

The U.S. Repository Program: A Program in Transition

Nuclear Power in Society
Council for Clean and Reliable Electricity

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October 26, 2009
Ottawa, Canada

Overview

- ◆ The U.S. repository program will be changing dramatically
- ◆ It will take place over perhaps the next 2-3 years
- ◆ There are lessons to be learned
- ◆ Canada and others seem to have already learned many of them

Before the Election

- ◆ (Then) Senator Obama:
 - ◆ “We will protect Nevada and its communities from the high-level nuclear waste dump at Yucca Mountain, which has not been proven to be safe by sound science.”
 - ◆ The basic theory was, we won’t solve the problem, we’ll just dump it in Nevada.”
 - ◆ “Yucca, I think, was a misconceived project.”

Before the Election

- ◆ Senator McCain

- ◆ “The political opposition to the Yucca Mountain storage facility is harmful to the U.S. interest and and the facility should be completed, opened and utilized.”
- ◆ “Yucca Mountain is a place where waste can be stored safely.”

Since the Election

- ◆ Secretary of Energy Steven Chu

- ◆ The proposed Yucca Mountain site is no longer an option

- ◆ Fuel can remain at nuclear power plants while a new, comprehensive plan for waste disposal is developed

- ◆ “I think we can do a better job”

The Obama Proposed Budget

- ✦ Only enough funds to answer the Nuclear Regulatory Commission questions on the license application
- ✦ Resulted in the support contractor staff reduced from 650 to 100 employees
- ✦ Under \$200 Million for FY 2010
- ✦ Possible “Zero” budget for FY2011 (Note: Canceling the program requires a change in law)

April 29, 2009 Senate letter to Secretary Chu

- ◆ “Consumers have contributed \$30 billion...”
- ◆ “Over \$7.7 billion has been spent researching Yucca Mountain...”
- ◆ “neither the NAS, the NWTRB, nor... National Labs... have concluded that there is any evidence to disqualify Yucca Mountain as a repository.”
- ◆ August 2008, all ten National Lab directors, including you, signed a letter advocating continuing licensing

The Industry

- ◆ Focused on new reactor orders
- ◆ Concerned with Congressional actions
- ◆ No longer supporting YM
- ◆ Now support look into reprocessing, possible new back end of the fuel cycle
- ◆ Still wants government to take title to spent fuel

WIPP and the Carlsbad Community

- ◆ Carlsbad, New Mexico, a volunteer host community, loves WIPP
- ◆ Community leadership continues to pursue HLW repository
- ◆ They are also interested in a commercial interim spent fuel storage center
- ◆ New Mexico state acceptance would be challenge

QuickTime™ and a
TIFF (LZW) decompressor
are needed to see this picture.

A New Presidential Commission

- ◆ An 11 member commission will be established
- ◆ 2 years to complete study
- ◆ Evaluate entire range of back-end issues
- ◆ Study alternative management and financing strategies, technical concepts, and timing
- ◆ Evaluate safety, environment, risks, costs, security, transport, incentives for hosts and much more

Some Key Differences Between Canadian and U.S. Programs

- ◆ Placement in DOE v. private industry
- ◆ Very tight deadlines in law with liability implications
- ◆ Intense, constant Congressional involvement
- ◆ Siting imposed based on site scientific promise, not willing host community
- ◆ State level opposition unrelenting
- ◆ U.S. industry not always united

A Few Lessons

- ✦ While politics clearly valid and important, a buffer is helpful
- ✦ Overly ambitious, artificial timelines hinder progress and erode confidence
- ✦ Adaptive staged approach often seems to work - e.g. Finland, Sweden
- ✦ Go where you're wanted
- ✦ Be prepared for action when the stars align...