

Rulemaking Comments

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OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

We live on an island in Puget Sound, surrounded by nuclear equipped Navy bases at Everett, Oak Harbor, and Bremerton. If any one of those locations experienced a nuclear emergency, there would be no exit from Whidbey island. The 2 lane bridge at the north end would be inundated with traffic in no time, and the ferries from Clinton to Mukilteo and Keystone to Port Townsend would most likely stop altogether, leaving Whidbey residents to deal with potential exposure and contamination. Not a comforting thought.

Most likely any emergency would be connected to a major catastrophic event involving earthquake, tsunami, or fire. By their nature catastrophic events are not predictable. The only option is to arrange matters ahead of time so that if such an event occurs, there is a clear protocol for protecting human life. At present there is no such protocol.

While Bremerton may seem far away, across the water, the prevailing winds come from the south and move up the sound, including over Bremerton, before dumping their load at the convergence zone on the west side of Whidbey.

The on-going events at Fukushima demonstrate that nuclear power disasters can have sustained and far reaching effects. A major concern associated with Fukushima and other nuclear disasters is the evacuation of affected populations. In the United States, emergency planning for nuclear emergencies has remained largely static since 1980, when regulations pertaining to emergency planning were initially enacted after the Three Mile Island accident. These plans are outdated and do not adequately protect the health and safety of United States citizens.

Specifically, the current 10-mile emergency evacuation zone does not adequately protect from the effects of ionizing radiation, despite what computer modeling and simulations may demonstrate. The real world experiences of Fukushima and Chernobyl are direct evidence that radiation releases from nuclear accidents can be greater than computer modeling or simulations suggest. Indeed, the accident at Fukushima resulted in sustained and large releases of radiation for a period of several weeks.

More than 150,000 people evacuated near Fukushima, from as far as 25 miles away--50,000 of those, according to the Associated Press (5/16/12) evacuated from outside the mandatory evacuation zones. Meanwhile, the U.S. Nuclear Regulatory Commission and U.S. State Department recommended that Americans within 50 miles of Fukushima evacuate. Even so, as much as 80% of the airborne radiation released at Fukushima blew directly over the Pacific Ocean, rather than populated areas. The NRC cannot rely on favorable wind patterns to protect the American public.

According to the National Academy of Sciences BEIR VII report, there is no safe dose of radiation, and women and children are affected more by radiation than men. Evacuation regulations must be protective of the most vulnerable in the population.

The ingestion pathway EPZ is also grossly inadequate, and should be expanded to 100 miles. Food contamination at both Fukushima and Chernobyl has been far reaching and persistent. In Chernobyl, radionuclides tainted crops and animal products hundreds of miles away. More than

25 years after that accident, sheep in Wales--hundreds of miles away--remain interdicted. Similarly, in Fukushima contamination of rice, milk, and other food has been exhibited 100 miles and more from the site.

Current NRC regulations do not require that emergency exercises take into consideration an initiating or concurrent natural disaster that might further complicate accidents and subsequent evacuation efforts. At Fukushima, a natural disaster (coupled with faulty reactor design) initiated the disaster. Both Fukushima and the U.S. experience with Hurricane Katrina demonstrate the difficulties associated with evacuating when a natural disaster strikes that causes roadways to wash out.

Weather patterns are growing more extreme and dangerous. In 2011, hurricanes, earthquakes, and flooding caused damage to U.S. nuclear reactors. As such, emergency preparedness drills and exercises should include regionally appropriate natural disasters such as droughts, flooding, blizzards, earthquakes, wildfires, and hurricanes.

It is for all these reasons that I request that the NRC adopt the proposed rule expanding emergency planning zones to the respective 25, 50, and 100 mile zones and add a new requirement that emergency exercises include scenarios of regionally appropriate initiating or concurrent natural disasters.

Thank you,

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