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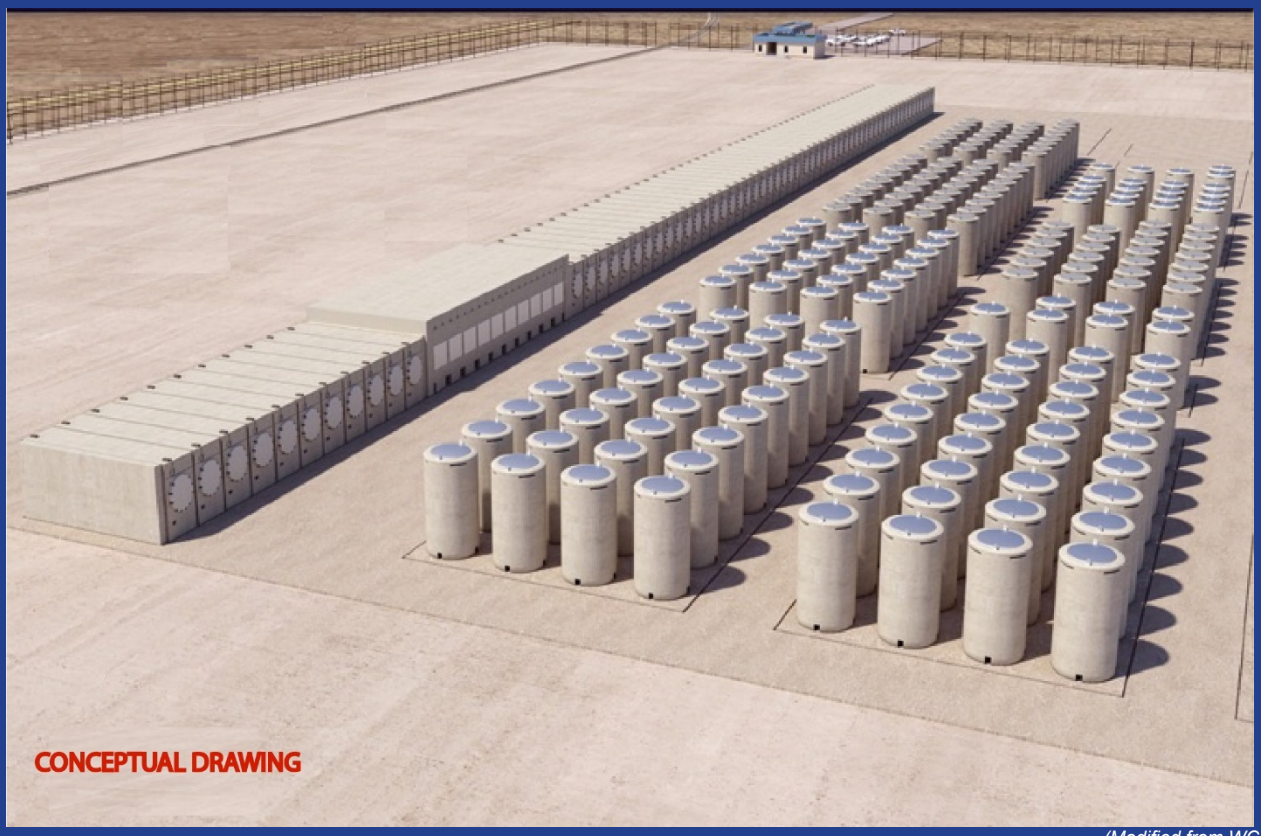

(Modified from WCS)

Overview of the Final Environmental Impact Statement for Interim Storage Partners LLC's Proposed Consolidated Interim Storage Facility

July 2021

NRC ADAMS Accession Number: ML21200A050

INTERIM STORAGE PARTNERS LLC'S PROPOSED CONSOLIDATED INTERIM STORAGE FACILITY

On June 8 and July 19, 2018, Interim Storage Partners LLC (ISP) submitted a revised license application to the U.S. Nuclear Regulatory Commission (NRC) to construct and operate a Consolidated Interim Storage Facility (CISF) in Andrews County, Texas. The facility would store spent nuclear fuel (SNF) and reactor-related Greater Than Class C (GTCC) waste, along with a small quantity of mixed oxide fuel. The NRC has reviewed the application and prepared an environmental impact statement (EIS) to comply with the National Environmental Policy Act (NEPA) and NRC regulations found at Title 10 of the Code of Federal Regulations, Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions" (10 CFR Part 51). The NRC staff also is using the NEPA process to comply with its obligations under Section 106 of the National Historic Preservation Act of 1966, as amended. As discussed below, the NRC previously published a draft EIS for public comment and is now making publicly available a final EIS.

Spent nuclear fuel is fuel that has been removed from a nuclear reactor because it can no longer sustain power production for economic or other reasons.

Greater Than Class C waste is low-level radioactive waste that exceeds the concentration limits of radionuclides established for Class C waste in 10 CFR 61.55

Mixed Oxide Fuel (often called "MOX") contains plutonium oxide mixed with either natural or depleted uranium oxide, in ceramic pellet form. Using plutonium reduces the amount of highly enriched uranium needed to produce a controlled reaction in commercial light-water reactors.

WHAT IS THIS DOCUMENT?

The final EIS describes the impacts that could result from construction, operation, and decommissioning of the CISF. It also details the cumulative impacts from other activities in the area and alternatives evaluated. This overview summarizes the NRC's environmental impact analysis that is documented in the final EIS.

WHERE CAN I FIND A COPY OF THE FINAL EIS?

- Access an online version through a link on the NRC project website at https://www.nrc.gov/waste/spent-fuel-storage/cis/waste-control-specialist.html. This project webpage also provides links to ISP's license application and other project-related documents.
- Access an online version directly at the following link: https://www.nrc.gov/docs/ML2120/ML21209A955.pdf

WHAT IS BEING PROPOSED AND WHY?

ISP's proposed CISF would provide an option for storing SNF from nuclear power reactors for a period of 40 years. ISP requests authorization of the project to store up to 5,000 metric tons of uranium (MTUs) [5,500 short tons] of SNF. Should the NRC license be issued, ISP plans to request amendments subsequently to the license to store an additional 5,000 MTUs for each of seven planned expansion phases of the proposed CISF (a total of eight phases), to be completed over the course of 20 years. If those future expansions are requested and approved, the proposed facility could eventually store up to 40,000 MTUs [44,000 short tons] of SNF. The planned amendments for the seven expansion phases are not part of the NRC's current licensing review, but the final EIS considers the impacts of the entire expanded CISF. The NRC used the best currently available information to assess the environmental impacts of the additional phases.

ISP is a private organization not related to the NRC. The NRC is not a project proponent, owner, or operator. The NRC is an independent regulatory agency with the mission to protect public health and safety and the environment.

In reviewing ISP's license application, the NRC has prepared a final EIS in accordance with the NRC's regulatory requirements that implement the NEPA. The NEPA requires Federal agencies to assess the environmental impacts of major licensing actions. The final EIS fulfills this requirement, following the NRC regulations found at 10 CFR Part 51. The final EIS describes ISP's plans to build, operate, and decommission its CISF and details NRC's evaluation of the environmental impacts of those activities. During operation, the CISF would receive SNF from decommissioned reactor sites around the nation and from operating reactors prior to decommissioning. The CISF would serve as an interim storage facility before a permanent geologic repository is available.

THE NEPA

The NEPA is a national policy for the environment that establishes the basis for considering environmental issues in the conduct of Federal activities.

The Act requires the following:

- Use a systematic, interdisciplinary approach for decision-making about actions that may impact the human environment.
- Inform and involve the public in the decision-making process.
- Consider significant environmental impacts associated with the action.
- Consider alternatives and compare their impacts to those from the proposed action.

The EIS provides the necessary information required under this Act.

The CISF license would be issued under 10 CFR Part 72, "Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste, and Reactor-Related Greater Than Class C Waste" (10 CFR Part 72). The NRC previously licensed one other away-from-reactor dry cask spent fuel storage facility, called Private Fuel Storage (NUREG-1714); however, that facility was never built. Most of the spent fuel storage facilities licensed by NRC are co-located with commercial nuclear power plants.

WHO IS LEADING THE ISP CISF LICENSE APPLICATION REVIEW?

The NRC is the lead Federal agency for reviewing the license application. As part of that review, the NRC consults with Federal, Tribal, and State government agencies with respect to potential impacts to threatened and endangered species, State species of concern, and historic and cultural properties.

A detailed description of how the NRC determines whether or not to issue a license to ISP is explained in the following sections.

WHAT IS NRC'S PROCESS FOR REVIEWING A LICENSE APPLICATION FOR A CISF?

When an applicant such as ISP submits a license application, the NRC first determines if the application is sufficient to warrant a detailed review. If so, the agency "accepts" and "dockets" the application and begins parallel safety and environmental reviews for the proposed action.

Exhibit A shows the NRC's review process for a CISF licensing review. The final product from the safety review is a safety evaluation report that details storage facility design and radiological safety issues. The final product from the environmental review is an EIS that describes the environmental effects of building, operating, and decommissioning the CISF. The Atomic Safety and Licensing Board (ASLB) also may conduct an adjudicatory hearing if a member of the public or an organization successfully files a petition that raises safety or environmental concerns.

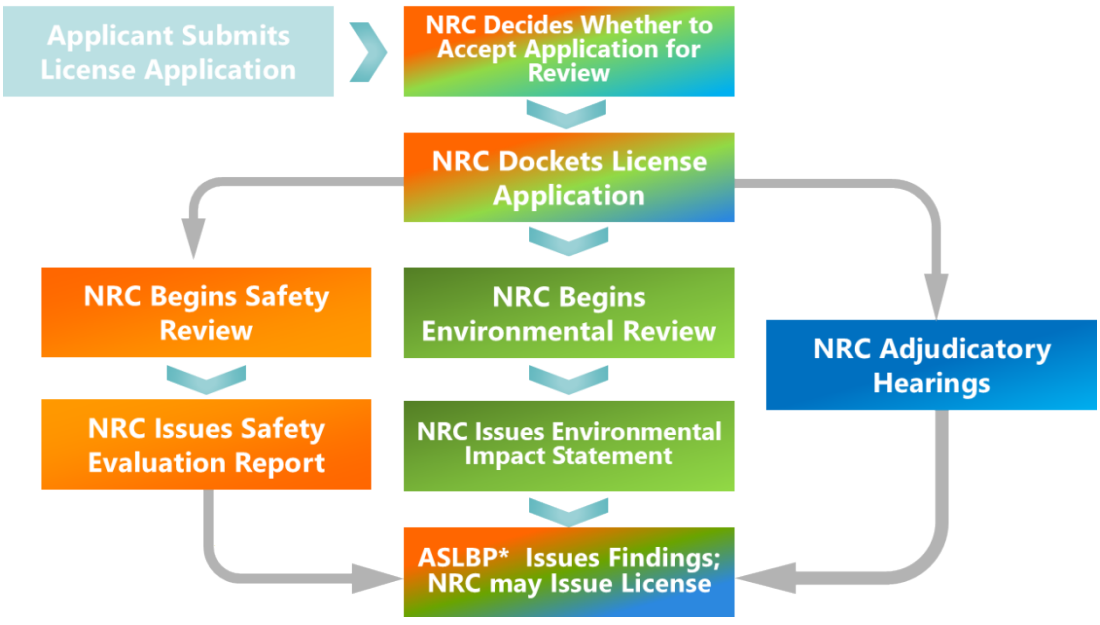

Exhibit A. License Application Review Process

SAFETY REVIEW PROCESS

The purpose of the NRC staff's safety review is to verify that the proposed location, design, and operations of the CISF will comply with applicable NRC regulations and requirements for the protection of members of the public, the workers, and the environment. The safety review is a combination of multiple reviews that includes 1) a detailed characterization and evaluation of the proposed site to determine the likely natural phenomena (earthquakes, storms, etc.) and man-made hazards (from activities at the site or at nearby industrial or commercial operations) that can occur; 2) an evaluation of the design, construction, and operations of structures and equipment at the site to confirm that the facility will withstand normal, abnormal, and accident conditions without releasing radioactive materials; 3) an evaluation of the physical protection plan and emergency response plan for the facility to ensure that it is protected against sabotage or theft, and provides for the common defense and security; and 4) an evaluation of the financial qualifications of the license applicant to ensure that it has the required resources to adequately construct, operate, and decommission the facility. The results of NRC's safety review are documented in a safety evaluation report.

ENVIRONMENTAL REVIEW PROCESS

The environmental review includes a careful look at the potential environmental impacts of construction, operation, and decommissioning of a CISF at the proposed site and the potential mitigation measures for reducing environmental effects. The NRC prepares the final EIS consistent with its NEPA-implementing regulations in 10 CFR Part 51, and NRC staff guidance in NUREG-1748, "Environmental Review Guidance for Licensing Actions Associated with NMSS Programs." The NRC categorizes impacts as *SMALL, MODERATE, LARGE,* or a range of these categories, which are based on the Council on Environmental Quality's regulations.

COUNCIL ON ENVIRONMENTAL QUALITY

The Council coordinates environmental efforts between Federal agencies and White House offices to develop environmental policies. The Chair of the Council serves as the environmental policy advisor to the President. NRC's impact categories below are based on regulations issued by the Council:

- *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.

The environmental review includes consultation and coordination with representatives of local, State, and Federal agencies and Tribal Nations. Independent evaluations by the NRC and its contractor experts also are undertaken. These evaluations involve 1) review of the applicant's information about the environment (documented in an environmental report or ER); 2) visits and tours of the proposed project site; 3) requests for further information from the applicant as needed (requests for additional information or RAIs); 4) reviews of other published studies and reports; and, when necessary, 5) performance of additional analyses to confirm the applicant's conclusions. The analysis of environmental impacts is documented in the EIS.

In addition, members of the public can provide input to the environmental review during the scoping process that is undertaken before the draft EIS is prepared and then again during public meetings on the draft EIS and a public comment period after the draft EIS is issued. The NRC addressed public comments from the scoping process (as documented in the Scoping Summary Report, a link to which is provided later in this overview) in the draft EIS, and has addressed public comments on the draft EIS in the final EIS.

Exhibit B shows a more detailed process for environmental reviews leading up to a decision on license issuance. The blue blocks are areas in which public involvement occurs. The yellow blocks are steps leading up to draft EIS publication, and the green blocks are steps leading up to final EIS publication and the NRC decision whether or not to issue a license.

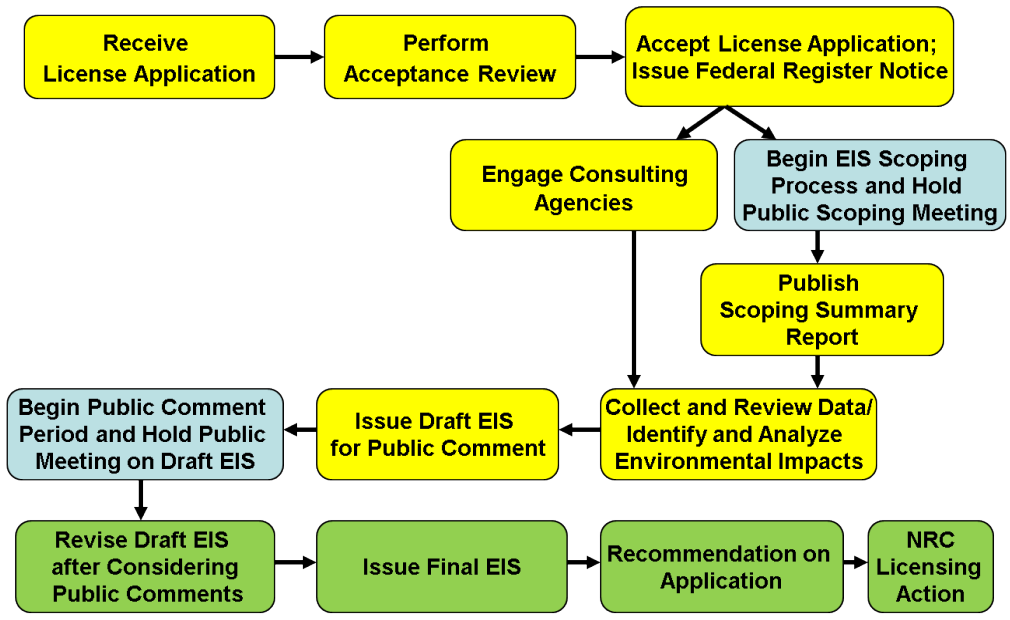

Exhibit B. Environmental Review Process

NRC Review and Decision

In addition to safety and environmental reviews, an adjudicatory hearing may be held by the ASLB if a member of the public or organization successfully files a petition raising safety or environmental concerns about licensing the CISF. The ASLB then issues a decision dispositioning the issues raised in the hearing, and this decision may be appealed to the Commission. The ASLB evaluated four petitions for hearing on this

ASLB

Members of the ASLB panel are employees of the NRC who act as administrative judges. The ASLB presides over contested licensing hearings. Their decisions are subject to Commission review.

To learn more about the NRC's adjudicatory process, visit https://www.nrc.gov/about-nrc/regulatory/adjudicatory.html.

project, one of which was admitted and later dismissed as moot. Petitioners appealed the rulings of the ASLB, which the Commission upheld. Petitioners have also appealed the Commission's rulings in Federal court.

The NRC will make its licensing decision regarding the ISP application only after the safety and environmental reviews have been completed. When an adjudicatory hearing is held, the NRC's licensing decision will be made after the conclusion of such a hearing.

WHO ELSE DID THE NRC WORK WITH ON THIS EIS?

Several Federal, Tribal, State and local agencies, and community organizations were contacted during the development of the EIS. These parties provided comments and information used by the NRC to develop a good understanding of the environmental resources in the proposed project area and the potential for environmental impacts. Correspondence related to consultations can be found in Appendix A of the final EIS.

In addition to a license from the NRC, ISP may need environmental permits and certifications required by Federal and State agencies related to construction and operation of a CISF. Table 1.6-1 of the final EIS contains a comprehensive list of all the permits and requirements ISP would need to build and operate a CISF.

WHAT IS ISP'S PROPOSED CISF?

For the proposed action, ISP proposes to store SNF in six dual-purpose canister-based dry cask storage systems licensed by TN Americas or NAC International, which currently are used to store spent nuclear fuel. SNF is stored horizontally in the TN Americas systems and vertically in the NAC International systems. Exhibit C is a conceptual figure of the proposed CISF, showing above ground horizontal and vertical SNF storage.

The TN Americas and NAC International dry cask storage systems have been previously approved by the NRC for independent storage of SNF, pursuant to requirements in 10 CFR Part 72 (https://www.nrc.gov/waste/spent-fuel-storage/designs.html).

Within the storage and operations area, there would be the TN Americas and NAC International storage systems licensed under 10 CFR Part 72; the cask transfer building where SNF casks would be delivered and prepared for placement in the storage systems; and the security and administration building. Outside the storage and operations area, there would be a rail sidetrack that connects the CISF to the existing Waste Control Specialists (WCS) rail line, a site access road, and a construction laydown area south of the CISF project area.

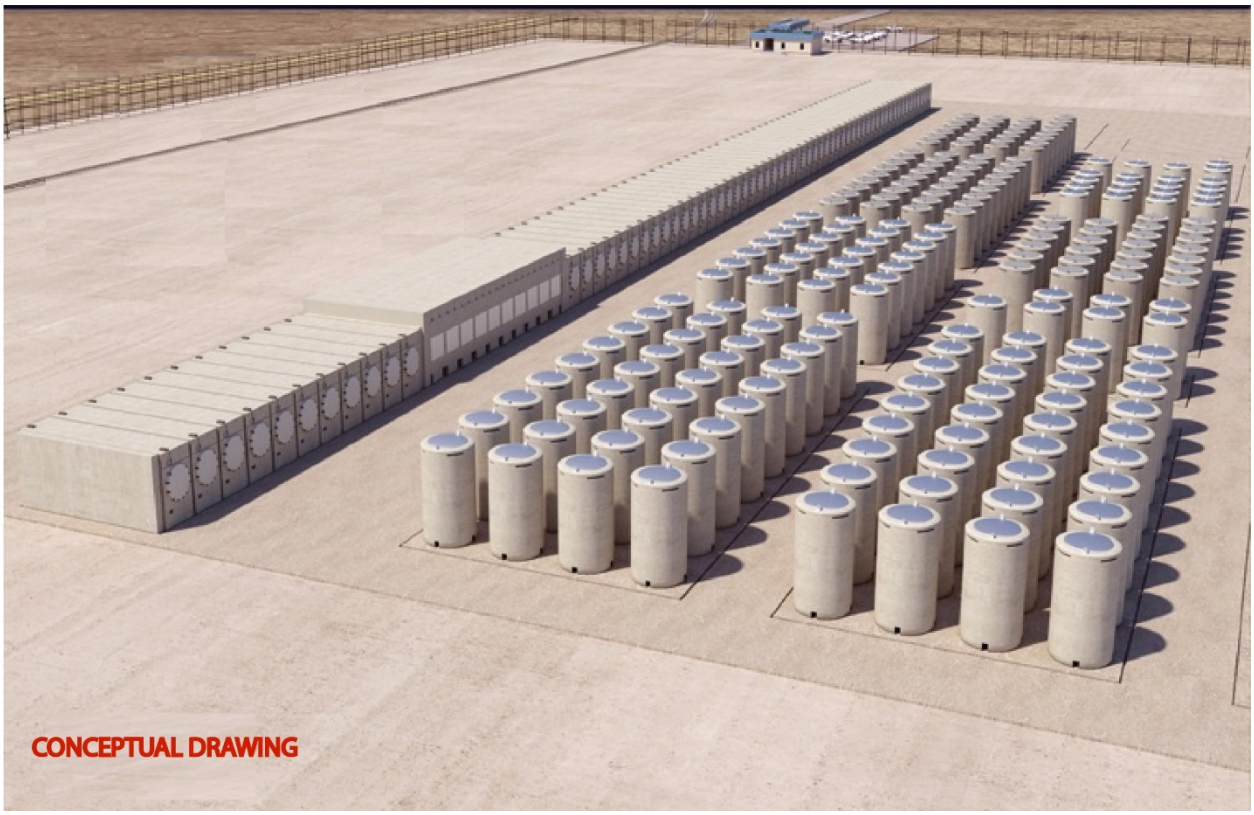

Exhibit C. Pictorial View of Proposed Project (Source: Modified from WCS)

WHERE WOULD THE PROPOSED CISF BE LOCATED?

The proposed CISF would be located in Andrews County, Texas, approximately 52 kilometers (km) [32 miles (mi)] west of Andrews, Texas, and 8 km [5 mi] east of Eunice, New Mexico. The project area would be situated on approximately 320 acres (100 hectares) of land within an approximately 14,000-acre (5,666 hectare) parcel of land that is controlled by WCS (Exhibit D). It would be situated north of WCS's existing waste management facilities and on land controlled by ISP through a long-term lease from WCS. The CISF is located approximately 2 km (1.25 mi) north of Texas State Highway 176 and just east of the Texas/New Mexico state line and State Line Road, also designated Andrews County Road 9998. The topography is relatively flat and slopes gently upwards from Texas State Highway 176 towards the north.

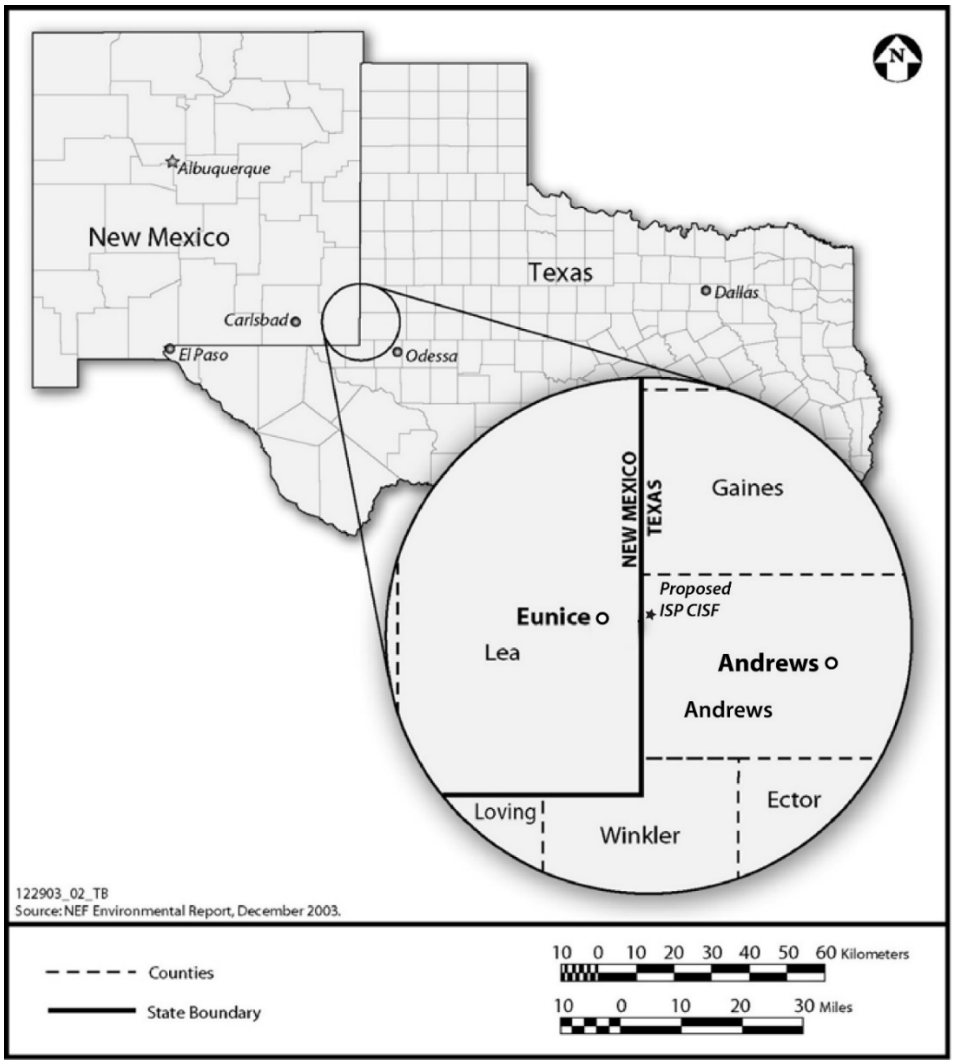

Exhibit D. Proposed Project Location (Source: Modified from National Enrichment Facility Environmental Report, December 2003)

WHAT ALTERNATIVES WERE CONSIDERED?

NO-ACTION ALTERNATIVE

Under the No-Action alternative the NRC would not approve the ISP license application for the proposed CISF. The No-Action alternative would result in ISP not constructing or operating the facility. No concrete storage pad or infrastructure (e.g., cask handling building) for transporting and transferring spent fuel would be constructed. Spent fuel would remain stored at individual sites across the country in existing wet and dry storage facilities in accordance with NRC regulations and would remain subject to NRC oversight and inspection. Site-specific impacts at each of these storage sites would be expected to continue. In accordance with current U.S. policy, the NRC staff also assumes that the spent fuel would be transported to a permanent geologic repository, when such a facility becomes available.

ALTERNATIVES NOT CONSIDERED IN DETAIL

Section 2.3 of the final EIS discusses alternatives to the proposed action that were considered but not evaluated in detail. These alternatives eliminated from detailed analysis include:

- Storage at a government-owned CISF operated by U.S. Department of Energy. This option has not been developed sufficiently and detailed information is not available.
- Alternative design or storage technologies
  - Dry cask storage system design alternatives
  - Hardened Onsite Storage Systems (HOSS)
  - Hardened Extended-Life Local Monitored Surface Storage (HELMS)

  These three options were evaluated. However, they were found to be speculative or did not meet the purpose and need for the proposed action.
- Location alternatives – ISP evaluated three other potential CISF sites, and none was clearly environmentally preferable to ISP's proposed site in Andrews County, Texas; therefore, no other site was selected for further analysis in this final EIS.

WHAT ARE THE CONCERNS OF INTERESTED PARTIES?

To learn about the concerns of interested groups and individuals across the country, public scoping comments were invited through notices in the *Federal Register* [FRNs] for a total of 243 days. Opportunities for public comment were also announced using a variety of methods, including social media [NRC's Facebook and Twitter accounts], electronic media (FRNs, NRC press releases, NRC's public meeting notification system website, and direct email notifications), and traditional media [newspapers and radio]. The NRC held four scoping meetings wherein public comments were transcribed and made part of the public record. Additionally, the NRC accepted scoping comments by e-mail, regular mail, facsimile, and online.

PUBLIC PARTICIPATION

- Scoping meetings were held on:
  - February 13, 2017, in Hobbs, NM;
  - February 15, 2017, in Andrews, TX;
  - February 23 and April 6, 2017, in Rockville, MD.
- NRC published a scoping summary report which is available in ADAMS at https://www.nrc.gov/docs/ML1916/ML19161A150.pdf
- Draft EIS comment meetings were held on October 1, 6, 8, and 15, 2020. These meetings were held virtually due to restrictions associated with the COVID-19 public health emergency.
- Comments received on the draft EIS and the NRC staff's corresponding responses are included in Appendix D of the final EIS.

The concerns raised during scoping helped to inform and focus the development of the draft EIS, which was issued for a 180-day comment period. As with scoping, the NRC announced the opportunity to comment on the draft

EIS using social, electronic, and traditional media; held four draft EIS public comment meetings; and accepted comments additionally by e-mail, traditional mail, facsimile, and online.

Some of the concerns raised during scoping and in draft EIS comments included:

- What are the impacts on local groundwater?
- How will transportation of spent fuel be addressed?
- Will the project disproportionately impact minority and low-income populations?
- How will this site impact public health?

HOW ARE THESE CONCERNS ADDRESSED IN THE FINAL EIS?

The final EIS contains an analysis of the potential impacts of construction, operation, and decommissioning of a CISF on environmental resources. Some of the impacts on resources that were raised during scoping and in draft EIS comments are:

GROUNDWATER IMPACTS

As described in the final EIS, exploratory boreholes installed near the proposed CISF site did not encounter groundwater in the Ogallala Aquifer. Additionally, the Ogallala Aquifer does not underlie the proposed CISF site and is not hydraulically connected to groundwater or aquifers beneath the proposed project area. The nearest Ogallala Aquifer boundary is located at distances between 14 and 19 km [9 and 12 mi] from the proposed CISF project area near Monument Draw, Texas.

Groundwater at the proposed CISF site is located deep below the ground surface, within the Dockum Aquifer (i.e., in the Santa Rosa and Trujillo Formations and in discontinuous saturated zones within the overlying Cooper Canyon Formation red beds), as well as that in the overlying undifferentiated Ogallala-Antlers-Gatuña (OAG) Formation at a depth of approximately 27 to 30 m [90 to 100 ft] below the ground surface. As discussed in the final EIS, water level and geohydrologic information collected from exploratory boreholes at the proposed CISF project site indicates that saturated (water-bearing) zones in the undifferentiated OAG are not connected and are laterally discontinuous.

Potable water for construction and operation of the proposed CISF would be provided by the City of Eunice, New Mexico's Water and Sewer Department through new potable water supply pipelines, extended from the existing potable water system at the WCS site. Drinking water for the City of Eunice (and therefore for the proposed CISF) is pumped by the City of Hobbs Water Department from six groundwater wells screened in the Ogallala Aquifer, southwest of Hobbs, New Mexico. To reduce consumptive water use, ISP would use water conservation practices.

Section 4.5.2 of the final EIS contains further details on ground water impacts.

TRANSPORTATION

Potential transportation impacts include increases in traffic, potential changes to traffic safety, and increased degradation of roads. These impacts would result from transport of equipment, supplies, and produced construction wastes. Workers commuting to and from the facility would also increase traffic. These impacts were found to be minor for the proposed action (Phase 1) and for the potential full build-out of the CISF (Phases 1-8). Other impacts, including radiological and nonradiological health and safety impacts under normal and accident conditions, could result from the proposed use of national rail lines to transport shipments of SNF to and from the CISF. These rail shipments of SNF could include relatively short segments of barge or heavy haul truck transportation as needed to move SNF from reactor sites to the nearest rail line where onsite rail access is limited.

Radiological impacts from transportation to both workers and the public were estimated based on prior NRC transportation risk estimates in NUREG–2125, "*Spent Fuel Transportation Risk Assessment*," and scaled using a representative transportation route that is longer than the distance from most reactor sites to the CISF. Because dose estimates increase with shipment distance, selecting a route with a larger distance than that actually expected is bounding (i.e., it overestimates potential dose). The radiological impact to workers from incident-free transportation of SNF to and from the CISF for the proposed action and for full build-out (Phases 1-8) were found to be below the NRC 10 CFR Part 20 standard dose limit of 0.05 Sv (5 rem) (see Section 4.3.1 of the final EIS).

The potential radiological health impacts to the public from incident-free transportation of SNF to and from the CISF would occur from exposures to the normal radiation emitted (during transportation) from the loaded transportation casks. All of the estimated public health effects from the proposed incident-free SNF transportation for all phases are below the thresholds for health effects (Section 4.3.1.2.2.2 of the final EIS) and, therefore, are most likely to be zero. Someone who stands about 30 meters [98 feet] from the tracks and watches all 3,400 shipments over 20 years would receive a dose of about 0.019 mSv, or 1.9 mrem, of direct radiation emitted from the heavily shielded transportation casks. For comparison, the NRC limits annual public doses from licensed facility operations to 1 mSv [100 mrem] (10 CFR Part 20) and the average annual background radiation exposure in the United States is 6.2 mSv [620 mrem], with approximately 3.1 mSv [310 mrem] from natural sources of radiation and 3.1 mSv [310 mrem] from man-made sources [medical, commercial, and industrial sources].

Impacts from transportation accidents to both workers and the public also were evaluated. All SNF proposed to be transported to and from the CISF would be shipped in canisters that are placed in NRC-certified transportation casks. In the most recent analysis (NUREG–2125, *Spent Fuel Transportation Risk Assessment*), the NRC staff concluded that there is no accidental release of canistered fuel during transportation under the most severe impacts studied, which encompassed all historic or realistic accidents, including fire and impacted force to the casks.

SOCIOECONOMIC IMPACTS AND ENVIRONMENTAL JUSTICE IMPACTS

The socioeconomic impacts from the CISF are primarily associated with new businesses that could be generated, workers who might move into the area, and tax revenues that the proposed project would generate, which would influence resource availability for the community. Tax revenues and economic growth from the proposed project and from the additional workers in the area would create a beneficial impact on the region, while there would be some increased use of public services, schools, and housing demand due to increased population in the region.

Environmental justice refers to the Federal policy established in 1994 by Executive Order 12898 (59 FR 7629), which directs Federal agencies to identify and address disproportionately high and adverse human health and environmental effects of their programs, policies, and activities on minority or low-income populations. The environmental justice review includes an analysis of the human health and environmental impacts on low-income and minority populations resulting from the proposed action (Phase 1), full build-out (Phases 1-8), and the No-Action alternative using census block groups and a 50-mile radius for the analysis. There are 109 block groups that fall completely or partially within the 50-mile radius of the proposed CISF project area. The NRC staff found no activities, resource dependencies (subsistence fishing or farming), pre-existing health conditions, or health service availability issues resulting from construction and operations at the CISF that would cause a health impact for the members of minority or low-income communities within the study area. Therefore, it is unlikely that any minority or low-income population would be disproportionately and adversely affected by the proposed action for all phases.

Sections 4.11 and 4.12 of the final EIS contain more details on socioeconomic and environmental justice impacts.

PUBLIC AND OCCUPATIONAL HEALTH

The radiological impacts from normal operations involve radiation doses to workers and members of the public. Operational doses to workers would occur as a result of their proximity to SNF casks and canisters during receipt, transfer, handling, and storage operations. Public radiation doses from normal operations occur from offsite exposure to low levels of direct radiation from the stored SNF casks. ISP would monitor and control both occupational and public radiation exposures by following a radiation protection program that addresses NRC safety requirements in 10 CFR Parts 72 and 20.

ISP estimated occupational radiation exposures during proposed operations involving the proposed SNF receipt and transfer operations for both vertical and horizontal emplacement in the CISF. From those estimates, the highest receipt and transfer collective dose estimate for the entire crew was 0.01097 person-Sv (1.097 person-rem), where person-Sv (person-rem) is an expression of the collective summation of the individual dose equivalents received by a population exposed to radiation. For comparison, if the proposed operational workforce of 60 employees received the annual occupational dose limit of 0.05 Sv (5 rem), as specified in

10 CFR 20.1201(a), their collective dose would be 3.0 person-Sv (300 person-rem). The maximum individual occupational dose estimate for a transfer operation was 4.5 Sv (450 mrem).

To assess the radiological impacts to the general public from normal operation of the CISF, the NRC staff evaluated ISP's estimates of the potential dose to a hypothetical maximally exposed individual located at the boundary of the facility's controlled area (i.e., protected area), as well as to nearby residents. The potential exposure pathways include direct exposure to radiation (neutrons and gamma rays), including skyshine, emitted from the storage casks. Exposure pathways that would require a release of radioactive material from the casks (e.g., environmental transport to air, water, soil, and subsequent inhalation or ingestion) are not applicable to normal operations.

For the operation stage of the proposed action (Phase 1), ISP estimated a bounding annual dose of 0.07 mSv (7 mrem) to a hypothetical individual that spends 8,760 hours at the controlled area boundary 1,006 m (3,300 ft) from the CISF at full build-out (Phases 1-8) (ISP, 2020). Doses to actual individuals further from the CISF or who spend less time at the boundary would be smaller. The estimated 0.07 mSv (7 mrem) dose is less than the 0.25 mSv (25 mrem) regulatory limit specified in 10 CFR 72.104 for the maximum permissible annual whole body dose to any real individual. Additionally, the 0.07 mSv (7 mrem) annual dose is less than half of the average annual preoperational radiation dose ISP reported in the ER from past monitoring near the proposed CISF project area of 0.168 mSv [16.8 mrem] and one percent of the annual natural background radiation dose in the United States of 3.1 mSv/yr (310 mrem/yr) (see final EIS Section 3.12.1).

SUMMARY OF ENVIRONMENTAL IMPACT LEVELS

For most resource areas, the impacts are SMALL. Resource areas with a SMALL impact are land use, transportation, geology and soils, surface water, groundwater, air quality, noise, historic and cultural resources, visual and scenic resources, public and occupational health, and waste management. Ecology resources would experience a SMALL to MODERATE impact. There would be a SMALL to MODERATE (beneficial) impact to socioeconomics, due to new businesses and residents, and tax revenues. For environmental justice, no disproportionately high and adverse human health and environmental effects were found for minority and low-income populations. Additional information about resource impacts may be found in Chapter 4 of the final EIS.

HOW CAN THE IMPACTS BE REDUCED?

Many of the SMALL impacts are considered minimal because monitoring and use of environmental practices and safeguards would reduce any negative effects on an environmental resource. However, some of the impacts greater than SMALL can be reduced or compensated or prevented from becoming disruptive.

Chapter 6 of the final EIS discusses mitigation measures that would reduce adverse impacts from the construction, operation, and decommissioning of the CISF. Chapter 6 discusses both

mitigation measures to which ISP has committed and additional mitigation measures identified by NRC staff to reduce adverse impacts on the environment.

WHAT IS THE RELATIONSHIP OF THIS PROJECT WITH OTHER PROJECTS IN THE AREA?

Cumulative impacts may result when the environmental effects associated with the proposed project are added to the temporary or permanent effects associated with past, present, and reasonably foreseeable future projects. Cumulative impacts can result from the combination of effects that might have been minor by themselves but become more noticeable when affecting the same resource over a period of time.

Several industrial activities and projects near the CISF were considered relevant in the analysis of cumulative impacts. These activities and projects include the co-located WCS waste storage and disposal facilities, Permian Basin oil and gas development, oilfield waste facilities, and a second CISF proposed in Lea County, New Mexico. Section 5.1.1 of the final EIS contains further details on these projects. The NRC staff used that information, the environmental setting discussed in Chapter 3 of the final EIS, and impacts described in Chapter 4 of the final EIS to independently evaluate cumulative impacts of ISP's proposed CISF in Andrews County, Texas. Exhibit E contains the cumulative impacts considering full build-out (Phases 1-8) of the project.

Exhibit E. Cumulative Impacts Considering Phases 1-8 of the Project

	Cumulative Impact
Land Use	The proposed project is projected to have a SMALL incremental effect when added to the MODERATE impacts from other past, present, and reasonably foreseeable future actions, resulting in an overall MODERATE cumulative impact to land use.
Transportation	The proposed project is projected to have a SMALL incremental effect for traffic-related impacts and a SMALL effect for the radiological effects of SNF transportation, resulting in an overall SMALL cumulative transportation impact.
Geology and Soils	The proposed project is projected to have a SMALL incremental effect when added to the MODERATE impacts from other past, present, and reasonably foreseeable future actions, resulting in an overall MODERATE cumulative impact to geology and soils.
Surface Water	The proposed project is projected to have a SMALL incremental effect when added to the SMALL impacts from other past, present, and reasonably foreseeable future actions, resulting in an overall SMALL cumulative impact to surface water resources.
Groundwater	The proposed project is projected to have a SMALL incremental effect when added to the MODERATE impacts from other past, present, and reasonably foreseeable future actions, resulting in an overall MODERATE cumulative impact to groundwater resources.
Ecology	The proposed project is projected to have a SMALL to MODERATE incremental effect when added to the SMALL to MODERATE impact from other past,

Exhibit E. Cumulative Impacts Considering Phases 1-8 of the Project

	Cumulative Impact
	present, and reasonably foreseeable future actions resulting in an overall SMALL to MODERATE cumulative impact to ecology. "No Effect" on Federally listed species, and "No Effect" on any existing or proposed critical habitats.
Air Quality	The proposed project is projected to have a SMALL incremental effect when added to the MODERATE impacts from other past, present, and reasonably foreseeable future actions resulting in an overall MODERATE cumulative impact to air quality.
Noise	The proposed project is projected to have a SMALL incremental effect when added to the MODERATE impacts from other past, present, and reasonably foreseeable future actions, resulting in an overall MODERATE cumulative impact to noise resources.
Historic and Cultural	The proposed project is projected to have a SMALL incremental effect when added to the SMALL impact from other past, present, and reasonably foreseeable future actions resulting in an overall SMALL cumulative impact to historic and cultural resources. "No historic properties affected" because there are no historic properties present.
Visual and Scenic	The proposed project is projected to have a SMALL incremental effect when added to the MODERATE impacts from other past, present, and reasonably foreseeable future actions, resulting in an overall MODERATE cumulative impact to visual and scenic resources.
Socioeconomic	The proposed project is projected to have a SMALL to MODERATE incremental effect when added to the SMALL to MODERATE impacts from other past, present, and reasonably foreseeable future actions resulting in a SMALL to MODERATE cumulative impact in the socioeconomic region of influence.
Environmental Justice	The cumulative impacts would have no disproportionately high and adverse impacts to low-income or minority populations.
Public and Occupational Health	The proposed project is projected to have a SMALL incremental effect when added to the SMALL impacts from other past, present, and reasonably foreseeable future actions, resulting in an overall SMALL cumulative impact to public and occupational health.
Waste Management	The proposed project is projected to have a SMALL incremental effect when added to the SMALL impacts from other past, present, and reasonably foreseeable future actions, resulting in an overall SMALL cumulative impact to waste management.

WHAT ARE THE NRC'S CONCLUSIONS?

After comparing the impacts of the proposed action to those of the No-Action alternative, the NRC staff, in accordance with the requirements in 10 CFR Part 51, recommends the proposed action (i.e., to construct and operate the proposed CISF and to store temporarily up to 5,000

MTUs [5,500 short tons] of SNF for a period of 40 years), subject to the determinations in the staff's safety review of the application. This recommendation is based on:

- The license application, which includes the Environmental Report and supplemental documents, and ISP's responses to the NRC staff's requests for additional information,
- Consultations with Federal, State, Tribal, and local agencies and input from other stakeholders, including members of the public.
- Independent NRC staff review, and
- Assessments provided in the EIS.

WHAT ARE THE NEXT STEPS IN THE ENVIRONMENTAL REVIEW?

The NRC will decide whether to issue to ISP the license. This decision will be based on the staff's determinations in the final EIS and the final safety evaluation report.

FOR MORE INFORMATION

Readers may access more information about the proposed ISP CISF by:

- Scanning the following QR code

- Visiting the NRC website at https://www.nrc.gov/waste/spent-fuel-storage/cis/waste-control-specialist.html for additional information
- Contacting the NRC Environmental Project Manager James Park at James.Park@nrc.gov or the NRC Safety Project Manager John-Chau Nguyen at John-Chau.Nguyen@nrc.gov.


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