Very Short History

- 1957 National Academy suggests deep geologic disposal
- 1970 AEC selects old salt mine in Lyons Kansas (failed too many drill holes)
- In 1974 India detonates bomb with plutonium from its Cirus research reactor (Smiling Buddha)
- President Ford banned plan by the Nuclear Industry to reprocess waste in fast breeder reactors; Carter continued ban.

History

- Congress passes 1982 NWPA in January 1983
- Required two national storage sites
- State of Nevada, by law, created the Nevada Commission on Nuclear Projects in 1985
- In the same time period the Clark County Commissioners passed a resolution opposing the selection of Yucca Mountain as a repository site.
- 1986 DOE narrows its selection to three sites
History

• DOE indefinitely defers the search for a new site in the east
• In a hearing of the Senate Energy and Natural Resources Committee the then DOE manager for Yucca Mountain states that he cannot conceive of finding anything major during site characterization that would disqualify Yucca Mountain.

History (longer than planned)

• 1987 the NWPAA is adopted.
• Screening process for a site in the east is terminated. (prohibits studies of a repository site in granite)
• Establishes office of the “Nuclear Waste Negotiator” to look for a volunteer site
Some Reasons why Nevadans are opposed

- 1982 NWPA WAS DESIGNED TO BE FAIR
- 1987 ACT. DROPPED FAIRNESS FOR POLITICAL EXPEDIENCY

Nevada’s Position

- States Rights
- State scientists believe that the site should have been disqualified (under DOE siting guidelines)
- Leakage could create long term health risks for Nevada residents
- Transportation accidents could hurt Nevada’s image as an attractive tourist destination
Nevada’s Position

• Lack of backup alternatives
• Public opinion polls (2006) indicate that ~70% of Nevadans do not want a nuclear waste disposal site in their state,
• In line with surveys taken since 1989

Statements by Nevada

• *Waste considered for Yucca Mountain would contain tons of plutonium, an extremely toxic radioactive byproduct. One billionth of an ounce, if ingested, can cause cancer or genetic defects."
• "Numerous studies, both by federal government scientists and independent contractors, suggest that Yucca Mountain is scientifically unsuited for holding most dangerous nuclear material and keeping it out of the environment for the extraordinarily long time required."
Statements by Nevada

• "The tiniest amount of radiation to the reproductive cells can cause mutations. . . . The National Academy of Sciences has also concluded that exposure to any level of radiation is harmful and may lead to ill health effects."
• "The site is affected by recent volcanic faulting, and nearby young volcanoes, evidence of a young and active geologic setting."

• "Yucca Mountain is situated within a world-class precious metal mining district. Millions of dollars of gold and silver may be located in the area.
• "Economic studies reveal that, if built, the repository and its operational activities . . . could negatively affect future investment in Las Vegas, discourage businesses relocating to the area, and cause tourists not to visit Nevada."
Clark County?

- 8000 square miles in size
- Population around 2 million
- 70% of the total population of Nevada
- Makes up ~70% of the State’s economic base
- ~45 million visitors annually
- 140,529 hotel rooms in 2008 (2035~272,000)
- Economic impact from tourism $~43 billion

Clark County

Focus of Clark County’s Program

- AULG status (1988)
- Public outreach
- Socioeconomic
- Transportation
- Public health and safety impacts
- Technical
Public Outreach

• Extensive program using a variety of communication techniques, videos, podcasts, web page, printed fact sheets etc.
• 3 languages, Chinese, Spanish and English
• Attend conferences and meetings to disseminate information on Yucca Mountain.

Clark County Impacts (source UER)

• Survey of lenders and appraisers indicated the following effects on property values along the transportation corridor:
  • No incident -2.0%-3.5%
  • Minor accident -6.2%-8.0%
  • Serious accident -29.0%-33.8%
  • Tourism downturn:
    • No incident -4.5%-5.7%
    • Minor accident -10%-15%
    • Major Accident -25%-33%
Insurance

- DOE has indemnification for accidents
- Price-Anderson reauthorized in 2005 (until 2025)
- Covers release of nuclear material and precautionary evacuation even if there is no release
- Limit is $10 Billion

Tourism Impacts
Clark County Impact Assessment Report 2002

- UNLV conducted a survey of 1000 tourists
- 3% will never return to Las Vegas if nuclear waste is transported through Clark County
- 18% will never return if there is a minor accident
- 40% will never return if there is a serious accident
Transportation Impacts
Costs of Increased Public Safety

- Accident response
- Training
- Facilities and equipment

Public Perception
2/2006 Survey

- Recent surveys indicate that 76% of residents are opposed to the repository
- 83% believe that property values will be affected
Licensing Process
Contentions Admitted by the ASLB

• 11 contentions on volcanism issues
• 3 on NEPA
  – Impacts on emergency management and public safety
  – DOE ignores Socio-Economic Impacts
  – Failure to analyze rail corridor alternatives

NTS

• 1300 square miles
• Between 1952 and 1992 more than 900 tests, with 100 above ground
• Left more than 300 million curies of contamination