WORKING TO BUILD TRUST IN NUCLEAR WASTE REGULATION: Progress in Public Outreach

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Overview

- Introduction
- Involving the Public in Rulemaking
- Need for a New Approach
- Revised Expectations
- Longer-term Changes
- Results, so far

NRC's Mission Depends on Effective Communication

- NRC is an <u>independent</u> regulator responsible for protecting public health, safety and the environment
- By law, NRC regulates the U.S. Department of Energy to assure safety of the potential repository at Yucca Mountain
- NRC uses a public rulemaking process

Inviting Public Comment on New Regulations for Yucca Mountain

- NRC published proposed regulations for comment (February 1999)
- Public Meetings in Nevada (March 1999)

    – **Local concerns not addressed**
    – **NRC staff needed more and better preparation**
    – **Initial meetings did not inspire confidence**

The Challenge:

- NRC's technical staff wants to explain agency actions and listen to public concerns but…

- To do so, we often must explain complex technical and policy issues in a manner readily understood by the public

Different Communication Styles and Needs

? Technical Staff typically
  - **Work with technical information**
  - **Communicate with other experts**
  - **Use detailed, intricate explanations**

? Public generally
  - **May not understand technical details**
  - **Have variety of questions and concerns**
  - **Demand short, common sense explanations**

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What did NRC do to improve future meetings?

- Identified lessons from initial meetings

- Allowed staff more time to prepare

- Designated a project manager

What else did NRC do?

- Expert training in risk communication
- Revamped meeting format
  - Trained facilitator
  - Shorter, plain language presentations
  - Addressed requested topics
  - Anticipated concerns and questions
  - Frequent breaks for questions and dialog
- Prompt, formal meeting follow-up

How did NRC's HLW staff bring about these changes?

- HLW Public Outreach Team

- Revised NRC expectations of interactions with the public

- Supported longer-term culture changes within NRC as a whole

HLW Public Outreach Team

- Brings together technical and administrative professionals
- Meets regularly
- Defines clear messages
- Identifies key concepts for "plain language translation"
- Organizes preparation for public meetings
- Develops handouts and displays

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Performance Assessment: Part of Evaluating the Safety of a Proposed Repository at Yucca Mountain, Nevada

What is Performance Assessment?
- Systematic analysis of what could happen at a repository
- One of many NRC safety requirements

What is assessed?
- What can happen?
- How likely is it?
- What can result?

Why use it?
- Complex system
- Systematic way to evaluate data
- Internationally accepted approach

How is it conducted?
- Collect data
- Develop scientific models
- Develop computer code
- Analyze results

Central diagram:

Collect Data

Site Characteristics

Repository Design and Waste Form

Combine Models to Evaluate Performance

Develop Conceptual Models

Develop Mathematical and Numerical Models

Performance Assessment: an iterative process

NRC would require DOE's Performance Assessment to
- Provide site and design data
- Describe barriers that isolate waste
- Evaluate features, events, and processes that affect safety
- Provide technical basis for models and parameters
- Account for variability and uncertainty
- Evaluate results from alternative models

Revised NRC Expectations for Public Interactions

- Improve common understanding of technical and policy topics

- Enable a more meaningful dialogue

- Explain, not persuade

Longer-term Changes

- HLW Communication Plan

- More Coordination Between NRC Offices

- International Forums

- Commitment of staff and resources

Agency-Wide Focus

? Communication Plans

? Task Force on External Communications

? NRC Director of Communications

? Agency "Guidelines for External Risk Communication" (NUREG/BR-0308)

Results, so far, are encouraging

? New approach successful at 29 meetings

? Positive feedback from local officials

? Many informed comments from wide array of stakeholders on NRC proposals

? Requests from public for more meetings