
RIC 2024 Hybrid
U.S. Nuclear Regulatory Commission
36th Annual Regulatory Information Conference
ADAPTING TO A
CHANGING LANDSCAPE
MARCH 12-14, 2024
Bethesda North Marriott Hotel
and Conference Center
Rockville, Maryland
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Enjoy the View

Let Emergency Preparedness Be Your Guide

W10—Todd Smith, Session Chair

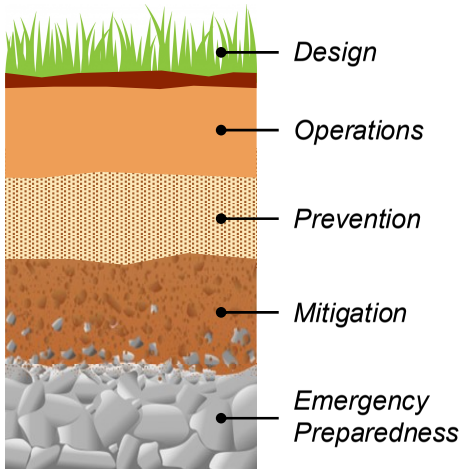
ADAPTING TO A
CHANGING LANDSCAPE

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Emergency preparedness (EP) is like bedrock in a changing landscape

Radiological EP—

- *ensures protective actions can and will be taken*
- *is an independent layer of defense in depth*
- *provides dose savings*
- *is risk-informed*



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AI answer: A changing landscape implies a dynamic, fluid, and unpredictable environment that requires ***adaptation, flexibility, and resilience***.

https://www.quora.com/What-is-an-ever-changing-landscape

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EP regulations have adapted

The final rule in 10 CFR 50.160 provides an alternative framework for small modular reactors and other new technologies:

- regulatory framework proportional to facility risks and hazards
- technology-inclusive, performance based
- hazard analysis for contiguous facilities
- ingestion planning capabilities rather than defined ingestion planning zone
- scalable emergency planning zone (EPZ)

The planning basis provides a clear view

The consequences from a spectrum of accidents, tempered by probability considerations, should be considered to scope the planning efforts for—

- *the **distance**[1] to which planning for predetermined protective actions is warranted*
- *the **time** dependent characteristics of a potential release*
- *the type of radioactive **materials***

1. The planning distance is the EPZ

EP regulations are flexible

- Applicants describe how EP performance-based standards are met for their facility
- Regulatory guidance is available and adaptable to suit any technology
- Preapplication meetings are highly encouraged
- Performance-based requirements provides flexibility in methods and metrics to demonstrate adequate EP capabilities are maintained

EP regulations build resilience

Regulations require an appropriate level of planning with offsite response organizations and support a whole community approach to preparedness through ***communication, coordination, cooperation***

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The NRC adapted to the changing landscape with a flexible EP framework that builds resilient communities to protect public health and safety

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