes to standards for radiation protection in response to section 5(b) of Executive Order 14300, “Ordering the Reform of the Nuclear Regulatory Commission,” NRC’s experience, and developments in the field of radiation protection since the last major revision to these standards in 1991.

New York’s Interest in the Proposed Rule

New York State has direct and substantial interest in this action. Radiation protection enables safe, economically viable operation of existing nuclear power plants, planned future operation of new nuclear power capability, medical diagnostics and treatment, and technology advancement at research & development facilities, and more. New York agencies continue to work together to ensure that the appropriate actions are taken to mitigate adverse impacts from radiation and radioactive materials within their statutory authority. The residents and workforce in New York have an expectation that these New York agencies will take appropriate actions to protect them from adverse health and environmental impacts associated with radiation dose.

Specifically, New York is host to several operating nuclear power plants with plans to expand this capacity significantly. Nuclear power plants have provided New York with reliable and zero-emission electricity, supporting more than half a century of progress and

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development across the state.¹ New York's commitment to advanced nuclear deployment is both ambitious and concrete. The State also plays a role in decommissioning of a spent fuel reprocessing facility. Decommissioning of the West Valley site provides experience and expertise in how regulations like those proposed will impact operations.² This experience gives New York unique insights into radiation protection programs, site management, and long-term site stewardship considerations.

In addition, New York has an expansive, high impact, medical and research capability operated by public and private entities and regulated by state agencies that leverages the latest developments in nuclear medicine, beneficial use of radioactive material, and radiation producing equipment. Changes to regulations that impact this capability can impact public and workforce safety, public trust, and the economic vitality of this sector. Carefully balanced regulation provides a framework to ensure safety, beneficial use of medical interventions, and public trust that decisions reflect their best interest with respect to impacts to their health. As an Agreement State, New York administers its own radiation protection program and must adopt compatible regulations. The proposed changes would require State rulemaking to follow amendments adopted by NRC.

New York believes that maintaining rigorous environmental and public safety standards is critical to sustaining economic progress, providing world-class health and research capability, and achieving the nation's goal of accelerated deployment of nuclear technologies. We appreciate all opportunities to provide input to NRC on radiation protection framework and offer the following feedback.

Comments on the Proposed Rule

New York supports NRC's goal of reforming and modernizing NRC's radiation protection framework. While New York agrees that several of the provisions of the proposed rule would be worthwhile updates, other provisions raise concerns for the State. In those cases, we offer constructive, concrete suggestions for improving the rule.

¹ Public Service Commission Chair Rory M. Christian. <https://www.governor.ny.gov/news/governor-hochul-announces-major-milestone-facilitate-new-advanced-nuclear-development>

² The Western New York Nuclear Service Center in West Valley, New York was the only privately-operated spent fuel reprocessing plant in the United States, which operated from 1966 to 1972. The more than 40-year cleanup of the site has proceeded under the West Valley Demonstration Project Act of 1980, Pub. L. 96-368, and remains a multi-billion-dollar federal and State undertaking. The site is owned by the State of New York through the New York State Energy Research and Development Authority.

Removal of As Low as Reasonably Achievable (ALARA)

Protection from adverse radiation impacts is accomplished through compliance with NRC and state regulations establishing quantitative limits and applying protective principles that drive actions to minimize radiation dose. To date, a fundamental aspect of this radiation protection framework has been application of the as low as reasonably achievable (ALARA) principle.

Regulations must balance providing radiation protection with avoiding overly conservative actions that do not provide cost-justified benefits or that unnecessarily impede the implementation of valuable technological advancements. This requires balancing the benefits of radiation protection for the public and the workforce against the cost of implementation so that beneficial technologies can be used safely and the economic benefits of technological advancements like advanced nuclear power plants can be realized.

While the stated goal of reducing regulatory subjectivity and avoiding unnecessary, and potentially costly conservatism are goals that New York shares, removing ALARA from NRC regulations completely is not likely to accomplish this goal for several reasons. ALARA principles are understood, incorporated into current best practices, and provide a framework for minimizing radiation dose to the workforce and public. The fact that there are some cases when excess conservatism has been applied and cost incurred because of misinterpretation of ALARA does not provide an adequate basis to remove the terminology and framework from the rules. Also, ALARA provides assurance to the workforce and public that they will not be exposed to unnecessary radiation dose. This is warranted because, as NRC indicates, no well-established alternative to the linear no threshold risk model exists, so a reduction in dose would be expected to reduce radiation risk. This risk reduction could be weighed against the nearly universally understood ALARA reasonableness definition.

Further, proposed changes to the radiation protection framework are expected to result in significant costs to existing operations with well-established radiation protection programs. A substantial number of materials licensees in New York would likely bear significant compliance costs to revise radiation safety plans, procedures, training programs, and task-specific Standard Operating Procedures, which would far outweigh the benefits cited by NRC in the proposed rule.

The changes removing ALARA and adding provisions for unrestricted use and license termination under restricted conditions may also result in increased dose to the public. The additional provisions indicating a net public or environmental harm and cost-benefit analysis provide a different framework than the existing regulations, which may not be necessary. For example, all former licensees located in NY that used a dose-based decommissioning approach within the past 30 years have been able to clean up to less than 5 mrem/yr, which is less than the 25 mrem/yr limit. None of these licensees were encouraged to invest additional cost or time to clean up to these levels.

New York opposes full removal of ALARA from the regulations per proposed § 20.1003. Instead, New York recommends that NRC provide additional guidance on ALARA's reasonableness standard. This will help prevent isolated cases where ALARA is misinterpreted in a way that results in unnecessary conservatism and cost. Keeping ALARA in the regulation will also prevent significant burden and cost from redesigning existing radiation protection programs, provide assurance to the workforce and public, and provide an effective tool for NRC to continue to play a strong role in minimizing radiation risk while supporting and advancing beneficial nuclear technologies. Specifically, New York recommends adding clarity in the regulation and guidance as to the word "reasonably" to bolster understanding that the intent is to make every reasonable effort, to the extent practical. This involves using prudent, relatively low cost, and effective actions or tools that reduce risk to an extent commensurate with the cost or burden. For example, optimizing time, distance, and shielding to achieve the objective while minimizing cost is a simple, effective method. Additionally, proper work controls and adequate staffing are prudent measures that will minimize dose per worker per year.

Additionally, New York opposes the proposed change of compatibility category for section 20.1101(b), from category H&S to category A. Agreement states that want to keep the ALARA standard should be given the flexibility to do so. The discussion section of the Federal Register notice states that the current ALARA standard is "at least as protective as the proposed revised regulations", thus there should be no loss of protection if some states were to choose to avoid the challenges and uncertainties of this change in approach.

Graded Approach to Occupational Radiation Dose

The use of a graded approach to occupational radiation dose has the stated goal to provide a less-subjective approach to managing doses below regulatory limits. However, in practice it is likely to result in increased dose to the workforce, especially at the high end of radiation exposure, which is inconsistent with the stated rationale of the proposed change. For example, the proposed change states that linear no threshold is accepted by NRC but that there is evidence to support that it is conservative. If we accept this concept, and therefore the threshold for stochastic health impacts is less than 5 rem/year, then the employee who receives up to 10 rem/year per the graded approach with dose limit extension (DLE) will likely have an increased cancer risk. For example, using the information and approach described in the proposed rule change (a cancer risk coefficient of 5×10^{-4} per rem, also found in NCRP 180, Section 4.1), one would expect double the cancer risk at 5 rem/year as the DLE approach would allow vs. 2.5 rem/year, which is a reasonable estimate if lower than maximum annual dose of 5.0 rem/year occurs and is not "made up" using the DLE. This would result in an estimated increase from 3.75% to 7.5% fatal cancer risk assuming a 30-year career, which is significant even given the 20% lifetime fatal cancer risk.

Maximizing dose per employee as the dose limit extension provides an option that could have the unintended consequence of sending the wrong message on radiation safety. The DLE is arguably the opposite of ALARA; instead of taking reasonable steps to keep worker dose well below 5 rem per year, DLE would allow for worker doses right up to the cumulative 25 rem limit during a five-year period. This proposed change would also create difficult-to-control situations if a worker has jobs in multiple industries where they could receive much higher radiation dose than they would under current NRC rules. The cost and time needed for licensees and regulatory agencies to update radiation protection framework across existing licensees, almost 1000 in New York alone, would very rapidly outweigh the cost savings NRC cited in the proposed rule.

New York does not support the § 20.1205 implementation of the graded approach to radiation dose and implementation of the DLE because it would likely result in increased occupational radiation dose. Instead, New York proposes that NRC maintain the current regime of providing limits for each class of radiation worker along with ALARA guidance.

Relaxed Limits for Release to the Environment and Public Dose

New York supports modernizing modeling approaches for dosimetry in § 20.1010. This science-based change provides increased flexibility for licensees while protecting public health.

Radioactive material releases to the environment and radiation dose to the public may have a profound impact on the promulgation of new nuclear technologies and continued use of existing technologies. Accordingly, increasing radiation dose limit to the public in the absence of evidence that there are challenges with meeting the current limits or an indication of benefits associated with relaxing these limits does not seem prudent.

The changes in regulations may allow higher dose to the public from radiation or from release of radioactive materials to the environment. This increased radiation dose limit to the public may be allowed through changes proposed by NRC allowing actions that would have been prohibited or discouraged under current regulations. For example, the NRC-proposed changes allow NRC authorization of an increase to the annual dose limit to members of the public in excess of 0.1 rem, if authorized instead of the previous annual limit of 0.5 rem. While there are criteria for this application provided suggesting an evaluation would take place, it is not clear that these changes proposed by NRC reflect the same posture with respect to minimizing radiation dose to the public as the existing limits that prohibit doses in excess of 0.5 rem per year and including ALARA. The proposed NRC increase in air emission limit impacting an individual member of the public on a total effective dose equivalent basis from 10 to 25 mrem per year does not appear to be needed. None of the New York Radiation Control Permit (Part 380) facilities are approaching the 10 mrem/yr constraint in the current regulatory regime. Most are below 1 mrem/yr. Also, as

noted in the proposed rulemaking, EPA found that air emissions from most facilities do not result in doses exceeding 1 mrem/year, with only a small percentage of facilities approaching, but none exceeding, 10 mrem per year.

New York opposes all proposed dose limit increases associated with releases to environment and public. This includes opposition to removing the current limitation of 0.5 rem/year dose to the public from § 20.1301(d), opposition to the provision in § 20.1301(b) allowing authorization of dose greater than 0.1 rem/year, and opposition to increasing the total effective dose equivalent basis from 10 to 25 mrem per year in § 20.1101. There is no clear justification for these changes given the large margin to existing limits based on the experience of New York agencies. The public is sensitive to changes in releases impacting their dose or the environment. If the NRC has knowledge of existing or planned facilities where there is a compelling benefit to operating above the existing limits, New York would like to review this information. This would allow state agencies to weigh this benefit against potential concerns about the dose limit increases to the environment and public. Efficient, streamlined regulation should not include weakening fundamental radiation protection standards.

Additional Considerations

New York recommends providing an alternate timing requirement in § 20.1101(c) for licensees to review their radiation protection programs if “at least annually” is removed.

New York recommends keeping the § 20.1301(a)(2) 0.002 rem/hr requirement since this is the standard rate of measurement for radiation detection equipment for licensees monitoring dose to the public. This limit provides a practical safeguard against unintended excess public dose. In medical settings, compliance with the 0.1 rem annual dose limit is typically assessed by calculations involving assumed workload and occupancy, factors that may vary significantly over time. Changes like this can be difficult to quantify and may not always trigger a reassessment of public dose by licensee radiation safety programs or regulatory bodies. Compliance with the 0.002 rem/hr limit, by contrast, can be reasonably verified through direct measurements and serves as a definitive and actionable control limit.

New York suggests that that language be incorporated into § 20.1402 requiring licensees to analyze if further reduction in residual radioactivity beyond 25 mrem per year provides a net benefit with regard to public or environmental harm with consideration of cost.

§ 20.1010 allows use of alternative dosimetry methods, which may provide benefit in flexibility to licensees, but likely represents an increase in burden on New York state regulatory agencies to review more highly varied methods than the current regulation. How

will NRC ensure that the benefit to licensees associated with these proposed changes is not outweighed by the cost and burden to state regulatory agencies?

§ 20.1205 includes the NRC proposed planned occupational dose limit extension provides a framework for assessing radiation dose across various exposure pathways. If a state were to not adopt this concept for x-ray exposures, how would the NRC handle a situation where a person is exposed to radioactive materials and x-rays? For example, if an interventional radiologist receives occupational exposure from fluoroscopy equipment and administers Y-90 therapy, how would this be treated?

§ 20.2106(a)(7) of the proposed rule adds language where licensees may annotate that an individual's occupational dose was received but did not exceed the criteria for recording in cases where monitoring was required pursuant to § 20.1502. This is applicable when the dose received does not exceed 10 percent of the applicable monitoring criteria. New York recommends not making this change because it provides minimal time or cost-savings benefit, degrades systemic controls, and potentially raises concerns of workers receiving occupational dose. This approach is also inconsistent with the change to § 20.1205 that considers planned occupational dose limit extension based on dose accumulated over prior years.

§ 20.1703(b) of the proposed NRC rule adds language where licensees may use equipment that has not been tested or certified by NIOSH without application and approval by NRC, so long as it has previously been approved for use by the NRC. New York seeks clarification on how a licensee can determine prior NRC approval for specific use and clarification on what respiratory protection equipment is in use at NRC sites that is not approved by NIOSH. New York opposes this proposed change in the absence of safeguards to ensure that a licensee cannot overlook differences in usage that might make the non-approved equipment appropriate in one case but not in another.

§ 20.1705(c) of the proposed rule adds language to allow licensees to use higher assigned protection factors without application and approval by NRC, so long as they have previously been approved for use by the NRC. New York seeks clarification on how a licensee can determine prior NRC approval for specific use.

Conclusion

New York shares NRC's goal of modernizing regulation of radiation protection. Several provisions in this rule are constructive, and New York endorses them. We also urge NRC to incorporate New York's recommended changes to the proposed rule. New York looks forward to continued coordination with the Commission, including through the Agreement State process, and is available to discuss these comments.

Thank you for the opportunity to comment. If you have any questions or concerns, please contact me.

Sincerely,

A handwritten signature in black ink that reads "Alyse Peterson". The script is cursive and fluid, with the first name "Alyse" and last name "Peterson" clearly distinguishable.

Alyse Peterson, P.E.
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