

# THE SACRAMENTO BEE

## Stand-down order at San Onofre questioned

The plant is closed, but radioactive material remains

By Jeff McDonald

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When the U.S. Nuclear Regulatory Commission approved a series of “stand down” orders lessening emergency planning and response requirements for the defunct San Onofre power plant this past summer, many saw it as the expected end of the nuclear era there.

But now a number of experts and consumer groups are questioning whether it was appropriate or safe to grant Southern California Edison exemptions from emergency-planning rules and reporting requirements that used to govern the plant on San Diego County’s north coast.

Federal regulators said the exemptions make sense because the likelihood of a nuclear accident has been greatly reduced since the plant closed in 2012. And Edison gave San Diego County a seven-figure grant to boost local preparedness.

But nearby emergency officials remain concerned, as Edison sets about to relocate tons of nuclear waste from cooling ponds into dry storage on site.

“I look at worst-case scenarios,” said Donna Boston, the Orange County director of emergency management. “Why do the rules exist then, if they are going to grant exemptions?”

Kevin Kamps of Beyond Nuclear, a Maryland nonprofit that works to ensure a safe transition away from nuclear power, said the scaled-back plans are not what they need to be in case of potential catastrophe.

“They assume people will be quickly evacuated out of harm’s way,” Kamps said. “The problem is, they are exempting Southern California Edison from maintaining effective emergency preparedness.”

The exemptions were approved in June, after the NRC concluded a 14-month review. The commission said the threat to public safety had been sharply reduced with the plant closure.

“Southern California Edison provided analyses to show the exemptions are warranted because when compared to an operating power reactor, the risk of an offsite radiological release is significantly lower and the types of possible accidents significantly fewer,” the commission said.

Under the exemptions, Edison is not required to maintain emergency-response plans across a 10-mile radius emanating from the twin reactors, which were shut down following a radiation leak in January 2012 and mothballed permanently in June 2013.

The license amendments permit Edison to stop maintaining an emergency zone stretching 50 miles from the reactors in every direction, extending south of Pacific Beach and east past Temecula and Ramona. That zone was set up to protect residents from radiation exposure through water, livestock and farm products.

Edison also is not required to immediately notify first-responders in San Diego and Orange counties if an accident happens. Instead, it has 30 minutes to define the event and another hour to alert local officials.

An agreement Edison signed last month calls for the company to inform San Diego and Orange counties of any mishaps within 15 minutes even though such notifications are not required by the NRC.

Utility officials say they will continue to plan for emergencies and maintain effective safety protocols. They declined to say how much money they save under the exemptions, but said the changes are routine for nuclear plants that stop generating power.

“The exemptions are the NRC’s existing process for managing the reduced risk associated with permanently retired nuclear plants such as San Onofre and several plants in other states,” Edison spokeswoman Maureen Brown said.

Nuclear power plants generate radioactive waste that remains dangerous thousands of years. Like most plants, San Onofre stores its spent fuel in pools that chill the waste to a temperature that makes it more safe.

Even before the plant was shuttered, Edison began transferring San Onofre's spent fuel into dry storage, or portable casks that are less susceptible to exposure.

The process of moving up to 1,600 metric tons of radioactive waste is slow. Edison expects to finish moving all of the spent fuel into casks by 2019.

Despite the highly choreographed and mechanized transfers, there is some risk that a pool will catch fire or a cask will be dropped. Experts say those risks need to be planned for, even though they are lower than the risks at plants that are producing electricity.

"I have long been troubled by NRC's grant of exemptions from emergency-planning regulations for nuclear plants that are not operating but still have large amounts of irradiated nuclear fuel on site," said Daniel Hirsch, a nuclear policy lecturer at UC Santa Cruz. "Effective emergency response plans would be critical to reduce public exposures to radiation."

For decades, Edison and minority plant owner San Diego Gas & Electric were required to create and maintain detailed emergency plans that accounted for nearly every conceivable worst-case scenario at the San Onofre Nuclear Generating Station.

The preparations called for evacuating and treating thousands of people who live within 10 miles of the plant under a worst-case scenario.

Plans also included handing out potassium iodide, or "KI" tablets, which people could take to protect thyroid glands from radiation exposure. And they included periodic testing of air-raid style warning sirens that resonated for miles across coastal San Diego and Orange counties.

As long ago as 1982, when Units 2 and 3 were just coming online, Edison joined with various government agencies to create a task force dedicated to coordinating an effective emergency response in case of an accident at San Onofre.

In addition to the utility, the Interjurisdictional Planning Committee had representatives from San Clemente, Dana Point, San Juan Capistrano, San Diego and Orange counties, Camp Pendleton and California State Parks.

Before they approved Edison's exemptions request, federal regulators invited committee members and others to submit comments on the application. Some of the more serious issues were raised by the California Energy Commission.

The changes "would unreasonably diminish the current safeguards necessary to ensure public health and safety," Chairman Robert Weisenmiller told the NRC in a May letter. "Taken together, the license amendment requests would significantly reduce, if not eliminate, notification procedures currently required."

Federal regulators formally approved the Edison requests three weeks later.

Edison said it worked closely with the Interjurisdictional Planning Committee on its emergency planning for San Onofre, and provided meeting minutes that refer to the company's plans to scale down emergency planning.

After the NRC received the request, Orange County filed 13 separate comments and concerns with the Edison proposal, including criticism of the notification delays and clarifications over how the utility planned to transport people exposed to radiation.

"Orange County maintains the position that we need to preserve our independent, off-site dose-assessment capabilities to ensure public trust remains intact and to provide the guarantee there is not a threat to public health," county emergency planners told the NRC.

Holly Crawford, director of the San Diego County Office of Emergency Services, said her office won concessions when it negotiated a memorandum of understanding with Edison this summer.

For one thing, the county received money from Edison — a little over \$1.7 million this year for the five municipalities represented on the planning committee, and more each year until the cooling pools are emptied and the fuel is placed into dry storage.

They also secured the commitment from Edison to alert them within 15 minutes of any accident.

"We remain a strong advocate for nuclear emergency planning," she said. "The funds will be used to maintain the array of response equipment, training and supplies we've amassed during our decades of planning to protect our community from any type of nuclear accident."

Edison said the new rules and agreements will serve the company and local responders.

“We are confident that the continuing emergency preparedness plan and coordination with local officials will ensure timely communication with local officials in the unlikely event of a radiological emergency,” the company said in a statement.

The Interjurisdictional Planning Committee continues to meet periodically to review emergency-response strategies.