



**Panel: The Future of Consent-Based SNF/HLW Disposal Siting  
And Discussion of the Alternatives**

**Thoughts Regarding BRC Report, Chapter 6, Consent-Based Siting;  
A Perspective Based on Previous Real First Hand Experience**

Dr. Donald L. Vieth\*

\* Retired, DOE/NVOO Project Manager for Yucca Mountain, 1982-1987

Session # 102

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

# Philosophy

- In developing any relationship, consenting parties are always the best possible framework to achieve an equitable finish!
- A BRC, chartered by the President, has some obligation to provide options that have some reasonable chance of producing a successful outcome.

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

# **Real First Hand Experience**

- 1976 – 1982 HQ Waste Management
  - Responsible for managing preparation of the announcement package to the 36 states re the NWTS Program
  - Responsible for visiting Governors requesting further detail re announcement
- 1982 – 1987 Project Manager for Yucca Mountain Project

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

Recognize that perspective today may be significantly different than  
that in 1976-1986 Period

Demographics have change in the **26 year** interim

## **1976 – 1986 US Situation**

**Attitude:** Conditioned by the Great Depression and WWII

**US Population:** 203+ million (1970)

**Economy:** Middle of Great Prosperity, plentiful jobs, expanding economy

**Things Nuclear:** Dirty & deadly; hysterical reactions, eliminate

## **2016 US Situation**

**Attitude:** Conditioned by the Great Prosperity and Social Networking

**US Population:** 308+ million (2010)

**Economy:** Middle of Great Recession, stubborn unemployment; massive home foreclosures, high debt level

**Things Nuclear:** Important; positive, rational approach must be taken

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

“The Times, They Are a Changin’” – Bob Dylan (1964)

# Evaluation of Proposal in BRC Report

Considered the Consent-Based Siting  
proposal in following context

What were the **latent-imbedded assumptions**

What were the **topics inadequately or not addressed**

What were the **misrepresentation**

“You Can’t Always Get What You Want” – Rolling Stones (1968)

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

# **Latent-Imbedded Assumptions**

- **Politics before geology can yield a licensable site**
  - Governor/Legislature will actually agree to entertain discussion
  - Traditional anti-nuclear advocates do not oppose the effort
  - No investigative reporter uses innuendo or misrepresents the risks to create a “big” story
  - Measured public fear can largely be assuaged
  - Long-term stable support will not collapse due to fear of the few spreading to the majority (No contagion)
  - Governor/State Legislature will withstand local political pressure
  - Governor/Legislature maintain continuity through project’s life cycle
  - Media are positive about the situation and provide accurate information
  - Multi-jurisdictional management is successful (Management by Committee)

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

# **Latent-Imbedded Assumptions**

(continued)

- Volunteered sites will take no more time or effort to undergo first licensing effort (for both Repository Program and NRC)
- New government or quasi-government organization will establish and maintain political and technical credibility
- Competent organization can be assembled to conduct the technical evaluation of the site
- Competent scientist will volunteer to work on another project that might be torpedoed by collapsing consent
- Federal government maintains continuity through the project’s life cycle of 30 years
- State university faculties remain supportive of project through its life cycle
- The NRC will establish a regulatory role for state in approving the proposed facility
- No external situation will arise to affect delays in schedule or concept
- State government will support condemnation proceedings to get land

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

# **Topics Inadequately or Not Addressed**

- Vetting of C-B Siting concept with repository-capable states as basis for recommendation
- Risk inherent in approach; alternative if it fails
  - Basis for schedule and cost of effort
  - The differences between the European and US political systems, and the impact of sovereignty of states in the US
  - Comparative social cohesion within the USA and Sweden or Finland
  - Understanding communitarian vs individualistic cultural values
  - Understanding high confidence in government institutions and elites
  - New basis for instilling trust as a means of getting the effort started
  - The impact of mission on the acceptability of the facility
  - Source of the technical competence and authority to establish the quality of the site’s post-closure isolation capability

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**



**“The Times, They Are a Changin’” – Bob Dylan (1964)**

# **Topics Inadequately or Not Addressed**

**(continued)**

- Degree to which defense oriented facilities in New Mexico set a positive framework for state government to readily accept the WIPP facility (with Defense mission only)
- The fact that the Executive Branch of US government currently does not have the authority to give the state the authority to execute a veto in the early stages of repository siting
- The number of states with sites that have to be convinced to participate and have suitable sites to meet the 2048 deadline
- Rationale as to why Senators and Congressmen will give up their prerogative to protect the citizens they represent to a government chartered corporation
- No significant discussion regarding difficulties of Repository Siting Proposal in 1976 and how to avoid those errors
- No discussion about spectrum of public response to a repository siting

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

## **Misrepresentation**

- Selection of WIPP site done under an active consent-base siting efforts
- Site selection process for WIPP and Yucca Mountain were significantly different
- Comparison of facilities with significantly different uncertainty in safety case (thermal pulse vs none; high radioactive levels vs minimum radioactive levels)
- Degree to which European siting methodology and experience is applicable within the US political structure
- That major opposition to WIPP was not associated with change in mission
- There is no political or operational risk associated with Consent-Based Siting

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

# Misrepresentations

(Continued)

- There are no consequences due to failure of Consent-Based Siting
- Comparison of an operating facility built under DOE self-regulation and RCRA permitting with a yet to be built facility that has to be the first licensed under NRC regulation
- RCRA permitting through the state is as demanding as licensing under NRC regulations
- The basis for the US government having no capability to dispose of high level radioactive waste

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

# **Perspective**

**Proposed Consent-Based Siting Approach**

**Paradigm Driven – Success Oriented**

Highly Aspirational, or maybe

Dangerously Naïve, or maybe

Intentionally Deceptive, or maybe

Just Reflects a Half-Hearted Effort

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

When in the Field  
and not Understanding the Nature of the Issue;  
**Prepared for a Significant Emotional Experience**

Legalized Drugs: Confusion

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

When in the Field  
and not Understanding the Nature of the Issue;  
**Prepared for a Significant Emotional Experience**

Legalized Drugs: Confusion

Abortion: Conflict

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

When in the Field  
and not Understanding the Nature of the Issue;  
**Prepared for a Significant Emotional Experience**

Legalized Drugs: Confusion

Abortion: Conflict

Gun Control: Outrage

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

When in the Field  
and not Understanding the Nature of the Issue;  
**Prepared for a Significant Emotional Experience**

Legalized Drugs: Confusion

Abortion: Conflict

Gun Control: Outrage

Nuclear Waste: Fear

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**



**“The Times, They Are a Changin’” – Bob Dylan (1964)**

When in the Field  
and not Understanding the Nature of the Issue;  
**Prepared for a Significant Emotional Experience**

Legalized Drugs: Confusion

Abortion: Conflict

Gun Control: Outrage

Nuclear Waste: Fear

Repository Siting: Combat

Context: BRC's Incomplete Grasp of the Situation  
**Dangerously Naïve Territory**

**“You Can't Always Get What You Want” – Rolling Stones (1968)**

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

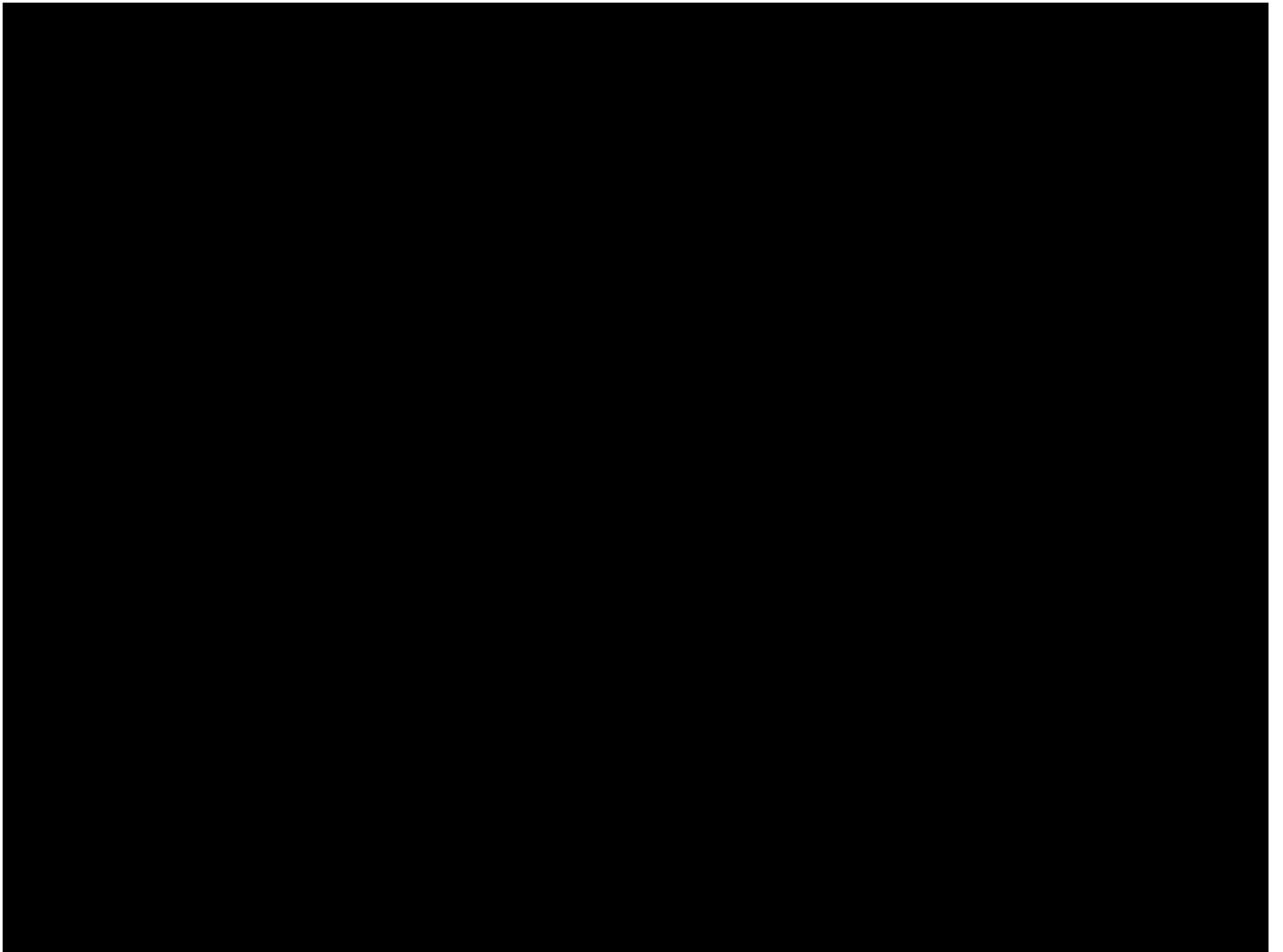
**Prepared for a Significant Emotional Experience**

(continued)

# Riders on the Storm

Doors (1970)

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**



# Backup Charts

“The Times, They Are a Changin’” – Bob Dylan (1964)

## Overarching Question

- Did President Obama take a **prudent risk** when he disposed of the \$15 billion investment in established US government assets to pursue Consent-Base Siting for a repository?
- Does Chapter 6 on Consent-Based Siting of the BRC Report **justify the risk taken** by President Obama?

“You Can’t Always Get What You Want” – Rolling Stones (1968)

“The Times, They Are a Changin’” – Bob Dylan (1964)

# Justification for Action

- The BRC’s flagship concept in their report is Consent-Based Siting for a high-level radioactive waste repository
- The discussion for such an approach is superficial at best being detailed in only **12 pages** in the report.
- Not sure that this effort **justifies the action** to dispose of a \$15 billion investment

“You Can’t Always Get What You Want” – Rolling Stones (1968)

“The Times, They Are a Changin’” – Bob Dylan (1964)

## Value Judgments

Not obvious that anyone on the BRC has ever been **involved personally** in a siting process for a controversial facility

Clear that there is no one on the BRC that has **any accountability** for success of the effort – they do not have to deliver product

It reflects the new mantra of Harry Reid –  
Consent-Based Siting

“You Can’t Always Get What You Want” – Rolling Stones (1968)

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

# Most Telling Statement in Report

Guidance for the New Siting Organization (page 56, 1<sup>st</sup> column)

“.... and local support, however, **has not been sufficient to overcome state-level opposition**. This suggest that **to be successful**, a new waste management organization **must find ways to address state concern** while at the same time capitalizing on local support for proposed facilities”

**Strategy – the magic approach**

Win over the sovereign states through an  
adaptive, phased, transparent process based on  
trust, consultation, and local authority to control

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**



# Another Telling Statement

Page ix, 1<sup>st</sup> column

- The approach we recommend also recognizes that successful siting decisions are most likely to result from a **complex and perhaps extended set of negotiations** between the implementing organizations and potentially affected state, tribal, and local governments and other entities.
- Why would a governor or state legislature want to enter into a political volatile action over a long period of time?
- Will extended and complex negotiations lead to positive media attention? Can they be totally transparent?
- How long is long in terms of months or years?

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

# FOCUS

Single most important objective of this effort  
is

**An ability to finish  
what has been  
started!**

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

## **Understanding Attitude in New Mexico regarding Siting of WIPP**

- Political leaders and citizens did not have any significant objection to facility for disposing of defense transuranic waste
- No objection to siting decision made by Congress – state saw no need to having a say in the decision
- Local communities favoring WIPP had strong leadership in the New Mexico state legislature
- New Mexico would not have accepted facility for disposal of commercial high level radioactive waste

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

## **Understanding Attitude in New Mexico**

Page 62, McCutchen, “Nuclear Reactions”

- Governor Bruce King approach was tacitly accepting studies of WIPP
- He sought no active role in the decision making (as long as it was a military only project)
- Jerry Apodaca’s position, “I believe that the proper position for me to take is one of concerned neutrality awaiting the evidence before taking a firm position.”

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

# Understanding of Consent-Based

- Consent-Based: in the sense that affected communities have an opportunity to (formally) decide whether to accept facility siting decision and retain significant local control.
- Need to really understand who gets to make the siting decision. If the community has no objection to the facility in concept but has no legal voice in making the decision, is it still a consent-based decision in the context of the above definition. The state accepted the facility per the mission but never actually expressed formal consent.

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

# Clarification re WIPP

New Mexico had benefited well from defense related operation:

White Sands Proving Grounds

Holloman Air Force Base

Walker Air Force Base

Kirkland Air Force Base

Phillips Laboratory

Sandia National Laboratory

Los Alamos National Laboratory

And then there was

WIPP

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

“The Times, They Are a Changin’” – Bob Dylan (1964)

# Misrepresentations

Page ix, 1<sup>st</sup> column

- By contrast, the approach we recommend is explicitly adaptive, staged and consent-based.”
- “Based on the review of successful siting process in the United States” ..... “including most notably the siting of a disposal facility for transuranic waste, the Waste Isolation Pilot Plant (WIPP) in New Mexico” .... –
- “we believe this type of approach can provide the flexibility and sustain public trust and confidence to see controversial facilities through to completion.”
- The above (1<sup>st</sup> 2 bullets) specifically implies that WIPP site selection decision was based on a Consent-Based siting process?

“You Can’t Always Get What You Want” – Rolling Stones (1968)

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

# Misrepresentation

Page 48, 1<sup>st</sup> column

“In the history of the US nuclear waste management program, the contrasting experience with Yucca Mountain and WIPP offers important insights.”

“Yucca Mountain was singled out as a sole site to be considered for a first national geological repository ...” [for civilian/commercial high-level radioactive waste]

However, it can be equally said

WIPP was singled out as a sole site to be considered for the first national geological repository .....[for defense transuranic waste]

Basic difference was **mission** – note NM response when **mission** changed on the front end of the siting decision

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**



**“The Times, They Are a Changin’” – Bob Dylan (1964)**

# Misrepresentations

Page 49, 1st column

“The WIPP example, in particular, represents an affirmative demonstration that with adequate patience, flexibility and public support, success is possible.”

Strongly implies that WIPP was the product of Consent-Based Siting

Site selection was made by Congress, HASC – Price, based on a recommendation of ERDA, with absolutely no political involvement of the state of NM

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

# Misrepresentations

Selection of YM was different than WIPP

Both sites were selected in similar manner – by the Congress, both by politically legitimate processes

NM had no voice in the WIPP **selection by Congress**

NV had a voice, the authority to reject the DOE recommendation, however, without substantive justification, it was overridden by two houses and, thereby, **selected by Congress**

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

## **Misrepresentations**

- That the success of Consent-Based Siting methodology in Europe is a strong indicator that it will work in the US
- Axiom - No significant differences between the political structures in Europe and in the US with the sovereignty of its states
- Axiom - Political and societal attitudes about HLRW in US may be different today than they were in the 1976 to 1986 period

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

## **Reality Perspective**

- From Dr. Critz George – First Repository Program – Siting in Salt (Primarily West of the Mississippi River)
- “I am sorry to say that I have very little recall of the specifics of that time. My life was a constant scramble just to deny erroneous press reports, respond to misconceptions from Governors and state legislators, feed the IRG beast with program data, reassure countless public meeting out in the provinces that we were honorable men, and plan a siting program that could be (I hoped) carried out by ONWI.”
- From Dr. Sally Mann – Second Repository Program – Siting in Crystalline Rock Formations (East of the Mississippi River)
- “We held formal public meetings on these document under very contentious conditions, many time requiring us to request assistance from state and local police offices. Many of us received personal threats, including a gun being pulled on the DOE person presenting in one of the meetings.”

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

**Taking Destructive Control**

**Lets Make a Deal Method of Management**

**The govt will give up everything it has accomplished for what is behind  
Door Number 2**

**Strategy**

**Bet on a three card draw to an inside Royal Flush**

**Leading to**

**Humpty Dumpty Effect**

**- after the great fall**

**All the Congress’ horses and all the Congress’ men can’t pull their lost  
authority back together again**

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

BLUE RI

UTURE



**“The Times, They Are a Changin’” – Bob Dylan (1964)**

## Obama’s May 2007 letter to Las Vegas R-J

- "I believe a better short-term solution is to store nuclear waste on-site at the reactors where it is produced, or at a designated facility in the state where it is produced, until we find a safe, long-term disposal solution that is based on sound science.
- “In the meantime, I believe all spending on Yucca Mountain should be redirected to other uses, such as improving the safety and security of spent fuel at plant sites around the country and exploring other long-term disposal options,” he wrote.

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

“The Times, They Are a Changin’” – Bob Dylan (1964)

## Obama’s letter October 30, 2007 to Senators Reid and Boxer

- "In short, the **selection** of Yucca Mountain has **failed**, the time for debate on the site is over and it is time to **start exploring new alternatives** for **safe, long-term solutions based on sound science**," Obama wrote to the senators
- Obama **apparently believes** that there are **alternatives to mined geologic disposal**
- Obama **apparently believes** that **mined geologic disposal is not based on sound science**



**“The Times, They Are a Changin’” – Bob Dylan (1964)**

# BRC’s Bottom Line Position on Other Disposal Options

Page 30 of their final Report

**“In sum, based on the evidence available to date, the Commission sees no reason to change the continued focus of the U.S. program on developing minded geologic repositories.”**

That brings us to the point to seriously question the basis on which the President has taken action to terminate the current effort at Yucca Mountain. He has noted more than once it was not based on sound science and that there were other alternatives that needed to be explored.

The President’s own hand picked Commission has shown that his “belief” are completely bogus!

The question is, how can the President alone, going contrary to current law and with no substantive basis, dismiss over \$15 billion in government assets?

The question is, how can the President put the country’s nuclear power generation capability in jeopardy by destroying the definitive effort to put the waste disposal capability in place and demonstrating the inability to finish the job of establishing definitive evidence that the US government has both the technical capability and political will to solve the problem?

The question is, does his action reflect a political debt to a person that just couldn’t accept the legitimate political action of the collective Congress to solve a problem they, collectively, helped create?

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

Obama has **made decisions based on his beliefs!**

Does the adequacy of the **belief justify** the decisions?

**Coherent Bases** for  
Actions or Decisions

- Hard Evidence
- Established Fact
- Thorough Analysis
- Clear and Present Danger (real risk)
- Reasonable Assurance
- Preponderance of Evidence
- Professional Knowledge

**Unreliable Bases** for  
Beliefs Leading to Actions

- Prejudice
- Inaccurate Guidance
- Community Gossip
- Folklore
- Speculation
- Psychic Experience
- Premonition
- Religious Revelation
- Antagonistic Response
- Overactive Imagination
- Superstition
- **Someone else’s unhappiness**

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**

**“The Times, They Are a Changin’” – Bob Dylan (1964)**

## Significance of Obama’s Action to Scientists and Government Employees

- “What does it say about the Administrations view of the technical competence of the US Geological Survey, the Sandia National Laboratory, the Lawrence Livermore National Laboratory, the Los Alamos National Laboratory and the Berkley National Laboratory?”
- What does it say about the Administration’s view of the technical competence of the Nuclear Regulatory Commission staff and their ability to review of the first high level radioactive waste repository?
- What does it say about the Administration’s view of the technical competence of the Nuclear Waste Technical Review Board?
- What does it say about putting politics above science in making a decision – tried that at Lyon’s KS
- Lots of time for politics up front and forcing the scientist to work to accelerated schedule on the back side.

**“You Can’t Always Get What You Want” – Rolling Stones (1968)**