



SECRETARY OF THE NEW MEXICO ENVIRONMENT DEPARTMENT JAMES C. KENNEY

LETTER OPPOSING THE NUCLEAR REGULATORY COMMISSION'S FINAL ENVIRONMENTAL IMPACT STATEMENT'S RECOMMENDATION TO GRANT HOLTEC INTERNATIONAL'S LICENSE TO STORE SPENT NUCLEAR FUEL

As the Secretary for the New Mexico Environment Department (NMED), I am responsible for preventing and remediating contaminants released to air, land and water that have the potential to migrate into New Mexico and create threats to human health and the environment for current and future generations. I join the New Mexico Attorney General's Office in opposing the U.S. Nuclear Regulatory Commission's (NRC) recommendation in its July 2022 final environmental impact statement (FEIS) to approve the Holtec International (Holtec) license application to construct and operate a consolidated interim storage facility (CISF) for spent nuclear fuel (SNF) and Greater-Than-Class C waste, along with a small quantity of spent mixed oxide fuel at a site located approximately halfway between the cities of Carlsbad and Hobbs, in Lea County, New Mexico.

It is my understanding that the NRC's proposed action is the issuance of a license authorizing a CISF to store up to 8,680 metric tons of uranium (MTUs) (9,568 short tons) in 500 canisters for a license period of 40 years at the site that can be renewed at the end of every term. The license would allow Holtec to subsequently request amendments to the license, that, if approved, would authorize Holtec to store an additional 500 canisters for each of 19 expansion phases of the proposed CISF (a total of 20 phases), to be completed over the course of 20 years, and to expand the proposed facility to eventually store up to 10,000 canisters of SNF. This is more than the previously proposed permanent Yucca Mountain waste repository site.

In addition to participating in the environmental review process as a limited-in-scope cooperating agency, NMED submitted detailed comments on the Draft Environmental Impact Statement (DEIS) and they are incorporated by reference herein. After reviewing the FEIS, NMED is concerned with NRC's the evaluation and findings. NMED's on-going and unresolved concerns are set out below.

1. **Seismic Activity:** The proposed seismic hazard analysis was deficient. Powerful earthquakes may occur, and the proposed action fails to account for the potential for geologic activity to impact the proposed facility. See FEIS Section 3.4. The FEIS provides general information about the history of earthquakes in the region, including earthquakes caused by fluid injection by the oil and gas industry, and asserts that CISF infrastructure will be designed to withstand seismic events, but does not provide specific information about these safeguards. Further, the proposed SNF canisters will be stored on concrete pads on the ground surface exposed to the elements directly above shallow groundwater sources in an area with recent seismic activity. Seismic activity could pose a threat to SNF canisters and pads over time, putting New Mexico's groundwater and residents at risk.
2. **Contaminant Migration:** NMED informed the NRC that the draft EIS lacked complete and thorough evaluation of contaminant release scenarios, the resulting migration and exposure pathways, and the resulting risks to human and ecological health, but no changes were made in the FEIS to address these issues. The FEIS's limited spatial scale in a region of obvious seismic risk, and the evaluation of cumulative impacts to groundwater resources is inadequate.

The FEIS fails to provide a conceptual hydrologic site model, and ignores hydraulic relationships between shallow groundwater, springs and playas in the area. NMED also commented on groundwater chemical background inconsistencies and inadequacies.

The proposed site is in an area that is underlain by concerns for sinkhole development and shallow groundwater that does not provide deep geologic isolation for indefinite SNF storage. So, if there is any discharge of SNF at the CISF site, New Mexico's groundwater and surface water will be directly impacted. Additionally, some 600 boreholes that could provide a migratory pathway for contaminant migration to groundwater are known to be on the Holtec property, and the FEIS does not provide information on how many boreholes have been improperly abandoned. The EIS does not address adequate protection of groundwater beneath the site.

3. Transportation: Most, if not all, of the SNF that will be stored at the CISF site will be transported to the site by railroads within New Mexico and on New Mexico roads from nuclear reactor sites all over the country, and then transported to a permanent storage site (assuming one is ever created) by the same routes. Moving SNF multiple times through New Mexico only increases the unnecessary risk to public health, safety, and the environment and increases the likelihood of accidents within the State of New Mexico and elsewhere. Moreover, states and regional groups have consistently supported moving spent nuclear fuel only once – from current locations to a national permanent repository.

The transportation of SNF using railways creates risk everywhere along the transportation routes, but transportation was not considered as a connected activity throughout the environmental impact analysis process, and improvements to rail lines were not evaluated. The result is the CISF will rely on New Mexico's limited resources to mitigate any risks of harm from a transportation accident. This avoidable risk was not considered in the alternatives analysis.

4. Storage Lifespan: A permanent repository for high-level radioactive waste does not exist in the United States and there is no existing plan to build one, so the NRC cannot guarantee that a permanent repository for SNF in the United States will be developed in the foreseeable future, or that the CISF site will not become a permanent repository.

Further, the FEIS does not address the temperature rating of the SNF canisters and if maximum summer temperatures at the site are within this temperature rating; nor does the FEIS discuss how the concrete pads used to store SNF canisters will be protected or repaired from cracking and spalling due to exposure to the elements of the arid Southwest. New Mexico does not have the luxury of assuming the canisters will be removed or replaced before they have eroded or degraded and contamination is occurring.

In addition, the FEIS fails to provide details of the radionuclides and activities in the spent fuel rods and only references metric tons of uranium (MTU) in the fuel rods that were originally placed in the nuclear reactors. Spent fuel rods can be much more radioactive than the original fuel rods due to the presence of a mixture of byproducts from uranium fission. Radionuclide activities in spent fuel rods can depend on age, uranium burnup and decay, and the type of reactor that was used. As fuel rods age, they are subject to corrosion, damage or cladding, and the potential for explosive levels of hydrogen to build up inside the canisters. As the storage lifespan of the canisters and storage site come to an end, the risk to the environment rises dramatically. These are all issues not discussed in the FEIS.

5. Environmental Justice: Failure to identify and evaluate the cumulative history of adverse human health and environmental effects on New Mexico’s vulnerable populations and failure to quantify specific impacts and health consequences to vulnerable populations in New Mexico that might occur from the various accidents and release scenarios considered in the FEIS are two examples of the insufficiency of the NRC’s evaluation of environmental justice. New Mexico is already home to contaminated former uranium mining and milling sites on and near tribal lands, legacy contamination at national laboratories, and disposal of defense waste at the Waste Isolation Pilot Plant (WIPP), which have long created risks to public health and the environment in the State of New Mexico. The proposed action threatens minority and low-income populations in New Mexico that have already suffered disproportionately high adverse human health and environment effects from nuclear energy and weapons programs of the United States.

Finally, on July 13, 2022, Governor Michelle Lujan Grisham issued the following statement after the NRC announced it intends to issue a license to Holtec for the construction and operation of an interim nuclear waste storage facility in New Mexico:

“Despite my strong objections and concerns over public health, economic, scientific, natural resource and environmental justice – and those of tribal leaders, local governments, and the people of New Mexico – the NRC is effectively choosing profit over public interest.”

“The NRC has unilaterally decided to house the nation’s spent nuclear fuel in New Mexico, despite the fact that our state has not one nuclear power plant within its borders. And while the NRC and Holtec International say that the proposal is ‘temporary,’ a 40-year license with the opportunity for renewal will threaten the health and safety of generations of New Mexicans.

“The state of New Mexico will not become a dumping ground for the nation’s spent nuclear fuel due to Congress’s failure to identify a permanent disposal solution for commercial nuclear waste. My message to the state Legislature is clear: deliver a proposal to my desk that protects New Mexico from becoming the de facto home of the country’s spent nuclear fuel and it will have my full support.”

For the above reasons, the Governor of New Mexico and I strongly disagree with the NRC’s recommended action to approve the Holtec license and recommend the No Action Alternative.

Dated: August 8, 2022

James C. Kenney
Cabinet Secretary