

# **U.S. Nuclear Regulatory Commission Draft Environmental Impact Statement for a Consolidated Interim Storage Facility (CISF) for Spent Nuclear Fuel in Lea County, New Mexico**

## **Public Comment Meeting Webinar – June 23, 2020**

**Webinar access:** <https://usnrc.webex.com>

Event Number: 199 800 0026

Password: HOLTEC

**Telephone access:** 888-454-7496

Telephone passcode: 5790355

# Spanish Language Staff and Slides

Spanish language slides are available on the NRC's meeting notice a

<https://adamswebsearch2.nrc.gov/webSearch2/view?AccessionNumber=ML20162A121>

Native Spanish speaking staff available during today's meeting

# Opening Remarks

John Tappert, Director

Division of Rulemaking, Environmental and Financial  
Support

# Meeting Overview

- **NRC's Review Process**
  - Safety Review
  - Environmental Review
- **Overview of Holtec's License Application**
- **Public Scoping Comments**
- **NRC's Environmental Review Results**
- **Information Resources and Ways to Comment**
- **Public Comment**



# PURPOSE OF MEETING

- To receive comments on the  
**DRAFT ENVIRONMENTAL IMPACT  
STATEMENT**

# **The NRC's Review Process for a License Application for a Consolidated Interim Storage Facility**

# The NRC's Review Process

- Evaluate the application and determine if a license can be issued
- Not to promote Holtec's proposal or the Consolidated Interim Storage Facility (CISF) concept
- Safety and Environmental Review of Holtec's application
  - Safety Review: Determine whether Holtec can safely construct and operate the CISF at the proposed site
  - Environmental Review: Evaluate the environmental impacts of building and operating a CISF at the proposed site

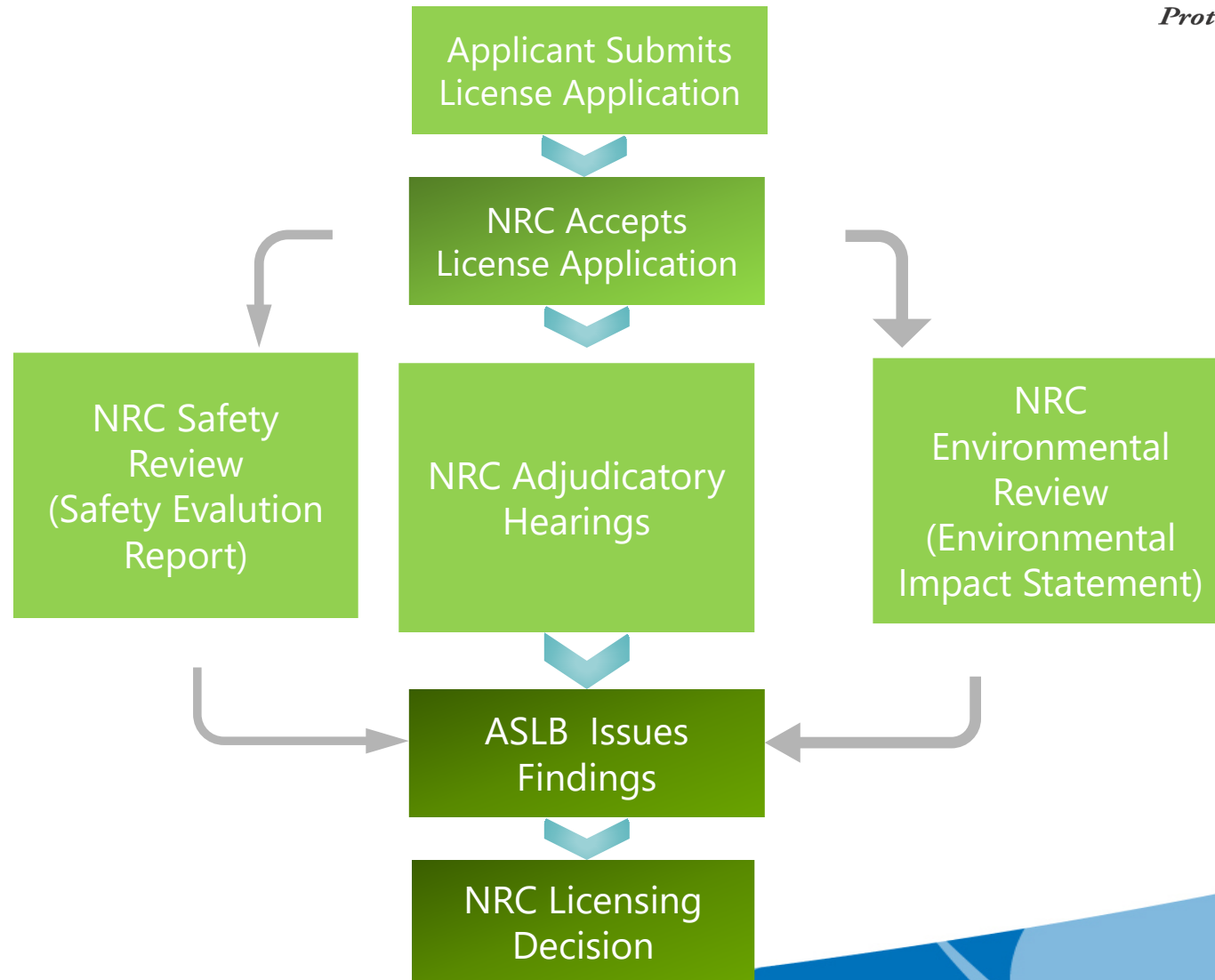
# NRC's Decision Process for CISF Reviews

## AEA – Atomic Energy Act

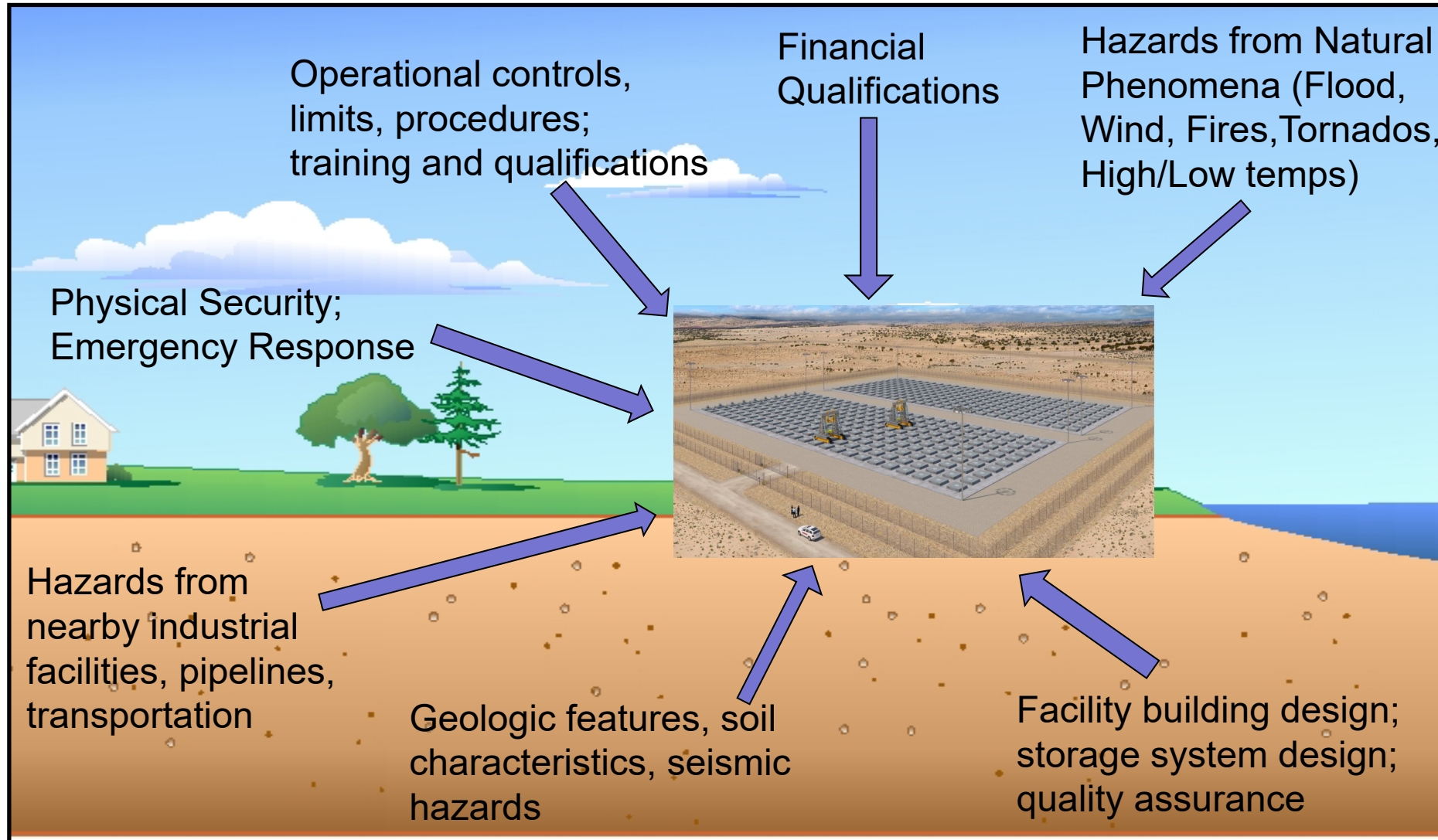
- Regulations must be met for licensing
- 10 Code of Federal Regulations Part 72

## NEPA – National Environmental Policy Act

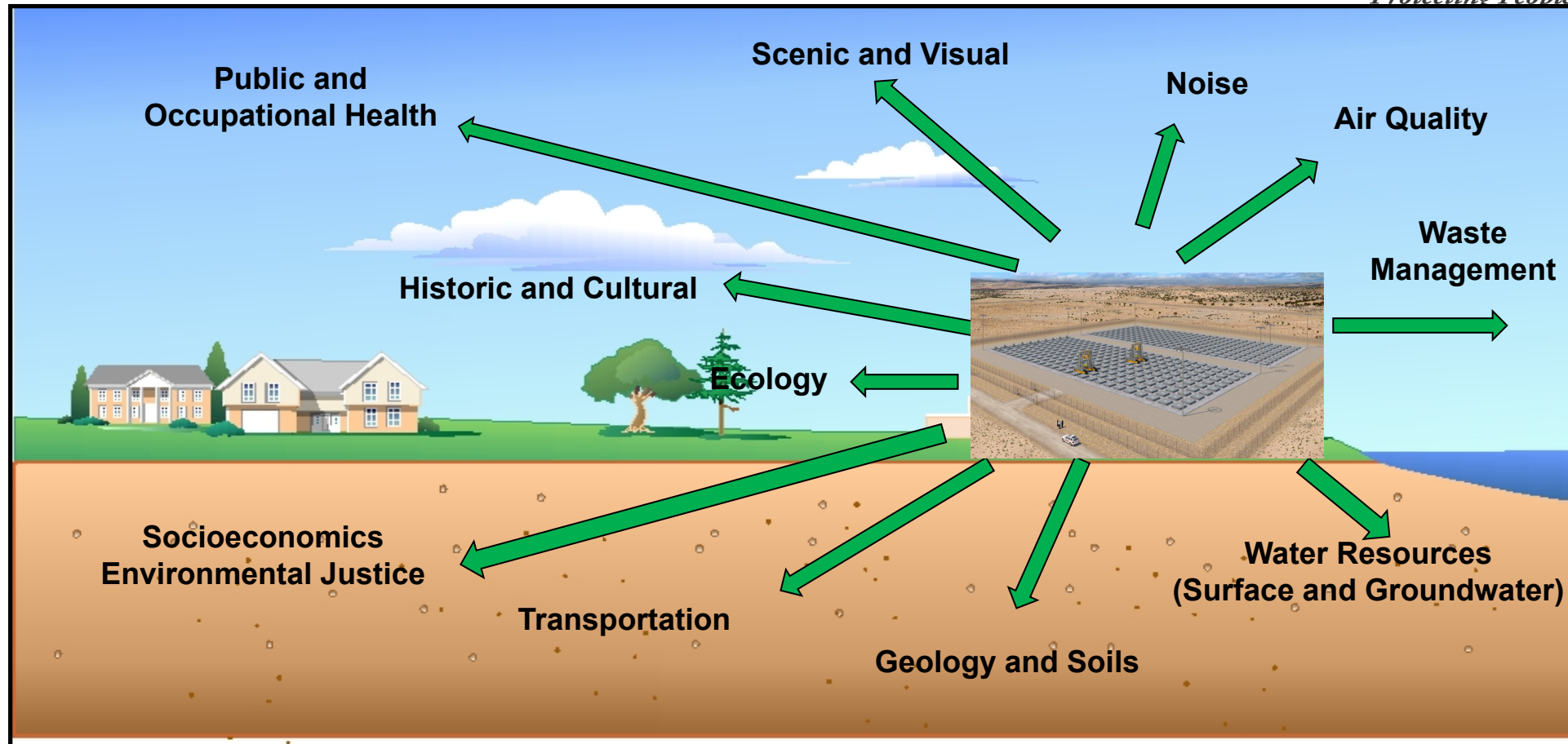
- Disclosure of environmental impacts
- NRC impact levels



# NRC's CISF Safety Review



# Environmental Review



# Impact Significance Levels

- ***SMALL*** – Environmental effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource.
- ***MODERATE*** – Environmental effects are sufficient to alter noticeably, but not to destabilize, important attributes of the resource.
- ***LARGE*** – Environmental effects are clearly noticeable and are sufficient to destabilize important attributes of the resource.

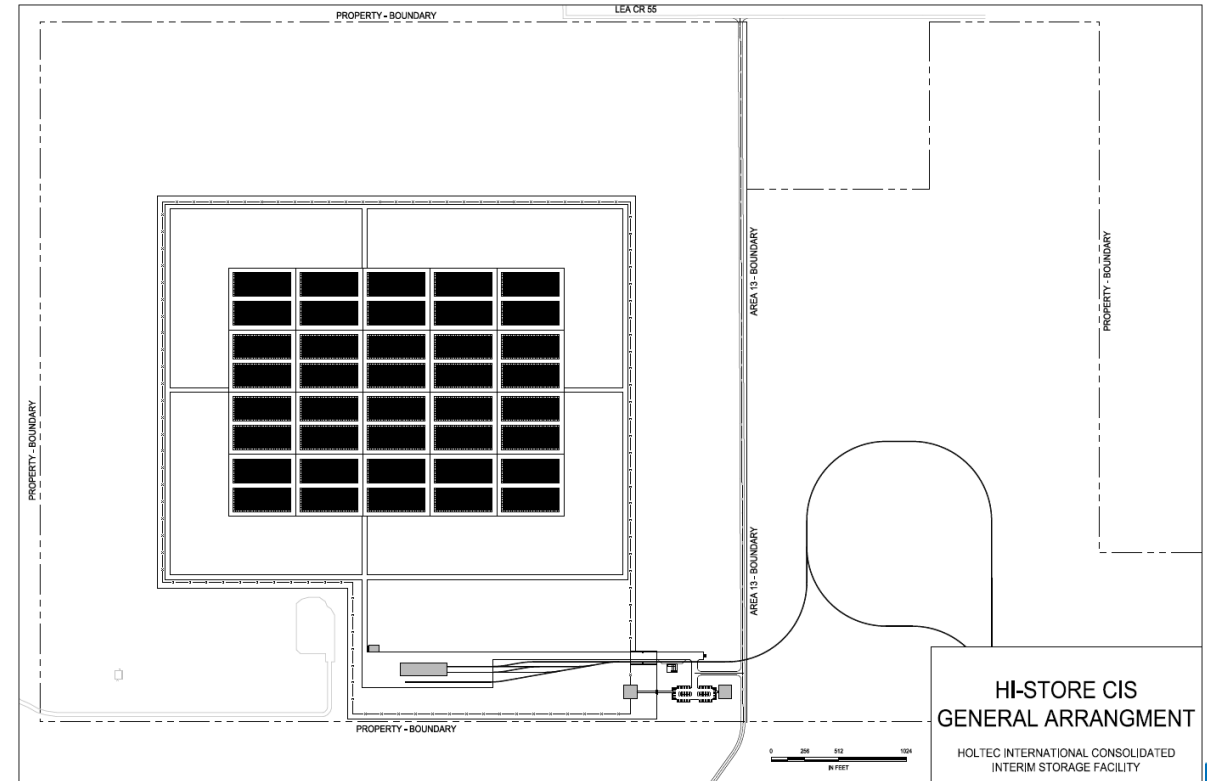


# **Summary of Holtec International's CISF License Application to the US NRC**



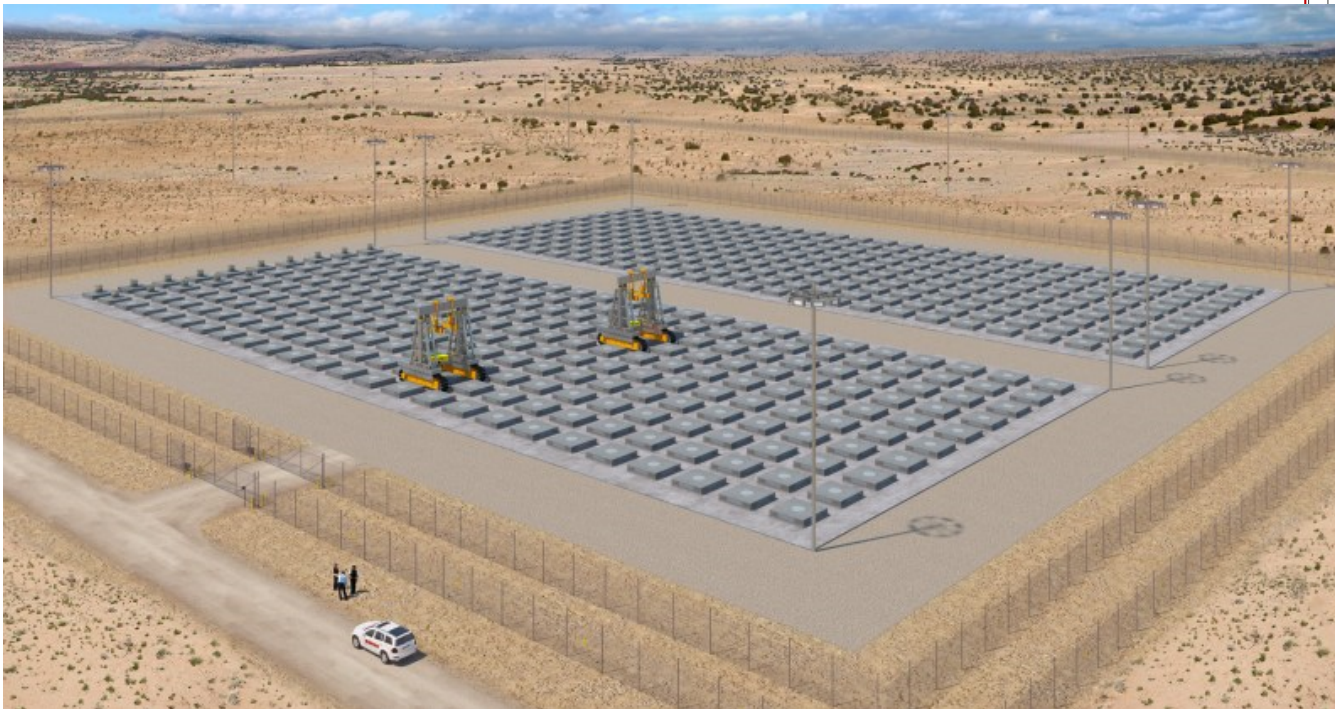
# Holtec's Proposed Consolidated Interim Storage Facility (CISF) for Spent Nuclear Fuel

Located between Hobbs and Carlsbad, NM  
Includes storage facility, related buildings and rail line  
Licensing request is for Phase 1 of the CISF project

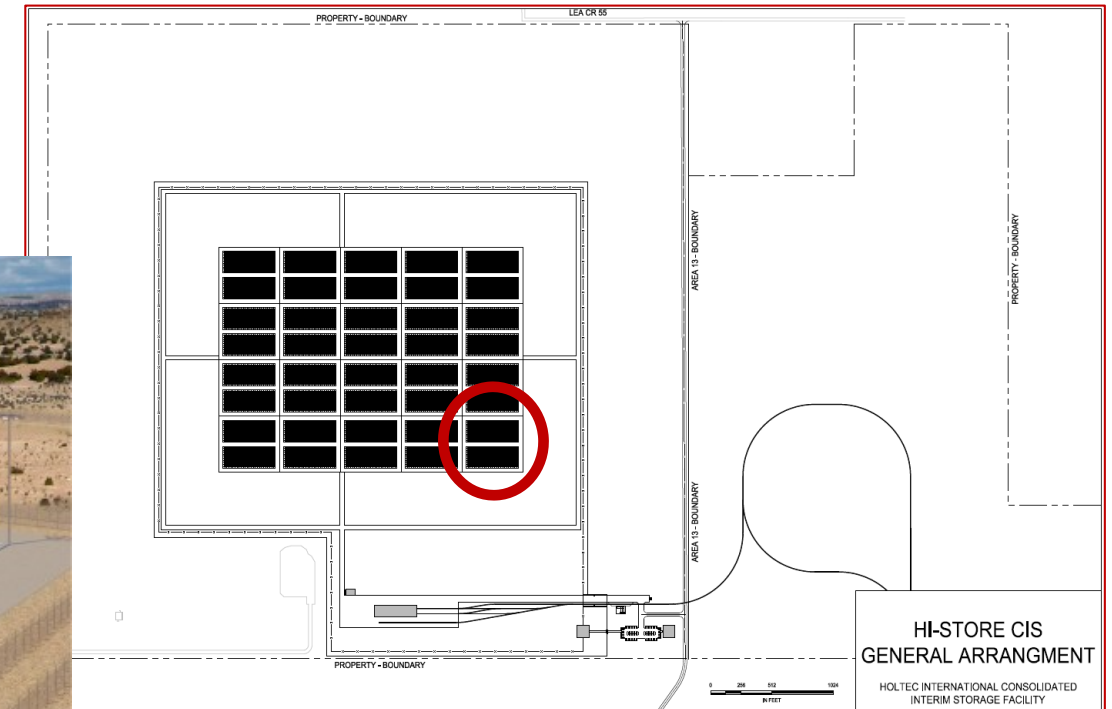


# Holtec HI-STORE CISF - Site Diagram

## Phase 1



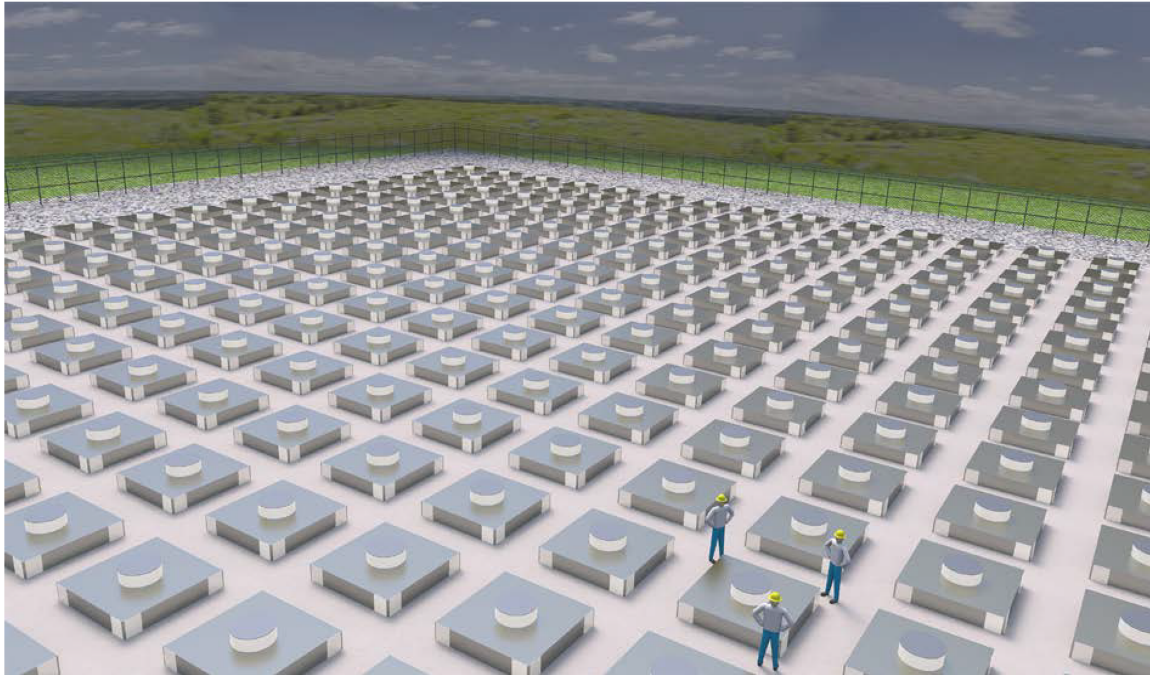
Source: Holtec International



Source: Environmental Report (Holtec, 2017)



# Holtec HI-STORE CISF

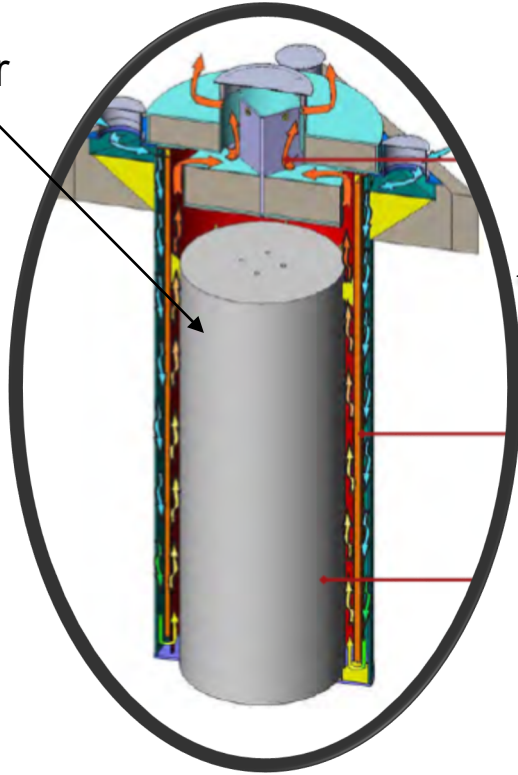


- HI-STORM UMAX system
- Dry, in-ground spent fuel storage system
- Each module contains 1 canister
- In-ground Canister Transfer Facility for canister transfer operations

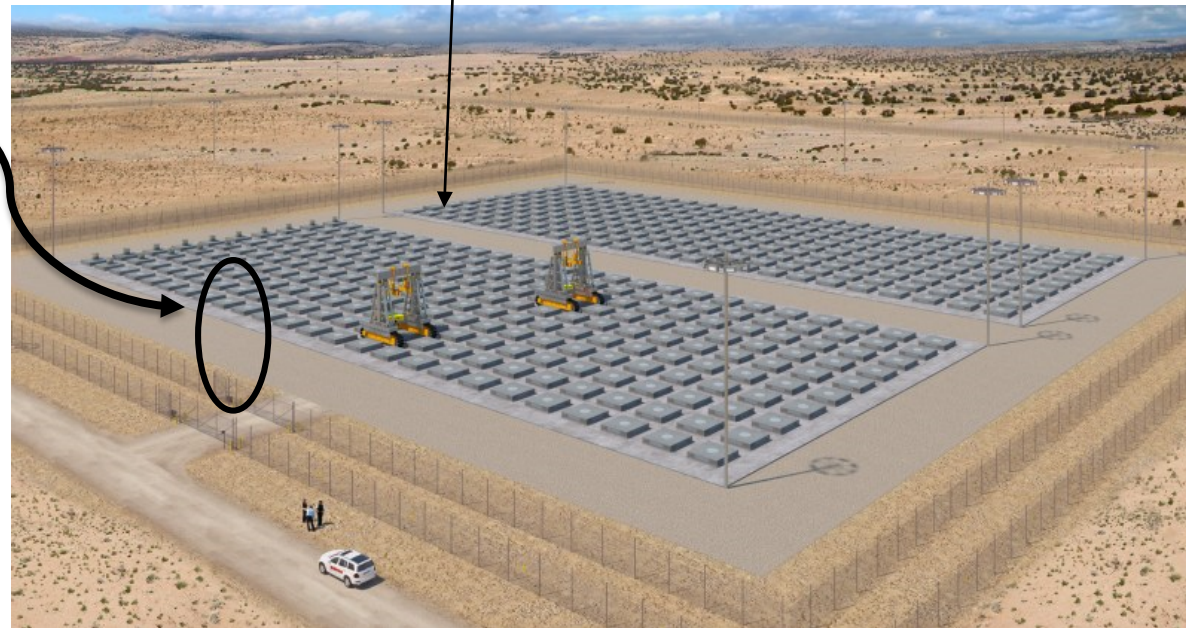


Source: Holtec International

Umax  
Canister



Hi-Store Design



Source: Safety Evaluation Report (Holtec, 2017)



# Phases and Stages

- Holtec proposed action is Phase 1 or 500 canisters
- EIS evaluates potentially impacts of up to 20 PHASES
  - Note that the safety review evaluates Phase 1 storage facility and any other facilities that are important to safety (i.e. transfer building components)
- EIS evaluates THREE STAGES of the project
  - Construction, Operation, Decommissioning/Reclamation
- Phase 1 includes construction of rail spur and additional facilities including administrative building and transfer building

# Public Scoping Comments

# Scoping Process

- Scoping Period
  - March 30, 2018 – July 20, 2018
  - Webinar and in-person meetings held in Carlsbad, Gallup, Roswell, Hobbs and Albuquerque, NM
- Comments –
  - 6,665 pieces of comment correspondence
  - Approximately 3,900 unique comments
- Scoping comment report
  - <https://www.nrc.gov/docs/ML1912/ML19121A296.pdf>

# Public Comments

- Transportation
  - Safety/Accidents
  - Radiation dose to citizens near the rail line
- Location and Land Use
  - Alternate location
  - Impacts of accidents
- Geology
  - Sink holes
- Volume of Material
  - 500 or 10,000 casks?
- Water Resources
  - Contamination to playa lakes and ground water aquifer
- Socioeconomics
  - Small number of jobs
- External Events – fire, flood
- Out of Scope - Covered in the Safety Review
  - Potential for flooding, external hazards
  - Impacts from sink holes, stability of the subsurface
  - Compatibility with the Umax system
  - Design of structural elements
  - Integrity of the Umax canister
  - Financial assurance
  - Accident conditions and failure of transport casks



# Results of NRC's Environmental Review

# Impact Evaluation

## License term

- Impacts were analyzed for a term of 40 years for a storage license
- A licensee would be required to remove the spent fuel prior to decommissioning the facility

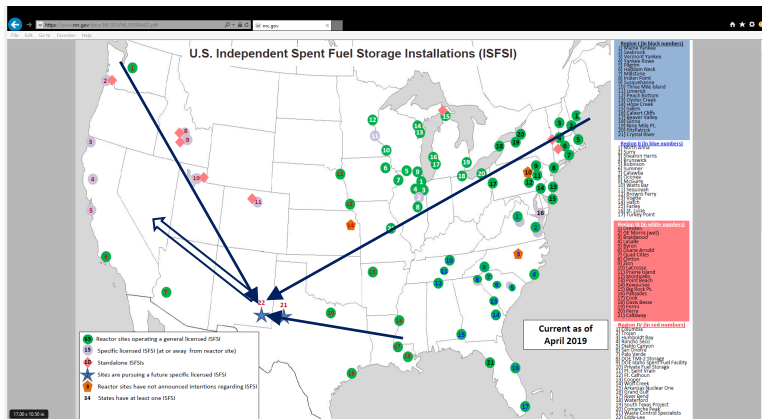
## Groundwater and Surface Water

- No liquid stored in the Umax canister, groundwater near the facility was characterized
- Impacts to playas (lakes) evaluated for sheet flow from the site – overflow is not contaminated

# Impact Evaluation

## Transportation

- Traffic safety and road degradation from workers and construction vehicles
- Dose rates to the public and workers along the route were estimated and found to meet regulatory limits
- Evaluated the movement for the entire 20 phases of material or 10,000 canister using conservative estimates of representative routes



## Impacts from Transportation Accidents

- Evaluated doses to first responders, workers and members of the public
- Assumptions of no releases during accidents; NRC rules require spent fuel transportation containers to withstand severe accidents without releases

## Location of Facility and Land Use

- Proposed by the applicant
- Site selection methods evaluated by NRC staff
- 6 mile radius from the CISF

# Impact Evaluation

## Socioeconomics

- Workers and tax reviews generated
- Resources available to the community
- Economic growth
- Demand on public services, schools and housing
- Primarily associated with workers who might move.

## Ecology

- No threatened and endangered species not identified.
- Vegetation removal and regrowth

## Environmental Justice

- Analysis of the human health and environmental impacts on low-income and minority populations
- 115 Census block groups that fall completely or partially within the 50-mile radius of the proposed CISF project area.
- Evaluate if any minority or low-income population would be disproportionately and adversely affected
  - Sections 4.11 and 4.12 of the draft EIS
  - **Block Groups (BGs)** are statistical divisions of census tracts, are generally defined to contain between 600 and 3,000 people, and are used to present data and control block numbering.

# Results of the Environmental Review

RESOURCE	IMPACT EVALUATION (construction, operation and decommission/reclamation stages)
Land Use	SMALL – Proposed Action (Phase 1) SMALL – Additional Phases (Phases 2-20)
Transportation	SMALL – Proposed Action SMALL – Additional Phases
Geology and Soils	SMALL – Proposed Action SMALL – Additional Phases
Surface Water	SMALL – Proposed Action SMALL – Additional Phases
Groundwater	SMALL – Proposed Action SMALL – Additional Phases
Ecology	SMALL to MODERATE – Proposed Action** SMALL to MODERATE – Additional Phases** ** until vegetation has been reestablished
Air Quality	SMALL – Proposed Action SMALL – Additional Phases

## IMPACT SIGNIFICANCE LEVELS NUREG 1748

- **SMALL** – Environmental effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource.
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# Results of the Environmental Review

RESOURCE	IMPACT EVALUATION (construction, operation and decommission/reclamation stages)
Noise	SMALL – Proposed Action SMALL – Additional Phases
Historic and Cultural	SMALL – Proposed Action SMALL – Additional Phases
Visual and Scenic	SMALL – Proposed Action SMALL – Additional Phases
Socioeconomic	SMALL to MODERATE* *beneficial on local finances
Environmental Justice	There would be no disproportionately high and adverse impacts to minority or low-income populations
Public and Occupational Health	SMALL – Proposed Action SMALL – Additional Phases
Waste Management	SMALL to MODERATE* *for Phases 2-20 for decommissioning and generated waste

See  
EIS – Chapter 9 Summary of  
Environmental Consequences

# Information Resources

- Draft Environmental Impact Statement
  - <https://www.nrc.gov/docs/ML2006/ML20069G420.pdf>
- Reader's guide
  - <https://www.nrc.gov/docs/ML2007/ML20073P254.pdf>
  - <https://www.nrc.gov/docs/ML2012/ML20120A522.pdf> (Spanish)
- Application material and NRC project website
  - <https://www.nrc.gov/waste/spent-fuel-storage/cis/holtec-international.html>

# How to Comment

- **Oral comments at NRC meetings**
- **Federal Rulemaking Web Site:** Go to <https://www.regulations.gov/> and search for Docket ID **NRC-2018-0052**. Address questions about NRC docket IDs to Jennifer Borges; telephone: 301-287-9127; e-mail: [Jennifer.Borges@nrc.gov](mailto:Jennifer.Borges@nrc.gov).
- **Mail comments to:** Office of Administration, Mail Stop: TWFN-7-A60M, ATTN: Program Management, Announcements and Editing Staff, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.
- **E-mail comments to:** [Holtec-CISFEIS@nrc.gov](mailto:Holtec-CISFEIS@nrc.gov).

NOTE : The NRC cautions you not to include identifying or contact information that you do not want to be publicly disclosed in your comment submission. The NRC posts all comment submissions at <https://www.regulations.gov> and enters all comment submissions into ADAMS, the NRC's document filing system.



# Public Comments on the Draft Environmental Impact Statement