SECRETARY OF THE NEW MEXICO ENVIRONMENT DEPARTMENT JAMES C. KENNEY

LETTER IN SUPPORT OF THE STATE OF NEW MEXICO'S LETTER OPPOSING THE NUCLEAR REGULATORY COMMISSION'S FINAL ENVIRONMENTAL IMPACT STATEMENT'S RECOMMENDATION TO GRANT INTERIM STORAGE PARTNER LLC'S LICENSE TO STORE SPENT NUCLEAR FUEL

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As the Secretary for NMED, I am responsible for preventing and remediating contaminants released to land, air and water that have the potential to migrate into New Mexico and create threats to human health and the environment. I join the New Mexico' Attorney General's Office in opposing the U.S. Nuclear Regulatory Commission's (NRC) recommendation in its July 29, 2021, final environmental impact statement (EIS) to approve the Interim Storage Partners, LLC (ISP) 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 the Waste Control Specialists (WCS) site in Andrew County, Texas.

It is my understanding that the NRC's proposed action is the issuance of a license authorizing a CISF to store up to 5,000 metric tons of uranium (MTUs) (5,500 short tons) for a license period of 40 years at the WCS site that can be renewed at the end of every term. The license would allow ISP to subsequently request amendments to the license, that, if approved, would authorize ISP to store an additional 5,000 MTUs (5,500 short tons) 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, to expand the facility to eventually store up to 40,000 MTUs (44,000 short tons) of SNF. This is more than the previously proposed Yucca Mountain site.

NMED is familiar with the WCS site due to its location along the Texas-New Mexico border, and because WCS already submits groundwater monitoring reports to NMED as part of its Groundwater Discharge Permit for WCS's waste disposal operations in Texas. NMED has previously submitted comments on the Draft Environmental Impact Statement (DEIS) and they are incorporated by reference herein. In addition, NRC never contacted my office or staff to discuss the DEIS concerns or any other matter. After review, NMED has concerns with the evaluation and findings of the EIS. NMED's concerns are set out below.

1. **Seismic Activity**: The geologic formation (Central Basin Platform) is heavily faulted, and the proposed seismic hazard analysis was deficient. On March 26, 2020, a magnitude 5.0 earthquake struck West Texas near the New Mexico border. More 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 EIS 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 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 final EIS to address these issues. The EIS's limited spatial scale in a region of obvious seismic risk, and the evaluation of cumulative impacts to groundwater resources is inadequate and the existing Texas Pollutant Discharge Elimination System (TPDES) Permit, and monitoring conducted pursuant to that permit, is not an adequate substitute for New Mexico's groundwater permitting and monitoring requirements.

   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. Groundwater flow beneath the existing waste cells at the WCS site is predominantly to the southwest towards New Mexico, and surface water flow from the WCS site is directed through outfalls that flow directly into New Mexico. 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 cause a migratory pathway for contaminant migration to groundwater are known to be on the WCS property, and the EIS does not provide information on how many boreholes have been improperly abandoned.

3. **Transportation**: Most, if not all, of the SNF that will be stored at the ISP 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 repository.

   The transportation of SNF using railways creates risk anywhere along the transportation routes, but transportation was not considered as a connected activity by the EIS, and improvements to rail lines and rail infrastructure were not evaluated. The result is the ISP 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 no action alternative.

4. **Storage Lifespan**: The lifespan for the storage facility and cask, canisters, and assemblies is for eighty (80) years and the lifespan for the SNF storage site is one hundred and twenty (120) years. However, 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 ISP site will not become a permanent repository.

Further, the EIS does not address the temperature rating of the SNF canisters and if maximum summer temperatures at the site are within this temperature rating, and the EIS does not 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 the canisters have eroded or degraded and contamination is occurring.

In addition, the EIS 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. All issues not discussed in the EIS.

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 EIS 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 disproportionally high adverse human health and environment effects from nuclear energy and weapons programs of the United States.

For the above reasons, NMED disagrees strongly with the recommended action of approving the Interim Storage Partners LLC's License and recommends the No Action Alternative.

Dated: September 14, 2021

James C. Kenney

Cabinet Secretary