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July 12, 2018

Ms. May Ma
Office of Administration
Mail Stop TWFN-7-A60M
US Nuclear Regulatory Commission
Washington, DC 20555-0001

COMMENT (205)
PUBLICATION DATE: 3/30/2018
CITATION # 83 FR 13802

RE: Docket NRC-2018-0052 Scoping comments for Environmental Impact Statement of the Proposed Consolidated Interim Storage Facility for Spent Nuclear Fuel in Lea County, New Mexico, Project being proposed by Holtec International

Dear Ms. Ma:

The Iowa Chapter of the Sierra Club has 6500 members spread across the state of Iowa. We are interested in protecting the environment and protecting the natural communities in the state.

Based on material provided at the public meeting in Carlsbad, New Mexico, on May 3, 2018, which I attended, the scoping process is to:

- Define the proposed action for the environmental impact statement (EIS)
- Determine the scope of the EIS and identify the significant issues to be analyzed in depth
- Identify and eliminate from detailed study issues which are peripheral, are not significant, or have been covered by prior environmental review
- Identify other environmental review and consultation requirements related to the proposed action

With that in mind, the Iowa Chapter of the Sierra Club offers the following comments. My comments will pertain to the Holtec project as it affects Iowa's land, water, air, and inhabitants.

Nuclear Regulatory Commission rules require that the Environmental Impact Statement must examine transportation issues.

Iowa will be a major transportation route for moving the spent fuel rods from power plants to the interim storage site in Lea County, New Mexico.

Iowa railroads are expected to be used to transport the spent fuel rods from nuclear power plants from the north-eastern United States, as well as the upper Midwest (Minnesota, Michigan, and Illinois), and also from the Duane Arnold nuclear power plant in Palo, Iowa. Based on the discussion at the Carlsbad scoping meeting, it is my understanding that the spent fuel will be shipped via a unit train which is a train that is shipping no other items. The train will consist of several engines and one or two rail cars each holding one canister of spent fuel rods.

Additionally Iowa's roads are expected to be used to transport the spent fuel rods, primarily Interstate 80 and Interstate 35, as well as roads in Linn County, Iowa, from the Duane Arnold Energy Center in Palo, Iowa.

Because the Duane Arnold plant is in Iowa, it is expected that the fuel canisters will be loaded onto rail cars in Iowa. That means that there will be a truck-to-rail transfer area with specialized equipment to handle the fuel canisters somewhere in Linn County, Iowa.

Several other nuclear power plants reside close to Iowa's borders - Quad-Cities Generating Station in Cordova, Illinois; Cooper Nuclear Station in Brownville, Nebraska; and Fort Calhoun Nuclear Generating Station in Omaha, Nebraska, which ceased operation in 2016. It is not clear, at this point, if any of the spent fuel from these nuclear power plants will be transported on highways within Iowa.

Throughout the 40-year license period one to two shipments of spent fuel rods will arrive in Lea County, New Mexico, every day. Not all of those shipments will travel through Iowa. However, it is conceivable that Iowa will be hosting a significant number of shipments.

The EIS should review the safety of the current rail lines in Iowa that are expected to be used in moving the fuel canisters, including what would be required to harden the route to ensure that it can safely handle the weight of the unit train.

The EIS should examine the long-term viability of the railroads during the 40-year permit period or longer.

The railroads in Iowa are privately owned. That means that the investments in improvements to the railroad tracks, signals, and rail bed will be made by the railroads themselves. The EIS should examine the long-term stability of the railroads and their financial ability to maintain the track.

The effects of climate change have affected Iowa's weather in significant ways and will continue to have major effects in the foreseeable future. Every major river body across the state has experienced 100-year floods in the last 10 years, with some of the rivers facing more than one 100-year flood in that time period. These floods will challenge the rail companies in keeping their tracks safe. In 2008, floodwaters washed away the rail bed, leaving the track exposed with no underground support, on a track in the Cedar Falls area. Continued flooding can have costly effects on the integrity of the railroad tracks and bed.

The EIS needs to review contingencies should the railroads show that they are unable to satisfactorily maintain the track during the 40-year permit period.

Should the railroads be unable to maintain the track, then alternate funding sources need to be examined.

Along with that, the Nuclear Regulatory Commission needs the ability to embargo the unit train carrying the spent fuel rods should the rail companies become unable to maintain the track to a high level of safety.

The EIS needs to assess the ability to keep the unit train in good working order. Additionally the EIS needs to determine what backup engines and rail cars are necessary for keeping the shipments moving.

The EIS needs to assess the ability of the rail company, the utility company, Holtec, and the United States Government to transfer a spent fuel canister from one rail car to another in an emergency.

The EIS needs to review the ability of independent inspectors to monitor the safety of the track, with the ability to embargo shipments should the track become unsafe for the unit train to carry the spent fuel rods.

The EIS needs to review the ability to halt shipments over track during times of floods, train malfunction, high heat which affects the rails and sometimes stops shipments over the rails, issues with repairing the track, and emergencies involving the rail line. Along with halting the shipments is the ability to safely and securely "park" the unit train.

I have personally been on Amtrak as it crossed flooded areas around the Mississippi River. Although Amtrak was able to slowly wind its way through the flood zone, it may be safer to halt travel on the tracks. That may mean that the unit train must be parked somewhere until it can continue its journey.

The EIS needs to examine if there are safe and secure parking areas for the unit train to park during times when it cannot continue travel along the tracks. The EIS should determine what kind of security staff are needed, beyond the security detail traveling with the unit train, when a unit train has to be parked for a period of time.

The EIS needs to review the financial ability of the utilities, rail companies, Holtec, and the United States government to make communities, businesses, and residents whole should a spill or leak occur during shipment.

I am aware of efforts in the United States legislature to transfer ownership of the spent fuel rods from the utility company to the United States government. Even so, should a canister fail during shipment, then the local community can suffer expensive costs in cleaning up the radiation and may find themselves permanently removed from a contaminated area.

The EIS needs to evaluate the use of hardened on-site storage (HOSS) versus transporting the spent fuel to an interim storage facility in Lea County, New Mexico.

As part of the study, the Nuclear Regulatory Commission should evaluate if the interim storage becomes permanent due to the inability to site a permanent waste storage facility. In essence, the Holtec site in Lea County could become a permanent repository.

Nuclear waste is a problem that will continue long into the future. The need for a safe effective long-term solution is important. Some of the nuclear power plants have been operating for over 40 years. Further, legally utility companies have up to 65 years to dismantle their power plants once they cease operation.

The EIS needs to evaluate the roads that will be used to transport the spent fuel from the power plant to the loading docks for the unit train, including what would be required to harden the roads to ensure that they can safely handle the trucks transporting the fuel. A special look should be taken to determine the safety of the bridges.

The EIS needs to evaluate the ability to safely ship the spent fuel canisters in light of efforts of terrorists to sabotage the shipment.

September 11 showed us the extremes some individuals and groups will take to destroy property in the United States. These unit trains could become a target.

Although a security detail is expected to ride in the unit train and although law enforcement in local communities will be alerted about the shipments, it is imperative that the EIS study the ability of the United States and local law enforcement to keep tabs on terrorist groups intent on destroying the unit train or gaining access to the nuclear fuel.

The EIS needs to determine if barges in the Missouri River and the Mississippi River can safely be used to transport the spent fuel canisters, prior to the canisters being loaded onto the unit train.

The EIS needs to determine what role the emergency responders will play in the event of a spill or radiation leak. Along with that, the EIS needs to determine what special equipment will be needed locally to handle a spill or leak. If the main clean-up team is to be centrally located, the EIS needs to study what is a safe distance to house a clean-up team from any potential spill site.

In many of these kinds of projects, the emergency responders are only allowed to maintain a perimeter, demand folks leave the area, and then wait for more highly skilled emergency responders to arrive on the scene. It may be many hours or days before the danger is adequately addressed.

The EIS needs to determine if the canisters will continue to safely hold the spent fuel rods after a lightning strike or a tornado.

The EIS should study locations for stationary dosimeters along the shipment routes, including, but not limited to, areas where the unit train is parked, the yard where the fuel canisters are loaded from the trucks to the train, and side tracks that could be used by the unit train.

Sincerely,



Pamela Mackey Taylor
Acting Director