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Protecting People and the Environment

Overview of NRC's Roles and Responsibilities for the Review of Consolidated Interim Storage Facilities

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Key Messages and Topics

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- The NRC is an independent regulator of civilian nuclear activities
  - Safety, security, and environmental protection mission; does not set nuclear policy or promotion
- The NRC is conducting detailed confirmatory technical reviews of the CISF applications
- Status of NRC's review of CISF applications
  - NRC's Safety and Environmental Reviews are ongoing, expected to complete by July 2021
  - NRC's Adjudicatory Hearing Process is ongoing
- NRC remains committed to an open licensing review process
  - Substantial engagement and participation both in-person and through virtual meetings
- The NRC and DOT co-regulate spent fuel transportation in the U.S. to ensure safe and secure transport of spent fuel

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NRC's Mission

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To license and regulate the Nation's civilian use of radioactive materials to protect public health and safety, promote the common defense and security, and protect the environment.

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The NRC

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- Five NRC Commissioners
  - Appointed by the President; confirmed by Senate
  - At most 3 of any one political party
  - Appointed to 5-year terms
  - Chairman designated by the President





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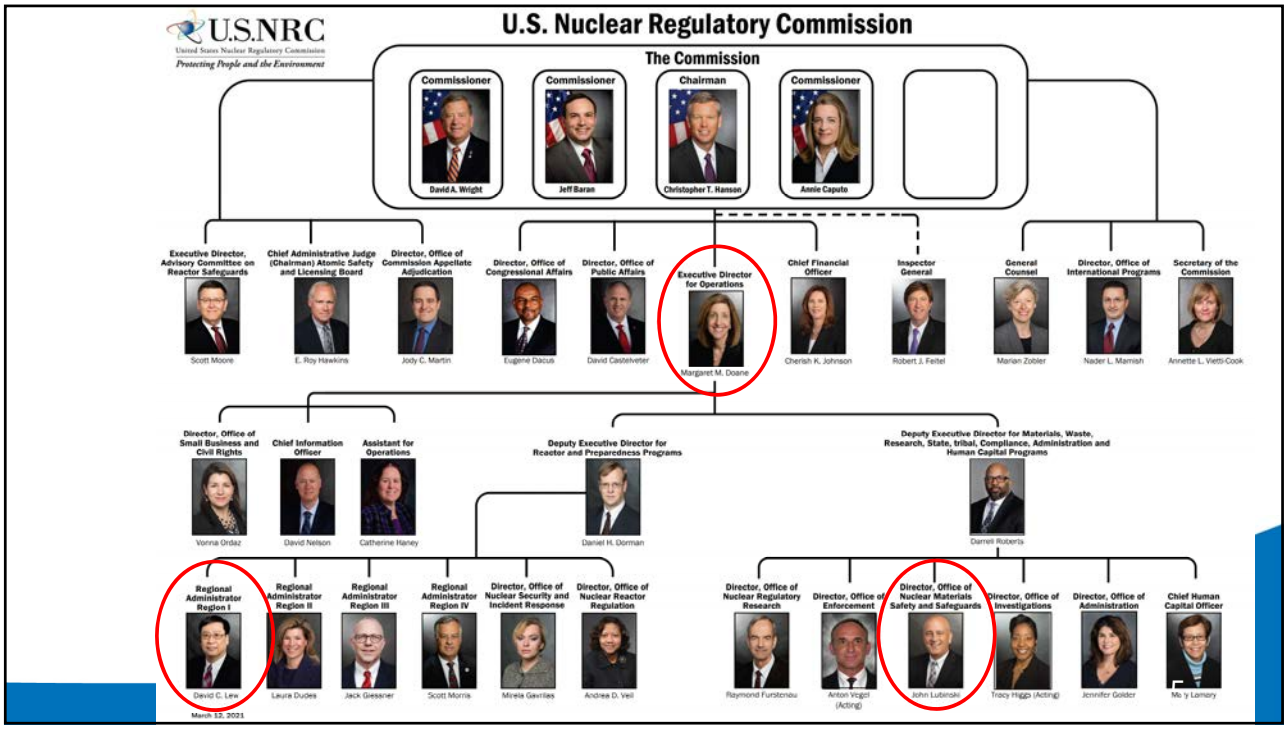

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NRC's Spent Fuel Storage Responsibilities

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- NRC establishes safety, security, and environmental regulations for:
  - Licensing of facilities for interim storage of commercial spent nuclear fuel;
  - Certification of dry storage cask designs for spent nuclear fuel
- NRC currently licenses and oversees 80 spent fuel storage facilities in 35 States:
  - Over 3,300 dry storage casks in service
  - 30+ years of spent fuel storage regulatory experience
- NRC inspects and oversees applicants and licensees during:
  - Construction, operation, and decommissioning of interim storage facilities;
  - Manufacturing of dry storage casks and systems

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Holtec HI-STORE CISF - Lea County, New Mexico

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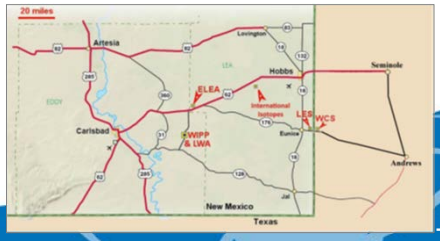
- License application submitted to NRC on March 30, 2017; detailed review began on February 28, 2018
- Holtec International is the applicant; proposed site is in Lea County, New Mexico
- Initial application for 40-year license to store up to 8,680 MTU (500 canisters) of commercial spent fuel; future plans to expand up to 100,000 MTU (10,000 canisters)
- Proposed facility to use the HI-STORM UMAX Canister Storage System



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Interim Storage Partners, LLC (ISP) CISF – Andrews, Texas

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- License application submitted to NRC on April 28, 2016; temporarily suspended in April 2017, restarted in August 2018
- ISP, LLC as applicant; joint venture between WCS and Orano CIS LLC (a subsidiary of Orano USA), site located near the WCS LLW site in Andrews, TX
- Initial application for 40-year license to store 5,000 MTU of commercial spent fuel; future plans to expand to 40,000 MTU
- Proposed facility to use several different above-ground dry storage cask systems

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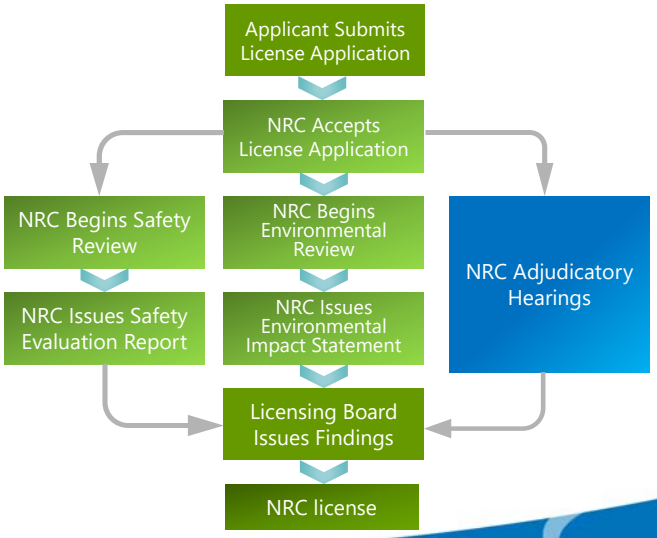
NRC's Decision Process for CISF Licensing



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The NRC has a Strong Regulatory Framework that Ensures Safety

- NRC has well-established safety requirements that support a rigorous review
  - NRC rules require that storage facilities must: maintain radioactive materials confined; provide radiation protection; prevent nuclear criticality, and maintain the ability of the spent fuel to be moved to a repository or interim storage facility
  - NRC rules also require:
    - Physical security measures to protect the facility from theft and sabotage, and plans for emergency response;
    - Financial qualifications and decommissioning funding;
    - Quality assurance programs, operational training and qualifications
- The NRC staff completes a detailed safety and security review
  - Approximately 20 technical staff, plus independent contractors, review the application
  - Issued several Requests for Additional Information (RAIs)
  - Conducted site audits at ISP and Holtec CISF sites
  - Conducted several in-person and virtual public meetings to discuss RAIs for both reviews
- Staff expects to complete safety and security reviews for both facilities by May 2021

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NRC's Environmental Review

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- **NRC regulations in 10 CFR Part 51 implement the National Environmental Policy Act (NEPA)**
- **NRC must prepare an Environmental Impact Statement (EIS) for an away-from-reactor CISF**
  - EIS is a comprehensive assessment of the environmental impacts of the proposed action
  - NEPA process provides opportunities for public participation (input to EIS scope, comment on draft EIS)
- Scoping
  - Holtec: five in-person meetings, one webinar; ISP: four in-person meetings, two webinars
  - Outreach to local governments, emergency responders, county councils, school districts, Federal partners, etc.
- Draft EIS public review and comment
  - Holtec's draft EIS on March 9, 2020; six-month public comment period; 6 webinars
  - ISP's draft EIS on May 4, 2020; six-month public comment period; 4 webinars
- Final EISs for both facilities expected by July 2021

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NRC's Environmental Review (cont'd)

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Resource Areas Evaluated in the EIS	
Land Use	Noise
Transportation	Historic and Cultural
Geology and Soils	Visual and Scenic
Surface Water	Socioeconomic
Groundwater	Environmental Justice
Ecology	Public and Occupational Health
Air Quality	Waste Management

Other Activities included in the Environmental Review:
National Historic Preservation Act, Section 106 Consultation
Endangered Species Act, Section 107 Consultation
Outreach Activities
NEPA Cooperating Agencies

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.
- ***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.

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NRC Adjudicatory Hearing

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- NRC provides an opportunity to request an adjudicatory hearing before a 3-judge licensing board of NRC's Atomic Safety and Licensing Board Panel (ASLBP)
  - ASLBP is an independent adjudicatory arm of NRC; conducts hearings for the Commission
  - To be granted, hearing petitions must contain at least one admissible contention; must demonstrate standing
- Status of Holtec Adjudicatory Hearing:
  - Board received 6 hearing petitions; approximately 46 separate contentions
  - No contentions were admitted; one appeal as well as new contentions filed after the initial deadline are pending before the Commission
  - One appeal to U.S. Court of Appeals is also pending
- Status of ISP Adjudicatory Hearing:
  - Board received 4 hearing petitions; approximately 40 separate contentions
  - One contention was initially admitted (contention of omission) and later dismissed as moot
  - Commission denied all appeals and referred one new proposed contention to ASLB for admissibility determination
- NRC rules allow staff to issue final licensing decision while appeals are pending before the Commission

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NRC's Spent Fuel Transportation Responsibilities

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- Transportation of radioactive materials is conducted in accordance with International Atomic Energy Agency (IAEA) standards established in 1961
  - Adopted by almost all international transport organizations and Member States as the basis for their national regulations, including the U.S.
  - Applicable to national and international transport of radioactive material by all modes of transport
  - NRC and DOT regularly harmonize domestic regulations with IAEA standards
- NRC and U.S. Department of Transportation co-regulate transportation of commercial spent fuel
  - NRC/DOT Memorandum of Understanding lays out the agencies' responsibilities for safety of radioactive materials transportation
  - DOT regulates carriers, modes of transport (rail, road, air, water)
  - NRC establishes design standards for spent fuel transportation packages
- NRC regularly meets with Federal, State, and Tribal government partners to discuss radioactive material transportation

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NRC's Spent Fuel Transportation Responsibilities (cont.)

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- Under NRC regulations, any entity licensed to possess commercial spent fuel is granted a general license to transport licensed material in an NRC-approved package
- NRC has a robust framework for the regulation of spent fuel transportation
  - NRC establishes regulations for:
    - Package design standards for transportation of spent fuel
    - Physical security requirements for transportation of spent fuel
  - NRC evaluates, approves, and authorizes for use transportation package designs; issues certificates
  - NRC approves routes and security plans for shipment of commercial spent fuel
  - NRC requires licensees to notify and coordinate with States, Tribes, and local law enforcement prior to shipments
  - NRC inspects and oversees certificate holders, package fabricators, and licensee shippers
- Spent fuel has been transported in the U.S. for decades and the risk associated with transportation is low

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Conclusions

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- NRC has an established robust regulatory framework in place for licensing of CISFs
- Any NRC decision on a proposed consolidated interim storage facility will only be made after:
  - A comprehensive safety, security, and environmental review, and;
  - An opportunity for public adjudicatory hearing
- The NRC will not license a facility unless it has reasonable assurance of safety and security
- NRC and DOT have an established regulatory framework for the safe and secure shipment of spent nuclear fuel
- NRC expects to complete its detailed reviews and make its licensing decision in late July 2021

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