

Tri-Valley CAREs

Communities Against a Radioactive Environment

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U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Re: Docket NRC-2025-1140; RIN 3150-AL47; “Reforming and Modernizing the NRC’s Radiation Protection Framework,” 91 Fed. Reg. 43456

Dear Commissioners,

Tri-Valley Communities Against a Radioactive Environment (“CAREs”), submits these comments in strong opposition to the Nuclear Regulatory Commission’s proposed rule, “Reforming and Modernizing the NRC’s Radiation Protection Framework.”

Tri-Valley CAREs is a community-based organization located in Livermore, CA that monitors nuclear weapons activities and environmental cleanup throughout the United States nuclear weapons complex, with a special focus on Lawrence Livermore National Laboratory and the communities surrounding it. Our work is grounded in the principle that workers and members of the public should not be subjected to avoidable exposure to radioactive materials merely because the resulting risk is difficult to measure, delayed in time, dispersed across a population, or inexpensive for an operator to impose.

The NRC should withdraw this proposed rule. The proposal would dismantle one of the central principles of modern radiation protection: the affirmative obligation to keep radiation exposures as low as reasonably achievable. It will be replaced with a weaker framework that allows operators to treat regulatory dose limits as operating space. It is a fundamental reassignment of risk, from licensees to workers, nearby communities, future land users, and the public.

I. The proposed rule violates the Atomic Energy Act (“AEA”) as passed by Congress.

42 U.S.C. § 2232 (Section 182 of the Act): Sets out the requirements for license applications, stating that licenses must find that the utilization or production of special nuclear material will "provide adequate protection to the health and safety of the public." 42 U.S.C. § 2201(b) (Section 161 of the Act): Grants the Commission the authority to establish regulations and orders it deems necessary to "protect health and minimize danger to life or property." These sections create the spirit of the AEA’s protection standards as Congress intended.

Removing ALARA’s legal requirement to drive doses down below hard numerical caps violates the spirit—if not the letter—of the statutory safety mandate by removing the continuous incentive to minimize toxic exposure. The NRC should retain ALARA as an enforceable requirement, not reduce radiation protection to compliance with ceilings

Removing ALARA changes the question that must be answered. Under ALARA, the question is, “Can we reasonably avoid or reduce this exposure?” Under the proposed graded approach, the

question increasingly becomes, “Can we remain below a numerical limit, and would avoiding the dose cost more than the assigned dollar value of the risk?”

That shift is especially troubling because the NRC acknowledges that there is no scientific consensus establishing a threshold below which stochastic health effects cannot occur. The notice further recognizes that no consensus supported and regulation ready alternative to the linear no-threshold model currently exists. It is irrational to respond to scientific uncertainty by eliminating the precautionary duty that was developed to address that uncertainty.

The NRC also acknowledges that existing ALARA-based programs have made occupational radiation risks negligible and calls that outcome a “net benefit.” The agency nevertheless suggests that this success may demonstrate “excessive conservatism”. This reasoning is backwards. Low occupational doses are evidence that prevention has worked, and not proof that prevention was unnecessary. This is the radiation-protection equivalent of arguing that a successful fire-prevention program should be weakened because few fires occurred. The absence of harm under a protective system cannot be used as evidence that the protections may safely be removed.

The proposed rule would also create a “ceiling becomes the target” problem. Once an enforceable duty to minimize exposure disappears, investments in shielding, remote handling, robotics, maintenance, staffing, contamination control, ventilation, work planning, and monitoring must increasingly be justified against the unused capacity below the dose limit. Over time, operators facing budget, schedule, and production pressures can be expected to consume more of that capacity.

Even when no individual regulatory change produces a dramatic dose increase, hundreds of marginal decisions can cumulatively increase worker exposures, routine releases, contamination, and cleanup burdens. ALARA is valuable precisely because it operates at each of those decision points.

An agency can not make rules that violate existing statute, and this change violates the AEA. Thus, the NRC can not make this rulemaking change unless congress amends the AEA.

II. The NRC’s proposed “graded approach” is not equivalent to genuine optimization

The NRC argues that the international standard has moved away from ALARA toward “optimization.” But the difference is much smaller than the NRC suggests. The International Atomic Energy Agency defines optimization as keeping radiation doses, the number of people exposed, and the chance of exposure as low as reasonably achievable, while also considering economic and social factors. The IAEA also says governments and regulators should require this kind of optimization. In other words, international standards still support the basic principle behind ALARA: unnecessary radiation exposure should be reduced whenever reasonably possible. They do not say facilities should simply be allowed to expose people up to the legal dose limit.

The NRC proposal departs from genuine optimization in many ways.

First, optimization is continuous and iterative. The proposal instead sets dose levels below which certain safety measures would no longer be required. For workers, these levels include 100 millirem, 500 millirem, and 5 rem per year. For the public, a licensee may not have to evaluate potential exposures at all if projected doses are below 25 millirem per year.

Secondly, true optimization considers the distribution of risk, not merely total person-rem. Exposing one subcontractor repeatedly is not ethically or operationally equivalent to distributing the same collective dose across a large, well-protected workforce.

Lastly, optimization should also include input from workers and affected communities. But this proposal gives companies more freedom to make their own decisions while making it harder for regulators and the public to challenge those decisions.

III. The Livermore experience demonstrates why low current doses are not a reason to abandon prevention

Lawrence Livermore National Laboratory is regulated by the Department of Energy (DOE) and National Nuclear Security Administration, not by the NRC when it comes to most radiation safety requirements.

But the NRC proposal is not happening in isolation. In January 2026, Energy Secretary Chris Wright approved a directive to eliminate ALARA from DOE directives and regulations. The Defense Nuclear Facilities Safety Board later described the January 9 memorandum as approving action to revise 10 CFR Part 835, DOE's occupational radiation-protection regulation, along with related DOE directives.

Importantly, DOE has not yet completed the process of removing ALARA from 10 CFR Part 835. The January directive set that process in motion; changing the federal regulation itself requires further action. But DOE has already begun revising and withdrawing radiation-protection directives and guidance associated with ALARA. For example, DOE now lists its handbook on implementing ALARA protections for the public and environment as archived rather than current.

That makes the NRC proposal particularly concerning. Two of the federal agencies responsible for radiation protection are moving in the same direction at the same time. If both DOE and NRC abandon ALARA, the change could reshape radiation-safety practices across both the nuclear weapons complex and the civilian nuclear industry.

For Livermore residents and workers, DOE's actions are especially relevant because Lawrence Livermore National Laboratory is part of the DOE nuclear weapons complex. Weakening ALARA could affect the standards and practices used to make decisions about worker exposure, radioactive materials, waste operations, contamination control and protection of surrounding communities.

Livermore's experience shows why relying on numerical limits alone is inadequate. In October 2024, a valve misalignment at LLNL's Building 298 caused an unplanned release of 35.6 curies of tritium. Although the release was below EPA's 100-curie reporting threshold, the Lab subsequently implemented new administrative and engineering controls. "Below the limit" should never end the inquiry.

IV. "Unused dose" is not a bankable asset belonging to an employer

The proposed planned occupational dose limit extension is one of the most objectionable elements of the rule.

The proposal would allow a licensee to expose a worker above the ordinary annual occupational limit, up to twice the applicable limit in one year and up to five times the annual limit during the current and preceding four years. For the five-rem total effective dose limit, this could permit up to 10 rem in one year and 25 rem across five years. The NRC describes the provision as allowing a licensee to access dose “not given” to the worker in earlier years.

That concept is fundamentally flawed. A worker’s avoided exposure in an earlier year is not an asset accumulated for the employer’s later use. The worker received a health and safety benefit from not being exposed. That benefit belongs to the worker. It should not be transformed retrospectively into a licensee’s permission to impose additional risk.

A worker with a low recorded dose over the preceding five years may become more attractive for a high-dose assignment. Newer employees, younger workers, temporary workers, and workers who have recently moved from a low-dose position could be selected precisely because they possess more “available” regulatory dose. This could produce a labor market in which workers are valued partly according to how much dose capacity they can supply. It may also encourage employers to move workers among projects or facilities to manage dose allocations.

The proposed DLE would weaken worker protections. The current rules make higher radiation exposure difficult and rare. The proper response to an exposure mechanism is not to create a more convenient one.

V. The proposed worker-notification provisions do not establish voluntary consent

The proposed text does not affirmatively require the worker’s voluntary written consent. It contains no express right to decline, no anti-retaliation protection tied to refusal, no independent counseling requirement, and no process for challenging the licensee’s dose estimate. Being informed that one has been selected for a high-dose task is not the same as freely consenting to it.

The proposed rule also fails to address subcontractors adequately. A worker employed by a staffing or contracting company may technically receive information from both the employer and licensee but still have no meaningful negotiating power. The party that benefits from completing the high-dose task may not be the party that bears the worker’s future healthcare or income-loss costs.

VI. The rule could create inequity and discrimination around pregnancy

A worker may not know they are pregnant or may delay disclosure because they fear losing pay, job opportunities, or privacy. Employers may also discriminate against workers who could become pregnant. Radiation protections should not depend on workers sharing private medical information. Facilities should reduce exposure for everyone.

VII. The proposal would expose transient workers and visitors who are not radiation workers

The NRC proposes allowing higher radiation doses for members of the public in “controlled areas,” including delivery workers, contractors, emergency responders, and visitors. These people may lack radiation training, monitoring, medical follow-up, or knowledge of their total exposure, and signs or briefings do not make them radiation workers or provide informed consent. Repeated visits could also add up to significant exposure. Anyone entering for paid work should receive full worker protections, and the NRC should not allow facilities to negotiate public dose limits above 100 millirem per year.

VIII. “National security” and “energy reliability” must not be used to justify increased public exposure

The NRC should not allow national security or energy needs to justify higher public radiation doses. Radiation harms do not change because a facility has a classified mission. This is especially dangerous near nuclear weapons sites, where communities could be asked to accept greater risks based on information they cannot review. Mission importance should never weaken health standards, and any request must include independent review and public information about the proposed dose, affected people, alternatives, monitoring, and end date.

IX. Facility-by-facility dose calculations can conceal cumulative community burdens

The proposed framework looks at radiation exposure one source and facility at a time, but people may face exposure from several places, including workplaces, nuclear facilities, medical procedures, contaminated groundwater, food, and radioactive material transport. A facility may remain below its individual limit even when a person’s combined exposure and other environmental burdens are much higher.

This is an environmental justice concern because low-income workers, renters, immigrants, people with disabilities, and communities with limited political power may have fewer ways to avoid exposure or obtain monitoring and healthcare. The NRC should evaluate cumulative exposure, existing contamination, transportation, climate-related risks, vulnerable populations, and whether people can realistically refuse the exposure. It must also avoid averaging methods that hide the risks faced by the most exposed people.

X. The NRC’s Cost Formula Undervalues Health and Shifts Costs to the Public

The NRC’s proposed guidance could let facilities reject a safety measure if it costs more than about \$5,200 for each person-rem of radiation avoided. This approach wrongly treats very different exposures as equal, even though a high dose to one worker is not the same as a tiny dose spread across thousands of people, and an involuntary exposure is not the same as a medical exposure accepted for personal benefit.

The formula also overlooks cancer treatment, chronic illness, lost income, caregiving, long-term contamination, stress, lawsuits, cleanup costs, and harm to families and communities. Facilities would receive the immediate savings while workers, taxpayers, healthcare systems, and future generations could bear the costs. Radiation protection also supports reliable operations by preventing contamination events and workforce losses. Cost analysis should never allow facilities to buy the right to expose people.

XI. The proposal could weaken cleanup and transfer contamination to future generations

The proposed rule would remove ALARA from license termination requirements and make it easier to decide that further cleanup costs too much. This could leave significant contamination at restricted sites. This approach lets polluters avoid cleanup costs while future communities and governments inherit contamination, restrictions, monitoring burdens, and possible emergency cleanup. It could also set a dangerous precedent for DOE nuclear weapons sites, where contamination is already long-lived

and cleanup remains incomplete. The NRC should favor permanent cleanup and risk reduction over financial calculations and institutional controls that may not last.

XII. The proposal would weaken United States' credibility internationally

The United States strongly influences international nuclear safety standards. Removing ALARA could encourage other countries to weaken worker and public protections, even though no completely safe level of radiation exposure has been established. The risk is especially serious around secretive military and nuclear weapons facilities, where communities may lack independent oversight, environmental data, worker protections, or the power to challenge exposure decisions.

The proposal also conflicts with international standards that call for keeping radiation exposure as low as reasonably achievable. Other governments could cite the NRC rule to claim that reducing doses below legal limits is unnecessary or too costly. Weakening ALARA would also make it harder for the United States to demand strong safety, cleanup, transparency, and accountability standards abroad.

XIII. The NRC has not justified its finding of no significant environmental impact

The NRC's claim that this rule would not significantly affect people or the environment is not credible because the proposal could increase worker and public radiation exposure, radioactive releases, residual contamination, and reliance on controls that may fail over time. Even optional changes have consequences if facilities use them, as the NRC's projected cost savings assume they will. The NRC should prepare a full environmental impact statement under the National Environmental Policy Act (NEPA) examining cumulative exposure, releases, monitoring, cleanup, environmental justice, climate risks, effects on state and DOE standards, and international safety norms. At minimum, it should revise its environmental assessment and open a new public-comment period.

In addition, the NRC should evaluate how this rule would change the analyses in all previous NEPA environmental reviews on nuclear power plants and other NRC regulated facilities where the human health impacts were analyzed based on adherence to the ALARA standard, and how the adoption of this new standard would change those analyses.

XIV. The claimed economic savings do not justify the rule

The NRC estimates that the rule would save the nuclear industry about \$9.53 million annually, along with smaller savings for regulators. These savings are modest across the entire industry, especially for a proposal that would weaken basic protections for workers and the public for decades. The analysis favors easily measured, short-term industry savings while treating future illness, medical care, contamination, cleanup, compensation, emergency response, and loss of public trust as uncertain or unquantified. Uncertainty should not be treated as zero cost.

The NRC must explain which safety measures facilities may stop using, how much additional radiation exposure and contamination it expects, who would receive those doses, and how often facilities would use the proposed exceptions. It must also count costs shifted to workers, families, insurers, taxpayers, and affected communities and analyze environmental justice impacts. Allowing greater exposure is not a true public benefit unless all resulting health, environmental, and social costs are included.

XV. Conclusions

The NRC presents a false choice between keeping ALARA and creating clearer, more flexible rules. The real question is whether radiation rules should prevent unnecessary exposure or simply keep exposure below “legal” limits.

The proposed rule would weaken worker dose limits, public protections, monitoring, recordkeeping, pollution controls, and cleanup standards. Its effects could spread beyond NRC facilities to states, federal agencies, nuclear workers, and facilities worldwide. It could also encourage weaker protections at Lawrence Livermore National Laboratory and across the nuclear weapons complex.

Tri-Valley CAREs therefore asks the NRC to:

- Withdraw the proposed rule
- Keep ALARA as an enforceable requirement
- Prepare a full environmental impact statement
- Extend public comments to at least 180 days
- Hold hearings in affected communities
- Consult workers, tribes, communities, and relevant agencies

Radiation rules should not ask how much avoidable exposure can be allowed. They should ask how much exposure can be prevented.

Filed on behalf of our 6500+ members,

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