

From: [Shannin Zevian](#)
To: [RulemakingComments Resource](#)
Subject: [External_Sender] Docket ID NRC-2020-0101: Don't Weaken Emergency Preparedness for Nuclear Reactors and Other Nuclear Facilities--Strengthen it!
Date: Tuesday, July 21, 2020 12:49:12 PM

Nuclear Regulatory Commission (EPZs)

RE: Docket ID NRC-2020-0101: Don't Weaken Emergency Preparedness for Nuclear Reactors and Other Nuclear Facilities--Strengthen it!

Dear ,

Commissioners and Staff of the Nuclear Regulatory Commission:

I am one of many that are extremely opposed to the U.S. Nuclear Regulatory Commission's proposed rule change, docketed in the Federal Register (NRC-2020-0101), to reduce the emergency preparedness requirements for small modular reactors, "other new technologies," and production and utilization facilities.

NRC is proposing to eliminate the requirement of dedicated minimum Emergency Planning Zones (EPZs) for the above-referenced facilities, and for site-specific Emergency Response Plans that must be reviewed and approved by the Federal Emergency Management Agency (FEMA). Instead, the proposed regulations would allow licensees to determine what the size of the EPZ should be (or whether offsite emergency planning is necessary at all), based on the probability that people would be exposed to more than 1000 millirems of radiation. This proposed rule change must be rejected.

Emergency planning requirements have been a bedrock of nuclear safety regulation for over 40 years, since the Three Mile Island disaster proved that large releases of radiation were possible, ad hoc emergency response measures are inadequate, and that nuclear disasters present unique challenges requiring advance preparation and coordination with state and local agencies. NRC has affirmed the importance of requiring offsite emergency planning on multiple occasions since the requirements were adopted in 1980.

Emergency planning requirements for nuclear facilities will be more essential than ever due to climate change. Natural disasters that could cause nuclear emergencies, as well as complicate emergency response plans, are increasing in both severity and frequency. But NRC's proposed rule and supporting documents do not even mention climate change or extreme weather events once. It is arbitrary and capricious for NRC to promulgate nuclear safety and emergency planning regulations without taking into account the real-world conditions of the climate crisis.

Emergency planning is part of the social contract for commercial nuclear facilities. It is the very last line of defense to protect public health and safety when safety regulations, reactor designs, defense-in-depth, and NRC oversight fail. The public bears the ultimate risk from a nuclear disaster. As the National Academy of Sciences affirmed in its seventh review of the Biological Effects of Ionizing Radiation (BEIR VII), there is no "safe" level of radiation exposure--every amount of ionizing radiation exposure results in an increased risk to a person's health. In addition, the Price-Anderson Act limits the nuclear industry's collective liability for radiological disasters at its facilities to only \$13 billion. Under the act, victims are left to seek damages from the federal government, forcing the public to sue our own government and ultimately requiring our fellow taxpayers to pay the bill for the industry's failures. In exchange for subjecting the public to what may ultimately be incalculable losses to health, family, career, community, and home, NRC licensees must create and maintain (and pay for) plans to enable people to get out of harm's way when nuclear safety measures fail and probability estimates prove wrong.

In practice, NRC's current emergency planning requirements under 10 CFR 50.33 have been demonstrated to be inadequate in real-world situations. They should be made more stringent, not less, and not based solely on

calculations of risk.

The small modular reactors (SMRs) and non-light-water reactors (NLWRs) this rule change would apply to still contain large amounts of radiological material. The proposed NuScale SMR reactor design is rated for 50-60 MW, about one-tenth the size of Fukushima Dai-Ichi units 1 and 2; however, the NuScale SMR currently under design certification review is intended to be built with 12 reactor units in a single reactor building, making each NuScale plant equivalent to a conventional large reactor. As the Fukushima Dai-Ichi disaster proved, a single event can cause multiple reactor failures on the same site.

It is arbitrary and capricious and absurd for NRC to assume that license applicants for new reactor designs should be able to exempt themselves from emergency planning requirements solely on the basis of risk calculations. NRC has no experience regulating many potential reactor designs. Further, by creating a process for “small” reactors to eliminate offsite emergency planning through a cold calculation of the probability that a radiation release would not be large enough to warrant emergency response, NRC is opening the door for reactors of any size, design, and vintage to reduce or eliminate emergency planning.

NRC appears to be subjugating its prime responsibility to protect the public health and safety under the Atomic Energy Act as amended in 1975 to industry financial interests in lightened regulatory burden and streamlined licensing procedures. The public can have no confidence in this proposed regulation & it must be rejected.

Sincerely,
Shannin Zevian

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