What’s the Holtec Proposal?

Nuclear New Mexico –
Enough is Enough!
Santa Fe, New Mexico
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Nuclear Power Plants

- ~94% of operating reactors are east of 100th meridian
- ~92% of spent fuel is east of 100th meridian
Very Radioactive Waste

Total Radioactivity (23.8 billion Ci)

Commercial Spent Nuclear Fuel (SNF) Radioactivity
23 billion Ci
97%

High Level Radioactive Waste (HLW) and DOE SNF Radioactivity
813 million Ci
3%

DOE SNF
190 million Ci
23%

DOE cesium and strontium capsules
109 million Ci
13%

DOE “German” glass
6.2 million Ci
~1%

DOE sodium-bonded SNF (ceramic and metal HLW products)
1.6 million Ci
<1%

Commercial HLW glass (West Valley Demonstration Project)
15 million Ci
3%

DOE HLW calcine (Idaho National Laboratory)
26 million Ci
5%

DOE HLW (Hanford Site)
134 million Ci
27%

DOE HLW (Savannah River Site)
332 million Ci
65%

Notes:
(1) Data from Carter et al. (2012) and SNL (2014).
(2) Radioactivity is for the following years: commercial SNF 2011; HLW 2017; DOE SNF 2010; capsules 2006; and “German” glass and sodium-bonded SNF 2000.
(3) Radioactivity for DOE SNF represents the inventory proposed for disposal as SNF. Radioactivity for DOE sodium-bonded SNF is the projected radionuclide inventory of ceramic and metal HLW products that will be created from electro-chemical processing of all DOE sodium-bonded SNF.
Storage Today

Surry - Virginia

San Onofre - California
Basic Questions

- If the waste is safe where it is, why bring it to New Mexico?

- If waste storage is good for the economy, why do the nuclear reactor communities not want to keep it?
Basic Facts

Holtec Site is between Carlsbad & Hobbs
Basic Facts

- NRC Application submitted March 31, 2017
  Dec. 2017 Environmental Report is 543 pages
  Safety Analysis Report is 536 pages & other documents
- 100,000 Metric Tons of Commercial Spent Fuel
  500 canisters per year for 20 years, starting in 2022.
  About 80,000 Metric Tons now stored
- Spent Fuel to be shipped by rail
  Loaded Transport transport cask weighs 371,000 lbs.
  to 414,800 lbs.
- Waste could be stored for 120 years (40-year license, plus two extensions)
Holtec Storage
Holtec Storage Canister

10,000 Planned
HI-STAR 190 Transport Cask

Cask length = 15’ 9”/17’ 8”
Internal Diameter = 6’4”
Outer Diameter = 8’10”

Waste Loaded weighs 371,000 lbs. to 414,800 lbs.
Current Law

- Nuclear Waste Policy Act – “Polluter Pays” – Nuclear Utilities pay for storage on site and private storage
- Holtec application says Department of Energy (DOE) would pay for transportation, which is not allowed by current law
Existing Consolidated Storage

- Private Fuel Storage is located in Tooele County, Utah
- NRC issued 20-year license on February 21, 2006
- Site not used because of public and state opposition, establishment of Cedar Mountain Wilderness Area, BLM not granting access, and BIA not approving lease
Existing Storage

U.S. Independent Spent Fuel Storage Installations (ISFSI)

Current as of March 2018

Legend:
- Reactor sites operating a general licensed ISFSI
- Reactor sites pursuing a general licensed ISFSI
- Specific licensed ISFSI (at or away from reactor site)
- Stand-alone ISFSIs
- Sites are pursuing a future specific licensed ISFSI
- Reactor sites have not announced intentions regarding ISFSI
- States have at least one ISFSI
Next Steps in NRC process

- NRC has public comment period until May 29 on environment impact statement scoping
- Public meetings in Roswell (April 30), Hobbs (May 1), and Carlsbad (May 3)

- Send public comments to: regulations.gov
  Docket ID NRC-2018-0052

- NRC issues notice of schedule for Intervening and submitting Contentions in the licensing case.
- Various parties file motions to intervene
Reality: Lots of Opposition
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Opposition Makes a Difference

“WCS respectfully requests that the NRC temporarily suspend all safety and environmental review activities as well as public participation activities.” 4/18/17

“WCS also is faced with a magnitude of financial burdens that currently make pursuit of licensing unsupportable. This is so because following the recent docketing of the CISF application in January 2017, the cost profile for WCS’ pursuit of the CISF application has increased dramatically.”
Opposition Makes a Difference

NM senators oppose interim N-waste site

Proposed depository would store rods from commercial power plants

By Kevin Robinson-Avila
Journal Staff Writer

New Mexico’s U.S. senators, Democrats Martin Heinrich and Tom Udall, released statements on Thursday opposing a proposal to build an “interim” storage site in southeastern New Mexico for spent nuclear fuel from commercial power plants in the U.S.

Both senators said that any proposal for an interim depository should not be considered until there is a permanent solution to disposal of the nation’s nuclear waste.
“I oppose the Nuclear Waste Policy Amendments Act of 2017 (HR 3053), which unfortunately makes it more likely that a future interim storage site becomes a permanent home for nuclear waste.”

Resources

Holtec NRC documents:
https://www.nrc.gov/waste/spent-fuel-storage/cis/holtec-international.html

Holtec community opposition:
http://nonuclearwasteaquii.org

Holtec’s website:
https://holtecinternational.com/productandservices/hi-store-cis/
DON'T WORRY ABOUT NUCLEAR WASTE.

MY NUCLEAR PLANTS HAVE SAFELY HANDLED IT FOR YEARS.

BUT WE CAN'T LEAVE THE STUFF AT 70 PLANTS AROUND THE COUNTRY WE SHOULD TAKE IT ALL TO ONE SAFE SITE...

...NEVADA, OR NEW MEXICO, OR ANYPLACE EXCEPT MY STATE.
Contact Information

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Hardened On-Site Storage (HOSS)

Earth/gravel berms should surround each cask and hide from ground-level view.

Potential Target: 24 to 36 Bundles of Nuclear Rods

Nuclear rods cooled by simple air convection.