

March 4, 2022

Kim Petry
Acting Deputy Assistant Secretary
Spent Fuel and Waste Disposition
U.S. Department of Energy
1000 Independence Ave., SW
Washington, DC 20585

Re: Consent-Based Siting Process to Identify Federal Interim Storage Facilities Comments

Dear Acting Deputy Assistant Secretary Petry,

On December 1, 2021, the U.S. Department of Energy (DOE) requested information on how to site Federal facilities for the temporary, consolidated storage of spent nuclear fuel using a consent-based approach. On behalf of the New Mexico Environment Department (NMED), this letter constitutes our response to the DOE Request for Information (RFI) and was also submitted electronically to consentbasedsiting@hq.doe.gov.

While NMED offers the attached comments for consideration, the State of New Mexico is firmly opposed to the interim storage of spent nuclear fuel (SNF) and high-level waste (HLW) within or near our borders. DOE's efforts to seek input on a consent-based siting process for federal interim storage facilities stands in stark contrast to the lack of a consent-based siting process for commercial interim storage facilities. Seeking input on a consent-based siting process for federal interim storage facilities creates an inequity in the siting process for SNF and HLW merely based on ownership.

Ultimately, the siting of any interim storage facility in a state, irrespective of whether it manages federal or commercial SNF or HLW, must require concurrence from the current Governor prior to issuing its license or permit to operate.

Thank you for seeking insight from people, communities, and groups that have historically not been well-represented in these discussions, especially states.

Sincerely,

James C. Kenney Cabinet Secretary

General Comments

New Mexico's perspectives on consent-based siting for a federal interim storage facility are based on our actual experiences with the management, permitting, and licensing of radioactive wastes. First, New Mexico is the only state in the nation with an existing repository for low-level waste known as the Waste Isolation Pilot Plant (WIPP) located in Carlsbad, New Mexico. Second, New Mexico continues to raise objection to the non-consent-based siting and licensing of a commercial high-level waste (HLW) facility proposed by Holtec International in Carlsbad, New Mexico. Third, New Mexico continues to raise objection to the licensing of an HLW facility in Texas that is on the New Mexico border known as Waste Control and Storage Services.

Furthermore, Congress authorized \$20 million annually (indexed for inflation) in payments to the State of New Mexico for the maintenance of roadways used for transporting waste to the WIPP facility. However, despite continued requests to extend the lifecycle of the facility, payments to the state ceased in fiscal year 2012. Fundamentally, New Mexico's experience as the host state for the nation's only permanent repository for nuclear waste speaks to the need for the federal government to recognize the contributions of the state and to *guarantee* adequate resources not just for operations and maintenance of the facility but also for the state infrastructure needed to support such a facility.

Our experiences with the proposed interim storage of spent nuclear fuel (SNF) from commercial facilities is equally problematic. The Nuclear Regulatory Commission (NRC) has failed to address the State of New Mexico's technical concerns related to the proposed Holtec International facility as raised in our April 9, 2021, response letter to the draft Environmental Impact Statement (EIS).¹

Request for Information (RFI) Area 1: Consent-Based Siting Process

- 1. How should the U.S. Department of Energy (Department) build considerations of social equity and environmental justice into a consent-based siting process?
 - a. The Department should build considerations of social equity and environmental justice into a consent-based siting process by not treating federally owned/managed wastes different than commercially owned/managed wastes when it comes to siting an interim storage facility. Further, the Department should work with the NRC to establish a singular consent-based process for federal and commercial wastes. Anything less is inherently unequal and will not further environmental justice for impacted communities.
 - b. The Department should: (1) identify and collaborate with communities that have been historically underrepresented in siting decisions and may be affected by siting

¹ See https://www.env.nm.gov/wp-content/uploads/2020/05/2021-04-09-NMED-Comments-on-Portions-of-Holtec-FEIS-Final.pdf.

action(s) (e.g., low-income, Native American Nations, Latinx, colonias, land grant communities, as well as other communities of color); (2) identify and evaluate the cumulative history of adverse human health and environmental effects on vulnerable populations and quantifying specific impacts and health consequences to vulnerable populations that could occur from the various accidents and release scenarios related to the interim storage facility; and (3) work with the states and local jurisdictions to identify key community representative leaders (e.g., non-profit leaders) to assure adequate and balanced community representation during siting discussions.

- c. The Department should address that consent is not indefinite and can change over time. While this creates uncertainty for the projects that are delayed, such a process acknowledges that public health and environmental conditions are dynamic. Further, elected/appointed leaders change and reflect changing views of their community.
- 2. What role should Tribal, state, and local governments and officials play in determining consent for a community to host a federal interim storage facility?
 - a. The use of the word "host" implies that a consent-based storage facility operating in a state would remain an invited "guest" in the state. However, a non-consent-based facility operating in a state is not a guest. Conceptually, states should have the right to consent or not to any such facility, yet the Department and the NRC do not have an equitable, parallel process for essentially the same radioactive wastes. The question itself is flawed and highlights the need for the whole of the federal government to develop a consistent, comprehensive approach rather than asking states to continue with a fractured process.
 - b. Tribal, state, and local governments are gatekeepers in any consent-based process. The Department must negotiate with each separately and seek their independent consent. More specifically, the Department should enter into a cooperating agency agreement with each Tribal, state, and local government for its environmental and safety reviews of any potential site in order to provide the most comprehensive information, including a full and complete characterization of any proposed project and its environmental and safety impacts and implications to a potential host community.

- 3. What benefits or opportunities could encourage local, state, and Tribal governments to consider engaging with the Department as it works to identify federal interim storage sites?
 - a. Funding for local, state, and Tribal staff time to independently analyze federal interim storage site plans may encourage engagement. However, local and Tribal governments are very engaged on this topic in New Mexico, and the majority strongly oppose interim and permanent storage.
- 4. What are barriers or impediments to successful siting of federal interim storage facilities using a consent-based process and how could they be addressed?
 - a. Without a longer-term solution in place, a federal (or commercial) interim storage facility is a de-facto permanent storage facility. Addressing the permanent repository *prior* to addressing interim storage is necessary.
 - b. The non-consent-based siting of commercial interim storage facilities will continue to undermine the Department's efforts on this topic. The federal government should adopt a wholistic, comprehensive approach to consent-based siting.
 - c. Historically underrepresented communities may be hesitant to participate due to a history of siting facilities, mines, tailings piles, toxic waste dumps, etc. in poor and minority communities. The Department could hold listening sessions about past injustices.
 - d. Finally, the Department's commitment to successful siting of a federal interim storage facility using a consent-based process may best be demonstrated by relocating staff to the state to interface with stakeholders fulltime for a requisite period of time to meaningfully engage with stakeholders on their time and in their communities.
- 5. How should the Department work with local communities to establish reasonable expectations and plans concerning the duration of storage at federal interim storage facilities?
 - a. The Department should promote and provide information and frequent briefings to state, Tribal, and local community groups with a clear message of understanding among partners of what would lie ahead following an agreement to proceed with a project. This information must include what is known and what is unknown regarding risks associated with federal interim storage facilities. Spent reactor fuel and high-level nuclear waste are complex topics that are not easily understood by communities. All aspects of risks and protections for workers and the community

during operations and eventual shut-down must be identified, assessed, and explained in plain terms along with a condition to conduct short- and long-term community and environmental monitoring. Reasonable community expectations regarding the duration of the storage may be addressed by the following:

- i. Provide a clear timeline that starts with consultation/engagement commencement and continues with milestones throughout the consultation/engagement process. The timeline with milestones should continue through the regulatory/licensing process. For all stages of the timeline and milestones, the Department should publish on its website a graphic that interfaces with key documents, meetings, public testimony, decisions, etc. in real-time. A mirror website for those with limited English proficiency should also be developed and maintained in real-time.
- ii. Provide a clear and detailed explanation of amounts and types of nuclear material for interim storage and processing for permanent off-site disposal.
- iii. Provide an explanation of the types of radioactivity expected, doses occurring during operations, and its potential harmful effects on workers and the off-site community.
- iv. Provide accurate quantities of drums, bins, and spent fuel rods planned or expected for interim storage.
- v. Define safe storage capacity and identify minimum and maximum amounts of material to be stored.
- vi. Explain if liquid radioactive waste and mixed waste will be stored.
- vii. Explain if there will be any planned or unplanned radioactive air discharges or releases.
- viii. Explain potential dangers of a criticality event.
- ix. Explain the frequency of independent inspections at the facility.
- x. Provide notifications and reports on radiation doses expected or measured at and near the facility during operations.

- xi. Provide notifications and reports on changes to duration of storage and operations.
- xii. Identify and report on the physical condition of arriving and stored nuclear material and the assurance of its safe stability in storage.
- xiii. Ensure trusted safety and mitigation measures will be in place to assure worker and community safety during and after operations cease.
- 6. What organizations or communities should the Department consider partnering with to develop a consent-based approach to siting?
 - a. The Department should partner with the following organizations and communities to develop a consent-based approach to siting: Native American Tribes and Nations; colonias; land grant communities; nonprofit organizations that protect public health and the environment, especially those run by and with a focus on Native Americans, Hispanics, and other communities historically underrepresented in siting and other environmental decisions; state governments (e.g., public health, environment, and transportation departments); county governments; town/village councils; economic development agencies and labor groups; emergency response systems, including fire, law enforcement, environmental response contractors, and medical response; and local area hospitals.
- 7. What other issues, including those raised in the 2017 Draft Consent-Based Siting Process, should the Department consider in implementing a consent-based siting process?
 - a. Ultimately, the siting of any interim storage facility in a state, irrespective of whether it manages federal or commercial SNF or HLW, must require concurrence from the current Governor prior to issuing its license or permit to operate.
 - b. The Department should work with Congress to codify into law a "for cause" termination of any permitted or licensed interim storage facility that successfully completed the consent-based siting process if there is intentional or unintentional misrepresentation of fact or circumstance discovered after the process is completed.
 - c. The Department should work with Congress to codify into law a "for cause" revocation of consent threshold or process. Further, the Department should work with Congress to codify into law a threshold or process to withdraw consent after a license or permit is issued with an adjudication process, placing the burden on the licensee or permittee to continue to operate not the "host" state.

- d. The Department should communicate clearly that given the history of SNF storage and disposal, temporary storage locations may turn into long-term or permanent storage locations without Congressional action. The Department should work with Congress to codify into law that an interim storage facility cannot constitute a permanent storage facility without the successful completion of a new consent-based process.
- e. Future potential drinking water sources and future potential drinking water transportation corridors need to be considered. As water resources become increasingly scarce, treatment of poor-quality water and transporting water to communities that no longer have an adequate supply may become more common. Placing a facility in an area where water resources are too saline or too deep to be currently used could reduce the option to use them in the future when new treatment technologies or increased demand might make these sources a viable option.
- f. Consent along transportation corridors must be included in the interim storage facility siting process.
- g. Facilities or structures for storing SNF should not be sited in proximity to existing critical infrastructure, including power generation, pipelines, petroleum storage tanks, etc.

RFI Area 2: Removing Barriers to Meaningful Participation

- 1. What barriers might prevent meaningful participation in a consent-based siting process and how could those barriers be mitigated or removed?
 - a. Limited English Proficiency. Language can be a significant barrier to meaningful participation. Materials and public notices should be translated into multiple written and spoken languages. Traditional newspaper advertisements should be supplemented with spoken announcements on radio, television, and social media platforms.
 - b. Trust of Government. Historically underrepresented communities may be hesitant to participate due to a history of siting facilities, mines, tailings piles, toxic waste dumps, etc. in poor and minority communities. The Department could hold listening sessions about past injustices. Compensation for and repair of past harms, including providing medical treatment, restoring damaged ecosystems, and/or providing additional services as requested by affected communities, could result in more participation, in addition to partially restoring justice.

- c. Information Accuracy. The Department should identify realistic challenges in advance (i.e., state, Tribal, and local laws, regulations, or restrictions) and open discussions early on with all stakeholders on project feasibility considering identified challenges. The Department should always assure that factual and science-based information regarding the project is released to the public. When the Department and partners interact with stakeholders in public settings, subject matter experts should fact check and quickly respond to misinformation conveyed.
- 2. What resources might be needed to ensure potentially interested communities have adequate opportunities for information sharing, expert assistance, and meaningful participation in the consent-based siting process?
 - a. In general, local, state, and Tribal governments are not funded by the federal government to engage on SNF interim storage facilities. The Department should fund local, state, and Tribal governments to staff the consent-based siting process from beginning to end. A consent-based siting process may create an unfunded mandate on local, state, and Tribal governments. The Department should not presume that local, state, and Tribal governments have the funding for staff and contractors to adequately and meaningfully engage in this process.
 - b. Adequate staffing and funding resources would be needed for outreach by multiple methods, including: in-person communication with leaders as well as non-leaders of underrepresented communities (e.g., Native American, Latinx, African American); online webinars; project website; translation services for local languages; facilitation services for community meetings; and hiring members of underrepresented communities to explore concerns and ideas.
 - c. The Department should develop educational and fact-based media clips and handouts featuring proposed scenarios in addition to providing an overview of: radiation safety and dose; risks to workers and community; community economic opportunities during and following operations; potential short- and long-term effects to the local environment; and comparisons to similar and successful Department projects.
 - d. The Department should frequently post multi-lingual project briefs and notifications through the following venues: local papers; local TV; email lists; mailings; local radio; and posting boards at the project site, universities and community colleges, local library, state office buildings (e.g., break rooms), grocery and general stores, laundry mats, coffee shops, municipal building and community meeting places, chapter houses, community senior citizen facilities, post offices, and power/telephone poles.

- 3. How could the Department maximize opportunities for mutual learning and collaboration with potentially interested communities?
 - a. The Department could relocate staff to live in the area the proposed interim storage facility may be located throughout the consent-based siting process. Further, the Department could fund a body of select local, state, and Tribal governments to provide ongoing feedback to the Department.
 - b. The Department could maximize opportunities for mutual learning and collaboration with potentially interested communities by engaging deeply with members of underrepresented communities, as noted previously. Additionally, the Department should identify and frequently interact with state officials and key community leaders by establishing a meeting schedule to brief leaders on progress, hurdles, and shortfalls. The Department should set up a local office at the site, or in the nearby community, for administration activities and to hold public gatherings. The Department should designate an on-site or community-based point-of-contact and support staff to interface with the state regulators, community, and other stakeholders.
- 4. How might the Department more effectively engage with local, State, and Tribal governments on consent-based siting of federal interim storage facilities?
 - a. The Department could relocate staff to live in the area the proposed interim storage facility will be located throughout the consent-based siting process. Further, the Department could fund local, state, and Tribal governments to engage in the consent-based siting process.
 - b. The Department should utilize existing Tribal councils or the Tribal Radioactive Materials Transportation Committee to facilitate consent among Native American Nations and provide a path to incorporating Tribal knowledge into the interim storage siting process.
 - c. The Department needs to assure adequate and balanced local, state, and Tribal community representation during all discussions.
- 5. What information do communities, governments, or other stakeholders need to engage with the Department on consent-based siting of federal interim storage facilities?

- a. Communities, governments, and other stakeholders need information related to the total process, their role in that process, and how to engage generally and meaningfully at the decision points. Communities, governments, and other stakeholders need to understand the key decisions points in the process timeline.
- b. Communities, governments, and other stakeholders need information from sources both outside of and inside the Department about the history of SNF storage and the fact that no permanent solution has yet been found for the safe storage of SNF for the thousands of years required until it no longer poses a threat to the health of humans and other organisms.
- c. Communities, governments, and other stakeholders need information regarding project feasibility, an accurate and science-based project overview, information on economic effects (i.e., before, during, and cessation of operations), environmental risks, and human and health risks.
- d. Communities, governments, and other stakeholders need information pertaining to the development and operations of a federal interim storage site. Stakeholders may ask whether the federal interim storage facility would potentially turn their community into a sacrifice zone upon cessation of operations.

RFI Area 3: Interim Storage as Part of a Waste Management System

- 1. How can the Department ensure considerations of social equity and environmental justice are addressed in developing the nation's waste management system?
 - a. The Department must comprehensively address federal laws, rules, and executive orders related to these topics and genuinely ensure they guide the process, especially related to cumulative impact and limited English proficiency. An independent audit of decisions and outcomes, including unconscious bias of Department management and staff, must be part of the process.
 - b. The Department should ensure considerations of social equity and environmental justice are addressed in developing the nation's waste management system by: (1) ensuring all Department staff undergo anti-racism training; (2) identifying and collaborating with communities that have been historically underrepresented in siting decisions and may be affected by siting action(s) (e.g., low-income, Native American Nations, Latinx, colonias, land grant communities, as well as other communities of color); (3) identifying and evaluating the cumulative history of adverse human health and environmental effects on vulnerable populations and quantifying specific impacts and health consequences to vulnerable populations that could occur from the various accidents and release scenarios related to the nation's

waste management system; and (4) working with the State of New Mexico to identify key community representative leaders (e.g., non-profit leaders, governmental leaders) to assure thorough and balanced community representation during national waste management system discussions.

- c. A project timeline for consent-based siting must include an iterative analysis of social equity and environmental justice in developing the nation's waste management system.
- 2. What are possible benefits or drawbacks to co-locating multiple facilities within the waste management system or co-locating waste management facilities with manufacturing facilities, research and development infrastructure, or clean energy technologies?
 - a. The possible drawbacks of co-location include: operational disruption from accidents, physical or cyber-attacks; increased chance of large-scale contamination due to a physical or cyber-attack with transportation, repackaging, or storage; increased large-scale contamination of land area affected and number of sources within a given area that could shut down multiple operations; greater impacts to larger numbers of people involved in the same area of work in a given location; long-term, cumulative negative environmental and human health effects; and geographic stigma that could threaten future economic conditions of the community and region.
- 3. To what extent should development of an interim storage facility relate to progress on establishing a permanent repository?
 - a. The Department should first identify a permanent repository process and candidates before siting any interim storage facilities. Once that occurs, the Department should demonstrate a reasonable and believable schedule for the operation and closure of the consent-based interim facility to be synchronized with the opening of a permanent disposal facility. The partners and communities may not be open to the Department siting an interim storage facility without a guarantee of a permanent storage repository directly linked to the closing of the interim site.
- 4. What other issues should the Department consider in developing a waste management system?
 - a. The Department's efforts to seek input on a consent-based siting process for federal interim storage facilities stands in stark contrast to the lack of a consent-based siting process for commercial interim storage facilities. Seeking input on a consent-based

- siting process for federal interim storage facilities creates an inequity in the siting process for SNF and HLW merely based on ownership.
- b. Ultimately, the siting of any interim storage facility in a state, irrespective of whether it manages federal or commercial SNF or HLW, must require concurrence from the current Governor prior to issuing its license or permit to operate.
- c. Interim storage discussions should include analysis of the complexity of transporting SNF across the nation multiple times. The current system requires transportation from the generator site to treatment facilities and then to interim storage facilities before transport to the final disposal facility location. The NRC stated in its Waste Confidence Decision (SECY-14-0072: Final Rule: Continued Storage of Spent Nuclear Fuel (RIN 3150-AJ20), July 21, 2014, https://www.nrc.gov/docs/ML1417/ML14177A474.pdf) that SNF can be stored safely beyond the operating life of a power reactor, at their current locations, until a national repository for SNF is established. States and regional groups have consistently supported moving the fuel only once – from current locations to a national permanent repository. Moving SNF multiple times increases the likelihood of accidents within the State of New Mexico and elsewhere. To promote public trust, the Department should research all infrastructure and routes of proposed transportation that would support the interim storage facility. The Department should address any infrastructure, social equity, and environmental justice considerations of the immediate community and affected distal communities (including neighboring states) that would be part of the network for transporting HLW and spent fuel rods to and from the site.
- d. The presence of non-radiological contaminants, including hazardous waste, that may potentially be discharged to soil, water, and air during operation of the site should be included in any waste management system design and operations and maintenance plans. Without thorough characterization of non-radiological contaminants present, neither the NRC nor the State of New Mexico can properly and effectively eliminate or mitigate potential discharges. Siting requirements should include analysis of all possible pathways for public and worker exposure to both radiological a non-radiological hazards related to the transportation and interim storage of waste.

- e. Design and implement plans for environmental multi-media (air, soil, water, biota, etc.) surveillance monitoring along transportation routes and the facility location, including the characterization of baseline conditions. The Department should also consider the long-term monitoring implications on local, state, and Tribal resources for storage sites and transportation routes.
- f. The Department must consider all local, state, Tribal, and federal protection standards and required regulatory actions.
- g. The Department should consider emergency response resources available within the context of local, state, and Tribal resources.
- h. The Department must include a safety analysis within an environmental review or National Environmental Policy Act (NEPA) analysis.