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FOR THE RECORD

NRC CLARIFIES MISCONCEPTIONS ABOUT EMERGENCY PREPAREDNESS

Much has been written about NRC emergency preparedness efforts in recent months, but sometimes clarity can be lost as a complex subject is simplified in news reports. Here are some quotes we think could use some clarification.

Quote: “... evacuation zones have remained frozen at a 10-mile radius from each plant since they were set in 1978”

Clarification:

The NRC established 10-mile emergency planning zones around each nuclear power plant based on the potential impact of radiation in the event of an accident. In other words, scientific analysis shows that the area out to 10 miles has at least a potential to reach EPA limits for radiation exposure. This potential impact has not changed – and therefore the overall 10-mile EPZ requirement has not changed. However, it’s important to note that the exact size and shape of the EPZ around each site is unique and is developed through detailed planning that looks at the specific conditions at each site, unique geographical features of the area, and demographic information.

In addition, these zones are not limits and are meant to be expanded, as necessary.

Quote: “The joint guidance of the NRC and FEMA in 1980 stated that ‘evacuation time estimates should be updated as local conditions change.’ In fact . . . little was done to keep planning in step with population increases.”

Clarification:

Nuclear power plants are required to have estimates for evacuation times for their emergency planning zones, and to update those estimates to reflect population changes or other changes that might impact evacuations. Current regulations do not require a specific schedule for these re-evaluations. However, the NRC is revising its regulations to make this re-evaluation of population – and any needed changes to evacuation estimates – be done every year.

Evacuation time estimates help city/local planners develop appropriate evacuation plans for communities around nuclear power plants. These plans are rigorously reviewed by the Federal Emergency Management Agency and aspects of the plans are tested and evaluated during exercises held every two years.

Quote: *Sheltering is a “concession to escalating populations and roads that haven’t been upgraded or widened in decades”*

Clarification:

Sheltering in place is a widely used protective action for a variety of hazards (not just radiological). In some cases, sheltering may be a preferred protective action over evacuation. Sheltering may protect people from potential exposure to radiation in the event of a radiological emergency in ways that evacuation may not.

Quote: *“... evacuation time estimates are required, but there is no standard for how quickly people must be able to leave. Regulators say the estimates will help planners make decisions in a real accident, even in the absence of a standard.”*

Clarification:

Evacuation time estimates are primarily used by local officials to make decisions about the best protective action decisions for their community. After analysis of current conditions and the evacuation estimates, an evacuation may or may not be the best action and may or may not be advised. These estimates are also used by local officials in developing traffic management plans to support an evacuation and, possibly, to identify ways to reduce evacuation times. The estimates are an information tool, and therefore, no minimum evacuation time was intended to be achieved.

Quote: *“NRC rules also concede there’s no guarantee that emergency sirens, ‘when tested under actual field conditions, will meet the design objective in all cases.’ This movable standard makes things easier for plant owners who often struggle to keep warning sirens working from their perches within the 10-mile zones.”*

Clarification:

Sirens are only one tool for alerting a population to an emergency at a nuclear power plant. Sirens are an outdoor alerting system that warns the public to seek shelter indoors and to tune to the radio or TV for more information. As they would in any sort of an emergency situation, state and local emergency responders may choose to use other and/or additional means to notify the public of an impending emergency.

Siren performance is tracked as part of the NRC Reactor Oversight Process and consistently shows very high reliability at all sites.