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Regulator's Perspective on Judging the Safety of a Proposed Repository Overview



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Who is the Regulator?

- Nuclear Regulatory Commission (NRC)
- Independent regulator for U.S. program
- Mission: Protect public health, safety and the environment
- Law directs NRC to regulate Department of Energy (DOE) repository

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What is the Regulator's Role at Yucca Mountain?

- Set rules for licensing decisions that
 - protect public and worker safety
 - are consistent with final U.S. Environmental Protection Agency (EPA) standards for Yucca Mountain
- Public prelicensing interactions
- Decisions on DOE license application
- Assure DOE obeys rules

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How Will NRC Carry Out Its Role?

- Review all information objectively
- Make open decisions based on facts
- Maintain open, public process

How Will NRC Carry Out Its Role? (cont.)

- Use phased process to make decisions on DOE license application one step at a time
 - Construction
 - Operation
 - Retrieval Period and Closure

How Will NRC Decide Whether to Accept DOE's Application for Review ?

- Does it
 - Contain all required information?
 - Enough documentation to support DOE's safety claims?
 - Comply with document access requirements?
- If yes, detailed technical review begins

What are the Possible Outcomes of NRC's Licensing Process?

- Deny the DOE license application
- Grant DOE a license with conditions
- Grant DOE a license

How Does NRC Address Safety Issues?

- Rely on our independent experts
- Require more information from DOE, as needed
- Do our own testing and document our conclusions

What Technical Expertise does NRC have?

- Professional staff in multiple disciplines
- Trained for license application review
- Support from Center for Nuclear Waste Regulatory Analyses in San Antonio, TX

On What Basis Would NRC Adopt DOE's Final EIS?

- By law NRC must adopt DOE's Final EIS unless:
 - Action to be taken differs from that described in the application in a way that significantly affects the environment or
 - Significant and substantial new information or considerations make the EIS inadequate

NRC's Role before a DOE License Application

- Law allows for NRC interactions with DOE before licensing
- NRC takes no position on whether a repository should be located at Yucca Mountain
- NRC's licensing views will be shaped by further analyses
- Any licensing decision comes much later, if at all

What are NRC's "Key Technical Issues (KTIs)?"

- Major topics NRC uses to guide its review of site characterization
- Important for understanding whether repository will be safe
- Framework for NRC regulations and license application review plan

How will NRC Judge if DOE has Enough Information about a KTI?

- Acceptance criteria based on issue's significance to safety
- Criteria and their technical bases documented in a series of public reports
- Yucca Mountain Review Plan (YMRP) collects these criteria in one guidance document for staff's use

How does NRC Involve the Public?

- Request public comments on NRC rules
- Hold public hearings on DOE license application
- Maintain on-going public dialogue

Summary

- One approach, specific to the U.S., for how a regulator does its work
- The approach includes elements common to all regulatory approaches
