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## The Future of Emergency Preparedness

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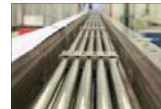
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## Future of Energy Getting Closer



NuScale Control Room Simulator



NuFuel  
HTP2  
Testing



NuScale Integral System Test Facility  
(Oregon State University)



NuScale Full-scale  
Upper Module Mockup



NuScale RPV Head Ingot Being Forged



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## What Does Advanced Reactor Safety Look Like?

- No credible design basis accidents
  - Margin for peak fuel clad temperature >1,500F to regulatory limit (<700F vs 2200F)
- No credible beyond design basis accidents
  - Frequency of occurrence so low as to not be credible
  - Progression times long and consequences small
- No need for operator actions, AC or DC power, or additional water to protect public health and safety
- Doses at site boundary, even for incredible scenarios, remain a fraction of regulatory limits

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## The Global Reality



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## A Vision



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## The Future? Nuclear Will be Close to People

- NRC's Qualitative Safety Goals
  - Risks from nuclear power should not be significant contributor to individual risk
  - Societal risks from nuclear power should be comparable to or less than other forms of generating power
- The current nuclear fleet established the foundation through an exceptional safety record
- Advanced reactors like NuScale build upon this through designs that offer unprecedented safety
- Public remains protected at site boundary, regulations are not relaxed but recognize advancements in safety

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## Smarter, Cleaner, Safer Energy



Changing the power that will change the world

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