

Some Concerns about the Holtec Proposal

Radioactive and Hazardous Waste Committee

Santa Fe, New Mexico

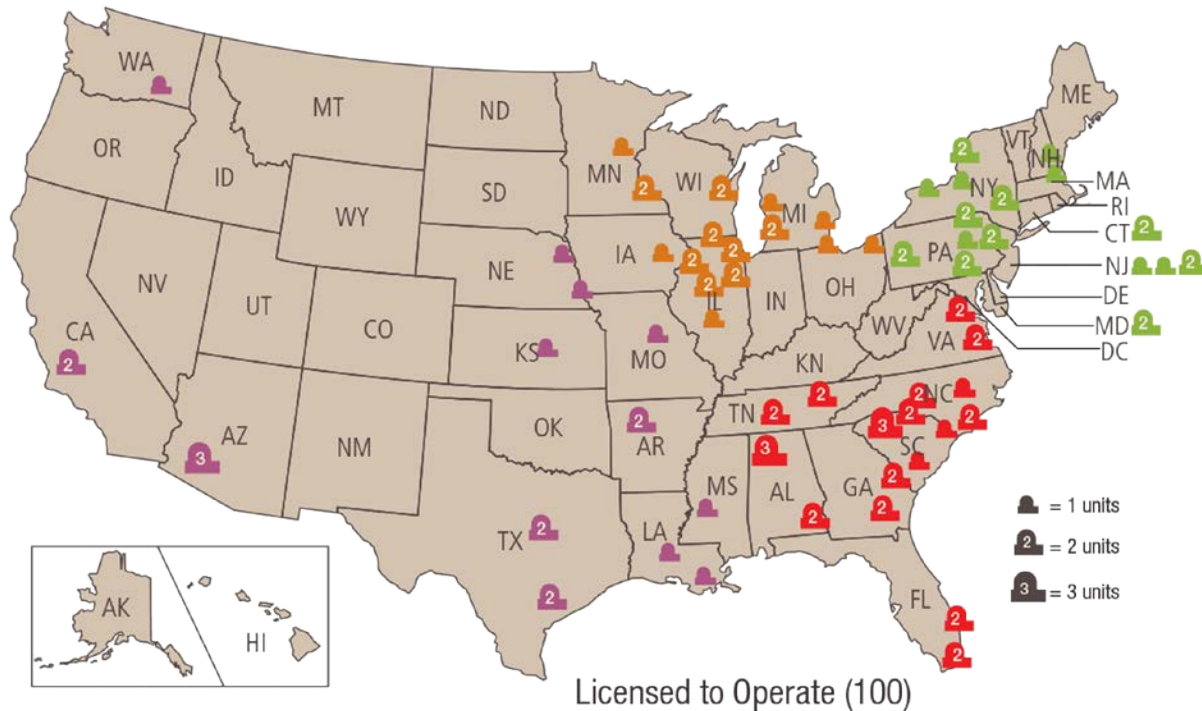
May 18, 2018

Don Hancock

Southwest Research and Information Center

Nuclear Power Plants

U.S. Operating Commercial Nuclear Power Reactors



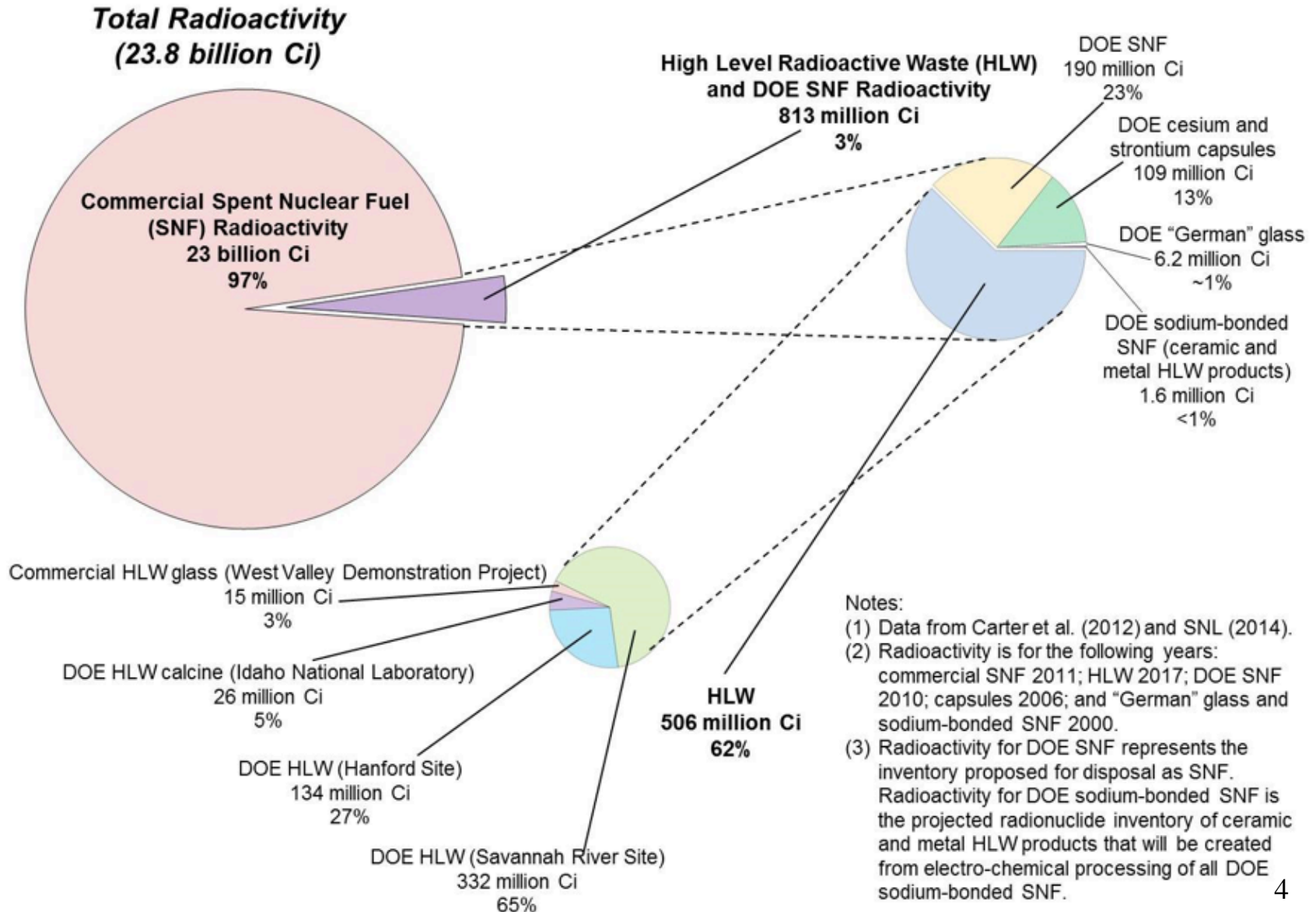
- ~ 94% of operating reactors are east of 100th meridian
- ~ 92% of spent fuel is east of 100th meridian

How much waste?

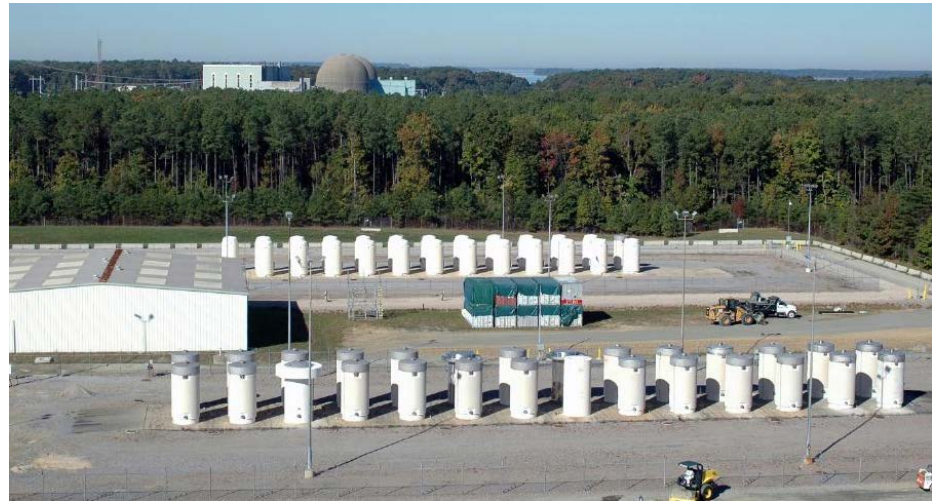
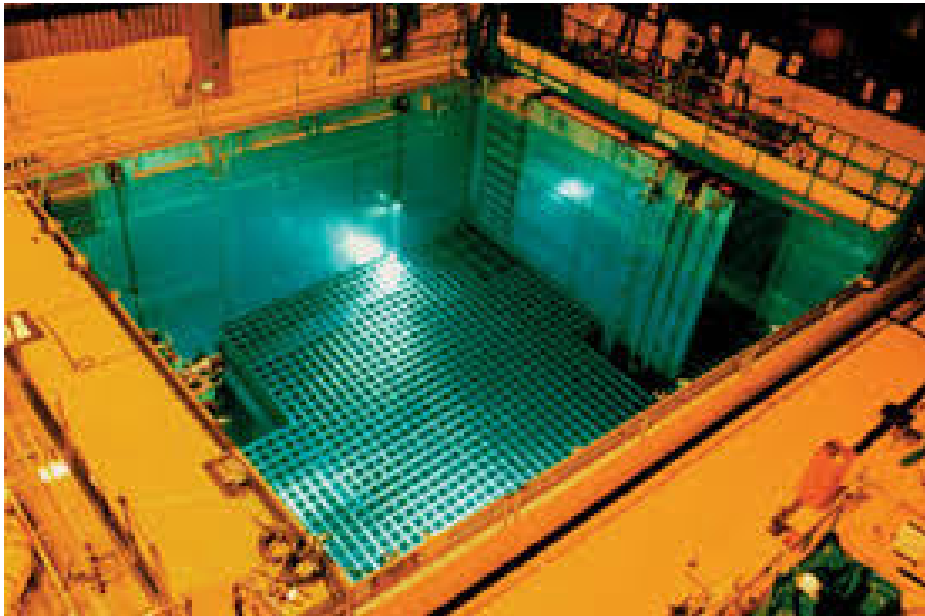
Current amount of commercial spent fuel = ~80,000 metric tons

Holtec: “this ER analyzes the environmental impacts of possession and storage of SNF containing 100,000 MTUs.” Holtec Environmental Report, p. 13.

VERY Radioactive Waste



Storage Today



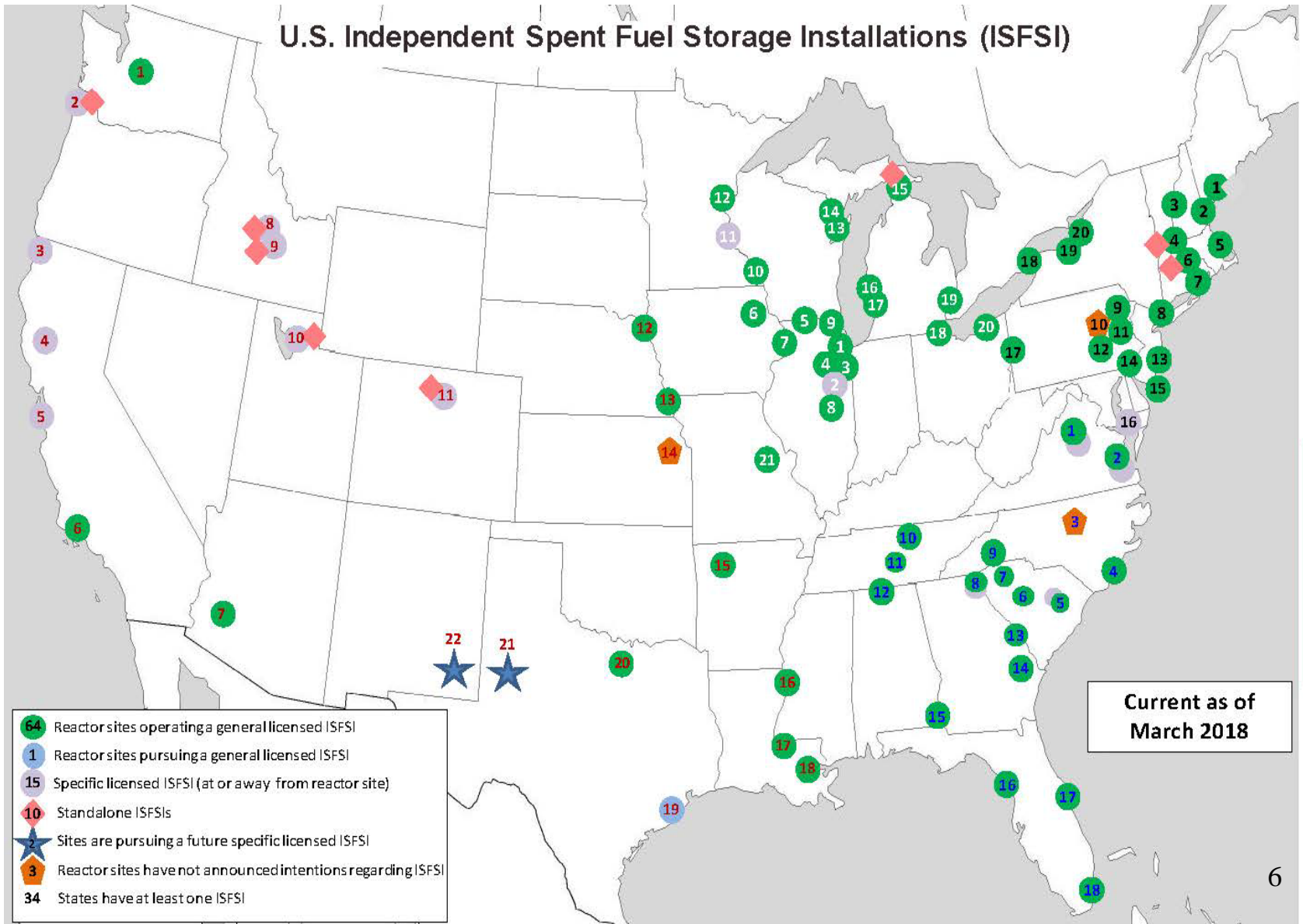
Surry - Virginia



San Onofre -
California

Existing Storage

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



Current as of
March 2018

- 64 Reactor sites operating a general licensed ISFSI
- 1 Reactor sites pursuing a general licensed ISFSI
- 15 Specific licensed ISFSI (at or away from reactor site)
- ◆ 10 Standalone ISFSIs
- ★ 2 Sites are pursuing a future specific licensed ISFSI
- ⬠ 3 Reactor sites have not announced intentions regarding ISFSI
- 34 States have at least one ISFSI

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

Law: Nuclear Utilities do Storage

“the generators and owners of high-level radioactive waste and spent nuclear fuel have the primary responsibility to provide for, and the responsibility to pay the costs of, interim storage of such waste and spent fuel until such waste and spent fuel is accepted by the Secretary of Energy in accordance with the provisions of this Act.” NWPA Sec. 111(a)(5).

Law: DOE does Disposal

“following commencement of operation of a repository, the Secretary shall take title to the high-level radioactive waste or spent nuclear fuel....” NWPA Sec. 302(a)(5)(A).

Holtec: DOE does Storage

“Phase 1 construction would begin after issuance of the license and after Holtec successfully enters into a contract for storage with the U.S. Department of Energy (DOE).” Holtec Environmental Report, p. 13.

Holtec: DOE does Transportation

“The U.S. Department of Energy (DOE) would be responsible for transporting SNF to the CIS Facility in transportation casks licensed by the NRC pursuant to 10 Part CFR 71.” Holtec Environmental Report, p. 198 (and p. 155).

Holtec: DOE does Training

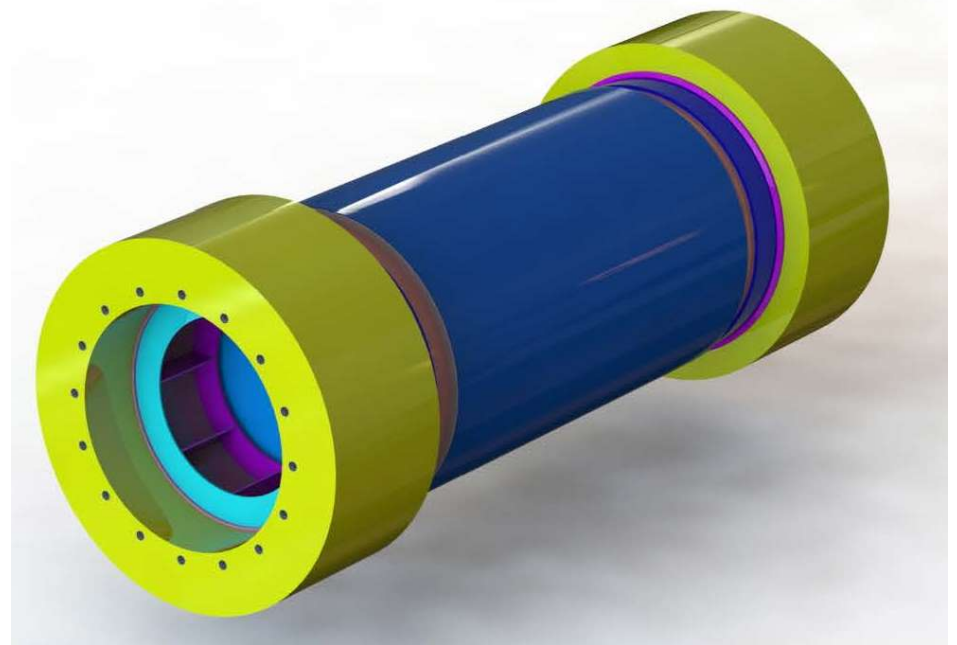
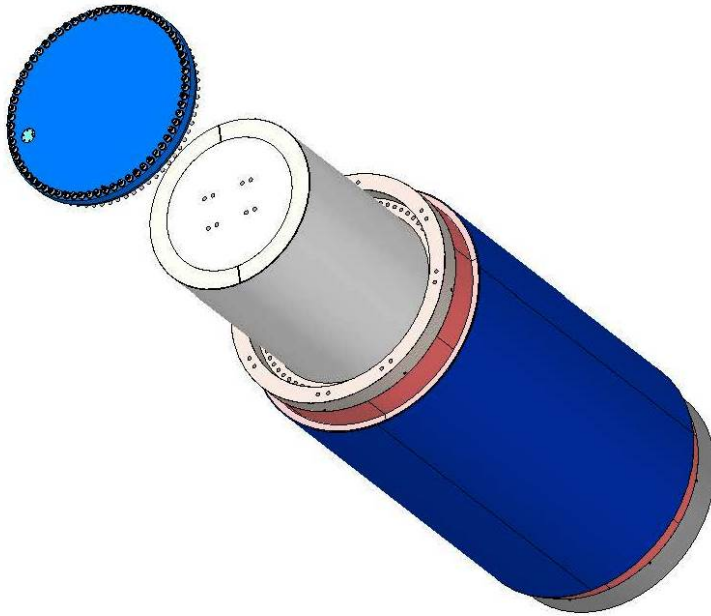
“The Federal government, through DOE, is responsible for providing emergency training to states, tribes, and local emergency responders along the transportation routes where SNF would be transported to the CIS Facility.”

Holtec Environmental Report, p. 198.

Holtec: Return leaky containers

“CIS Facility plans to reject and return canisters that have unacceptable external contamination.” Holtec Environmental Report, p. 214.

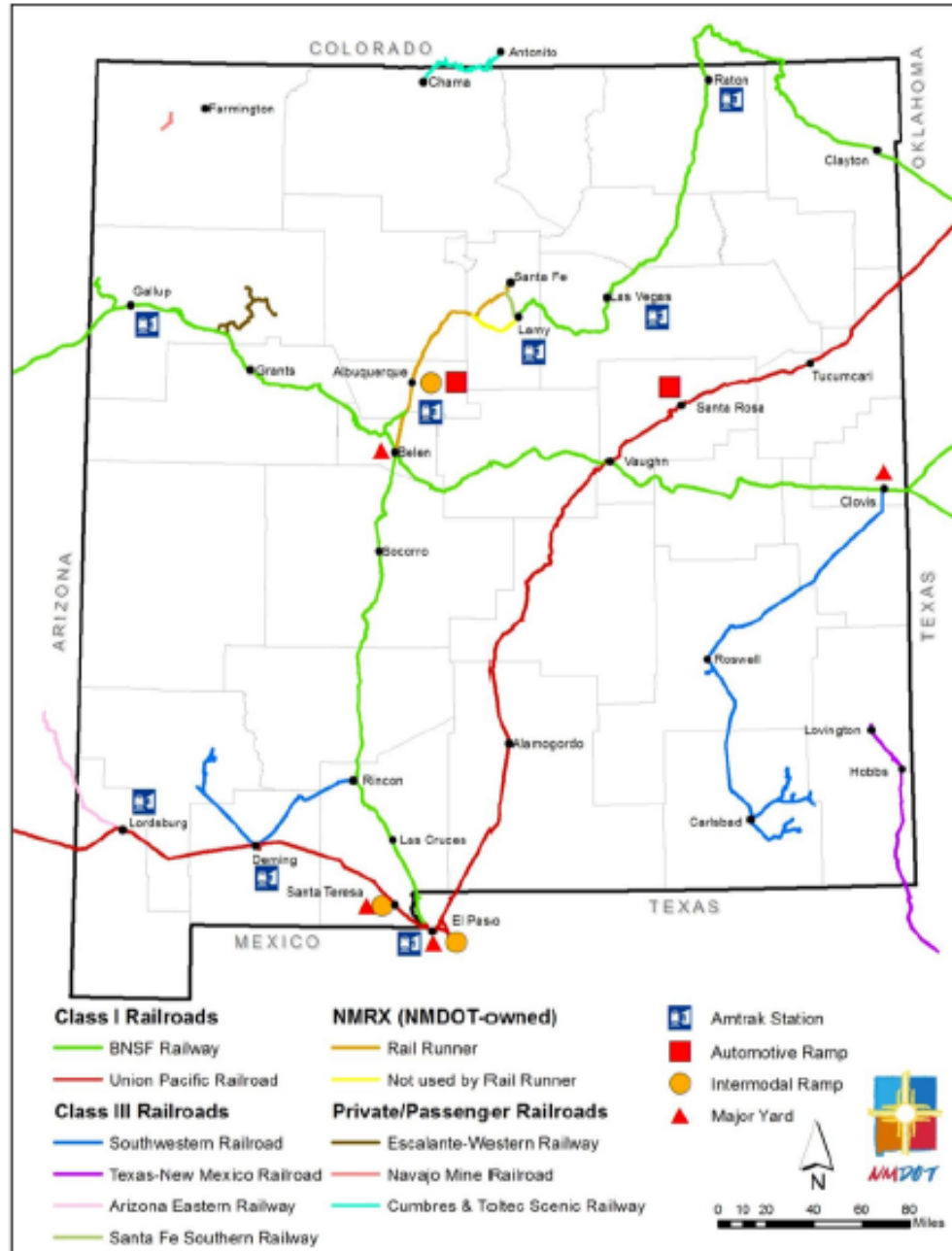
HI-STAR 190 Transport Cask



Cask length = 15' 9"/17' 8"
Internal Diameter = 6'4"
Outer Diameter = 8'10"

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

Figure ES.1 New Mexico State Rail System in 2014



Lots of Opposition

April 25, 2018 – NRC webinar –

25 commentors: 0 support Holtec

April 30, 2018 – Roswell meeting –

53 commentors: 45 oppose Holtec, 7 support,
1 neutral

May 1, 2018 – Hobbs meeting

47 commentors: 33 oppose Holtec,
14 support

May 3, 2018 – Carlsbad meeting

61 commentors: 32 oppose Holtec + 1,300
letters, 29 support

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?

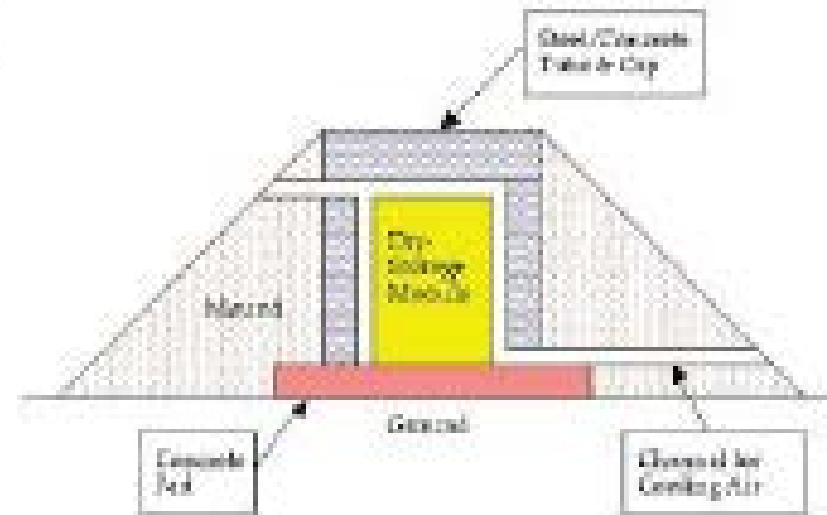
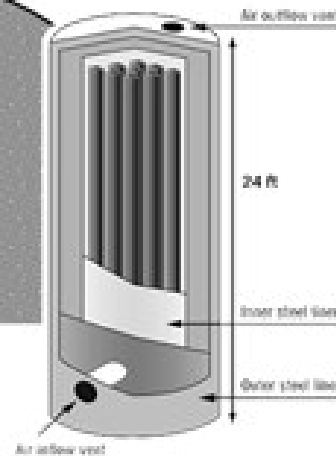
Hardened On-Site Storage (HOSS)

Earth/gravel berm 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.



Resources

Holtec NRC documents:

<https://www.nrc.gov/waste/spent-fuel-storage/cis/holtec-international.html>

Holtec community opposition:

<http://nonuclearwasteaqui.org>

Holtec's website:

<https://holtecinternational.com/product/sandservices/hi-store-cis/>

Contact Information

Don Hancock

Southwest Research and Information Center

PO Box 4524

Albuquerque, NM 87196-4524

(505) 262-1862

(505) 262-1864 (fax)

sricdon@earthlink.net

www.sric.org