

July 19, 2018 Advisory Letter — Opinion Request – Interim Nuclear Waste Storage Facility in Lea County

Senator Jeff Steinborn
New Mexico State Senate
P. O. Box 562
Las Cruces, NM 88004

Re: Opinion Request – Interim Nuclear Waste Storage Facility in Lea County

Dear Senator Steinborn:

You requested an expedited opinion regarding the license application of Holtec International (hereinafter “Holtec”) to operate a consolidated interim nuclear waste storage facility in Lea County. Specifically, you asked six questions[1] related to the legality of the proposal and the remedies available to the State of New Mexico should the project go awry:

1. Are consolidated interim storage facilities authorized under the federal Nuclear Waste Policy Act of 1982? If not, upon what legal basis may the Nuclear Regulatory Commission (“NRC”) issue a license to Holtec International to receive, acquire and possess power reactor spent fuel and other associated radioactive materials and store them at the proposed site?
2. What legal recourse is available to the state or private citizen stakeholders to prevent the NRC from licensing the proposed storage site if it does not have the legal authority to do so?
3. If the power reactor spent fuel and other associated radioactive materials stored at the proposed site are abandoned by Holtec International or a subsequent contractor, what state or federal laws exist to provide recourse to the state and/or affected communities?
4. Do state or federal laws provide for bonding requirements for the storage of power reactor spent fuel and other associated radioactive materials? What financial assurances are available to New Mexico to protect the state and its communities in the event the site is abandoned?
5. What legal recourse would the state have if consolidated interim storage is allowed in New Mexico but the federal government fails to permit a permanent, high-level waste repository?
6. Who would have legal liability for the materials if the lifespan of the canister is reached and the canisters remain at the proposed storage site in New Mexico?

The facts outlined by your request are summarized as follows: Holtec has applied for a license with the NRC to operate a nuclear waste storage facility in Lea County. The facility will be an interim storage facility, as opposed to a permanent depository. Holtec's initial application is for a license to store approximately 5,000 metric tons of uranium, but over time the company is expected to pursue expansions of the facility to eventually store up to 100,000 metric tons of uranium. No such facility currently operates in New Mexico, but similar facilities, which we will refer to as interim storage facilities, currently are located in thirty-four (34) states.[2]

Legal Background

The production of energy through nuclear fission results in the generation of radioactive waste. See *Nuclear Energy Inst., Inc. v. Env'tl. Prot. Agency*, 373 F.3d 1251, 1258 (D.C. Cir. 2004) (noting that nuclear power “produces a potentially deadly and long-lasting byproduct: highly radioactive spent nuclear fuel”). The storage of this waste has proved to be a vexing policy challenge, prompting the United States Congress to pass two federal acts, the Nuclear Waste Policy Act of 1982, 42 U.S.C. §§ 10101-10270 (2006) (“the NWPA”), and the Atomic Energy Act of 1954, 42 U.S.C. §§ 2011-2296b-7 (2006) (“the AEA”). The NWPA in particular directed a number of federal agencies to select and regulate a site that would serve as a permanent repository for the nation's nuclear waste. See *Nuclear Energy*, 373 F.3d at 1258-59. In 1987, Congress amended the NWPA and directed “that the nation's nuclear waste program focus exclusively on Yucca Mountain, Nevada.” *Id.* at 1260. See also 42 U.S.C. § 10172. The Department of Energy in 2008 requested permission from the NRC to begin construction of the Yucca Mountain facility, but the Department later withdrew its application during the Obama administration. See *New York v. U.S. Nuclear Regulatory Comm'n (New York II)*, 824 F.3d 1012, 1015 (D.C. Cir. 2016) (noting that “after nearly two decades of regulatory and political discord, the Department of Energy sought construction authorization from the NRC to establish a repository at Yucca Mountain in Nevada,” but the Department withdrew its application two years later). As a result, there is not yet a permanent repository for the nation's nuclear waste. *Id.*

In the absence of a permanent repository, nuclear waste is stored at interim facilities. See *Bullcreek v. Nuclear Regulatory Comm'n*, 359 F.3d 536, 537-38 (D.C. Cir. 2004) (noting that the NRC had the authority to license “privately owned away-from-reactor storage facilities” pursuant to the Atomic Energy Act) and *Indiana Michigan Power Co. v. Dep't of Energy*, 88 F.3d 1272, 1273 (D.C. Cir. 1996) (observing that the NWPA “created a comprehensive scheme for the interim storage and permanent disposal of high-level radioactive waste generated by civilian nuclear power plants”). These facilities can be at the site of the nuclear reactor or at an independent, away-from-reactor location. Unsurprisingly, the NRC's licensing authority over interim storage facilities has been the subject of prior litigation. See *Bullcreek*, 359 F.3d at 537-38 (holding that the NWPA did not deprive the Nuclear Regulatory Commission the authority to license “privately owned away-from-reactor storage facilities”).

In *Bullcreek*, the State of Utah sought to prevent the NRC from licensing a privately-owned, interim nuclear waste storage facility that, like Holtec's proposed facility, was not otherwise attached to a nuclear reactor. *Id.* at 538. Utah argued primarily that Congress, through the passage of the NWPA, had removed the NRC's legal authority to license such facilities. *Id.* The Court of Appeals for the District of Columbia rejected this argument, holding that the AEA had granted the NRC the authority to license "private away-from-reactor storage facilities," and the NWPA had not withdrawn that authority. *Id.* at 543. Hence, individual states do not appear to have any licensing or regulatory authority over interim storage facilities.

In the aftermath of the *Bullcreek* decision, the Court of Appeals for the Tenth Circuit issued an opinion in *Skull Valley Band Of Goshute Indians v. Nielson*, 376 F.3d 1223 (10th Cir. 2004), that grappled with the issue of state regulatory authority. The *Nielson* case involved the same nuclear waste facility in Utah that was challenged in *Bullcreek*. See *Nielson*, 376 F.3d at 1228. However, the issue presented to the Tenth Circuit was whether the State of Utah could independently regulate the facility pursuant to state law. *Id.*, at 1223. Utah's state laws required all nuclear waste storage facilities to be licensed by the state's Department of Environmental Quality, and the Utah legislature also passed new statutes facilitating county regulation of the facilities and imposing stringent railroad requirements. *Id.* at 1229-31. The Tenth Circuit found that federal law preempted each of these state laws, emphasizing the comprehensive nature of the federal government's statutory and regulatory scheme in the area of nuclear waste. *Id.* at 1254. The Court's concluding remarks were clear on that point:

In holding the Utah statutes preempted, we do not denigrate the serious concerns of Utah's citizens and lawmakers regarding spent nuclear fuel, a matter which presents complex technological, economic, and political challenges to those seeking effective solutions. However, in the matter of nuclear safety, Congress has determined that it is the federal government, and not the states, that must address the problem.

Nielson, 376 F.3d at 1254. Taken together, both *Bullcreek* and *Nielson* clearly establish two principles: first, that the NRC has the statutory authority to license and regulate consolidated interim nuclear waste storage facilities, and secondly, that the comprehensiveness of that federal regulatory scheme preempts virtually any state involvement.[3]

Because interim facilities clearly are not intended to be permanent repositories for nuclear waste, NRC regulations provide that all applications for a license to operate an interim storage facility must include a plan for the future decommissioning of the site. See 10 C.F.R. § 72.130. In addition to preparing a plan for final decommissioning, applicants must (as part of their application) estimate the cost of decommissioning and provide financial assurances as to their ability to pay for the same. See 10 C.F.R. § 72.30(b); see also 10 C.F.R. § 72.22(e)(3). These plans, estimated costs, and financial assurances are reviewed by the NRC as integral and necessary parts of the application for a license. *Id.*

The financial assurances made by the applicant with respect to decommissioning are also subject to a number of specific requirements. The applicant must show “the necessary financial arrangements to provide reasonable assurance before licensing, that decommissioning will be carried out.” 10 C.F.R. § 72.22(e)(3). This is addressed at length in 10 C.F.R. § 72.30(e), which requires that financial assurances for decommissioning be provided in one of three ways: by prepayment of the estimated decommissioning costs into a trust account approved by the NRC, through “[a] surety method, insurance, or other guarantee method,” or by the execution of an external sinking fund. *Id.* Following the issuance of a license, facilities are required to update these financial assurances. *See generally* 10 C.F.R. § 72.30; *see also* 10 C.F.R. § 72.54(e).

Once a licensee ceases operations at the site (whether due to the licensee’s voluntary decision or simple inaction), it is required to submit a final decommissioning plan with the NRC and begin the decommissioning process. *See* 10 C.F.R. § 72.54(d). During the decommissioning process, the licensee must still maintain its necessary financial assurances, although these can be reduced over time “as decommissioning proceeds and radiological contamination is reduced at the site with the approval of the Commission.” 10 C.F.R. § 72.54(e)(2). The “final step” in the decommissioning process requires the licensee to conduct a radiation survey and certify the disposition of all previously-stored waste. 10 C.F.R. § 72.54(l).

Analysis

The first two questions you present to us ask about the legality of interim storage facilities and what recourse might be available to the state or private stakeholders in the event the NRC lacked the legal authority to issue Holtec a license. As explained earlier, the NRC’s authority to license interim storage facilities stems directly from the AEA. *Bullcreek*, 359 F.3d at 543. As a result, we need not address the issue of what the state or a private stakeholder could do if the NRC could not legally license interim storage facilities. This is not to say, however, that the state or a private stakeholder would be without recourse if the NRC violated its own regulations or if some impropriety occurred in the licensing process.

Your third question asks what recourse would be available to the state and any affected communities in the event that Holtec abandoned nuclear waste at the proposed site. The NRC’s licensing and regulatory requirements should provide some assurance that Holtec would be unable to simply abandon the site, given that the NRC requires financial assurances to cover the cost of decommissioning the site. *See* 10 C.F.R. § 72.30(e). As mentioned earlier, these assurances must be maintained through the duration of the license, meaning that Holtec would have to continually maintain and update the anticipated costs of decommissioning in the form of a surety or another guarantee method. *Id.* In the event that the licensee files for bankruptcy, it also must immediately inform the NRC. *See* 10 C.F.R. § 72.44(b)(6). Together, these provisions offer some guarantee that Holtec would not be able to simply abandon the site without completing the decommissioning process.

In the unfortunate event that individuals were to suffer from illnesses or injuries as a result of the operation of Holtec's facility, state tort law would probably provide some remedies. While it is abundantly clear that the state cannot license or otherwise directly regulate interim storage facilities, see *Nielson*, 376 F.3d at 1254, the Supreme Court has repeatedly held that state tort law can provide a remedy for injuries suffered as a result of nuclear plant operation. See *Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238, 256, 104 S. Ct. 615, 626, 78 L. Ed. 2d 443 (1984) (holding that federal law did not preempt state law remedies for "damages for radiation injuries") and *English*, 496 U.S. at 85. See also *Cook v. Rockwell Int'l Corp.*, 790 F.3d 1088, 1098 (10th Cir. 2015) (noting that "Congress has authorized the federal government alone to promulgate before-the-fact nuclear safety regulations but—at the same time—has done little to forbid states from indirectly regulating nuclear safety through the operation of traditional after-the-fact tort law remedies"). As a result of these decisions, state tort law would almost certainly provide a remedy for injuries suffered from the operation of Holtec's proposed facility. (These remedies would be available irrespective of whether Holtec abandoned the site.)

NRC regulations also provide an answer to your fourth question, which inquires about the bonding requirements imposed upon licensees. The only such requirements, as explained earlier, are imposed by federal law, and specifically the NRC's regulations promulgated pursuant to the AEA. Prior to the NRC issuing the license, Holtec must post the estimated cost of decommissioning the site, see 10 C.F.R. § 72.22(e)(3), in the form of prepayment, a surety, the execution of an external sinking fund, or another "guarantee method," 10 C.F.R. § 72.30(e).

With respect to your fifth question regarding what legal recourse the state would have if the NRC licenses an interim storage facility in the state but fails to permit a permanent, high-level waste repository, the simple answer is that federal law does not appear to afford the state any legal recourse.[4] And, as demonstrated by the fact that interim storage facilities are currently licensed and operating in a majority of states, the absence of a permanent facility does not appear to preclude the NRC from issuing licenses for interim storage facilities. Moreover, the U.S. Court of Appeals has found that the federal government effectively "contracted to dispose of... spent nuclear fuel and related wastes" through the NWPA's creation of a Nuclear Waste Fund paid for by nuclear power generators. *S. Cal. Edison Co. v. United States*, 655 F.3d 1319, 1319 (Fed. Cir. 2011). See also 42 U.S.C. § 10131. And a number of courts have held the federal government in breach of contract with nuclear utilities for its failure to construct a permanent repository. See *S. Cal. Edison*, 655 F.3d at 1322 and *Me. Yankee Atomic Power Co. v. United States*, 225 F.3d 1336, 1343 (Fed. Cir. 2000). See also *Yankee Atomic Elec. Co. v. United States*, 536 F.3d 1268, 1272 (Fed. Cir. 2008) (noting that the Department of Energy's failure to establish a permanent nuclear waste depository "constituted a partial breach of the contract" with nuclear utilities). Thus, the federal government does have a duty to establish a permanent repository at Yucca Mountain, but, as a result of political uncertainty and a lack of real progress over the years, there simply is no telling when Yucca Mountain or some other permanent facility will be constructed. Unlike nuclear utilities, New Mexico does not itself appear to have any

recourse in federal law to obtain damages or force the federal government to open such a facility. It should be noted, though, that for however long Holtec (or a subsequent contractor) operates the planned facility in Lea County, it would remain subject to NRC regulations and, in particular, the rules pertaining to financial assurances.

The subject of your final question, the legal liability for canisters stored beyond their lifespan at the Lea County site, is addressed neither by NRC regulations nor by judicial precedent. It stands to reason, however, that because Holtec would be the owner of the site, it would be liable for the waste stored there and its compliance with NRC regulations. Additionally, we note that, as described earlier, Holtec would probably be subject to state tort laws and the site itself would be subject to a large number of environmental and safety regulations. Holtec may not be granted a license by the NRC until it has established adequate “proposed operating procedures to protect health and to minimize danger to life or property.” 10 C.F.R. § 72.40(a)(5).

Your request to us was for a formal Attorney General’s opinion on the matters discussed above. Such an opinion would be a public document, available to the general public. Although we are providing our legal advice in the form of a letter rather than an Attorney General’s Opinion, we believe this letter is also a public document, not subject to the attorney-client privilege. Therefore, we may provide this letter to the public.

Sincerely,

John Kreienkamp,
Assistant Attorney General

[1] While we are aware that concerns about other legal aspects of Holtec’s application (including the role of the federal Department of Energy) were raised at the May 18, 2018 meeting of the Radioactive and Hazardous Materials Committee, in this opinion we will focus on the questions that you have presented to us.

[2] See *NRC Maps of Independent Spent Fuel Storage Installations (ISFSI)*, Nuclear Reg. Comm’n., <https://www.nrc.gov/reading-rm/doc-collections/maps/isfsi.html> (last visited April 18, 2018). Many of these facilities, however, are located at the site of a nuclear reactor, unlike the facility proposed by Holtec.

[3] Indeed, the U.S. Supreme Court has noted that “the federal government has occupied the entire field of nuclear safety concerns, except the limited powers expressly ceded to the states.” *Pac. Gas & Elec. Co. v. State Energy Res. Conservation & Dev. Comm’n*, 461 U.S. 190, 212, 103 S. Ct. 1713, 1726, 75 L. Ed. 2d 752 (1983). This particular pronouncement was clarified later in *English v. General Elec. Co.*, 496 U.S. 72, 85, 110 S. Ct. 2270, 2278 (1990), where the Court stated:

[N]ot every state law that in some remote way may affect the nuclear safety decisions made by those who build and run nuclear facilities can be said to fall

within the pre-empted field... Instead, for a state law to fall within the pre-empted zone, it must have some direct and substantial effect on the decisions made by those who build or operate nuclear facilities concerning radiological safety levels.

[4] You have also inquired as to whether state approval is a prerequisite to the licensure of an interim storage facility. While there are a large number of factors that are considered by the NRC in evaluating a license application, state approval is not among them. See 10 C.F.R. § 72.40.