



UNITED STATES
NUCLEAR REGULATORY COMMISSION
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FOR THE RECORD

**RESPONSE TO A COMMENTARY PUBLISHED IN THE NORTH COUNTY
(CALIFORNIA) TIMES NEWSPAPER ON NOVEMBER 12**

In his commentary calling for the immediate closure of the San Onofre Nuclear Generating Station published Nov. 12, Roger Johnson, a professor emeritus residing in San Clemente, said a Nuclear Regulatory Commission study predicts 50,000 fatalities in the event of a catastrophic accident at the plant.

While he cites no reference, we believe Mr. Johnson was referring to “Technical Guidance For Siting Criteria Development.” This report, prepared for the NRC in 1982 by Sandia National Laboratory, was not an effort to determine how many people might die or how much property might be damaged in the event of a severe accident. It was an effort to determine how large a role factors like population densities, meteorology, geography, and emergency planning could play in the consequences of a nuclear accident. It used a hypothetical scenario in which all of the plant’s safety systems and barriers fail, spouting a radioactive geyser into the air. The entire contents of the reactor core get injected into a rain cloud hovering above the plant and the cloud then floats over a major population center where it drenches a population with radioactive rain. The scenario is so outlandish and considered so unlikely, the people who designed the study said at the time they doubted it *could* occur. Despite numerous explanations and clarifications by the NRC over the past three decades, this study has been misused by many.

Mr. Johnson also noted that San Onofre “has aging reactors vulnerable to equipment failure, human error, earthquakes, tsunamis, sabotage and terrorist attacks.” The NRC is precluded from promoting nuclear power; but with respect to safety, it is important that the record is set straight for all operating reactors. The NRC has rigorous requirements for the design and operation of nuclear power plants that ensure that they are built to exacting standards, operate safely, are capable of withstanding all manner of natural hazards and are secure from terrorist attack. The agency holds the industry to a high standard and our inspectors have a low threshold for concern. Our regulations require multiple safety barriers and “defense in depth” to protect the public from exposure to radiation. Our rigorous oversight ensures that adverse performance trends are identified long before they become safety significant.

Following the accident at Fukushima Daiichi, the NRC conducted inspections at all 104 reactors to ensure they could deal with the loss of major equipment or electrical power following extreme events. Some deficiencies were identified at San Onofre, but nothing that would have prevented the safe shutdown of the plant.

Mr. Johnson's commentary is peppered with other inaccuracies. Far too many, in fact, to address here. But here are a few: Contrary to Mr. Johnson's assertion, the industry doesn't pick NRC Commissioners; the President of the United States does and they are confirmed by the Senate. Yucca Mountain is not closed; it was never built. The used fuel rods at San Onofre do not "have the equivalent of thousands of Hiroshima bombs;" they are being safely stored in a water-filled pool or are transferred to massive steel and concrete storage casks. And the industry does not pay for the NRC; taxpayers cover the cost of the NRC, and taxpayers are reimbursed by utilities with checks that go to the Treasury for the safety oversight work of the NRC.