

No. 16-1275

IN THE
Supreme Court of the United States

VIRGINIA URANIUM, INC., ET AL.,
Petitioners,

v.

WARREN, ET AL.,
Respondents.

**On Writ of Certiorari to the
United States Court of Appeals
for the Fourth Circuit**

**BRIEF OF ENTERGY OPERATIONS, INC. AND
ENTERGY NUCLEAR OPERATIONS, INC. AS
AMICI CURIAE IN SUPPORT OF PETITIONERS**

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INTEREST OF AMICI CURIAE¹

Entergy Nuclear Operations, Inc. and Entergy Operations, Inc. (together, “Entergy”) hold licenses issued by the U.S. Nuclear Regulatory Commission (“NRC”) to operate nuclear power plants in seven States: Arkansas, Louisiana, Massachusetts, Michigan, Mississippi, New York, and Vermont. These plants collectively employ approximately 6,000 professionals, and those that remain in operation generate nearly 9,000 megawatts of power annually. As an NRC license-holder, Entergy must comply with expansive NRC regulations governing every aspect of nuclear power generation—from construction to decommissioning.

Entergy has been subjected to state regulation of these plants motivated by a radiological safety purpose and hence federally preempted under the majority approach in the lower courts. Such regulation has put Entergy (and other similarly situated licensees) in the difficult position of either challenging the regulations as preempted or complying with the state regulation (often at great cost). Because Entergy operates nuclear facilities in multiple States, it has a particular interest in ensuring that nuclear facilities are not impermissibly saddled with radiological safety-motivated state

¹ Pursuant to Rule 37.3, the parties have consented to the filing of this brief. Letters of consent have been filed with the Clerk. No counsel for any party authored this brief in whole or in part, and no counsel or party made a monetary contribution intended to fund the preparation or submission of this brief. No person other than *amici curiae* made a monetary contribution to its preparation or submission.

regulations in light of the already comprehensive NRC scheme.

INTRODUCTION AND SUMMARY OF THE ARGUMENT

The question before the Court is whether the Atomic Energy Act (“AEA”) preempts a State from regulating in its otherwise permissible sphere when the State does so for the purpose of regulating radiological health and safety. Virginia is not alone in burdening nuclear power generation by using facially legitimate state authority as a pretext for regulating radiological safety. As described below, numerous States have taken actions imposing costly and unnecessary radiological safety-based regulation on every phase of the nuclear generation cycle, including construction, operation, storage of spent nuclear fuel (“SNF”), and decommissioning. And the lower courts have properly looked behind the face of those efforts to their true purpose and readily found them preempted.

For example, States previously have attempted to impose the following facially neutral regulations, where the evidence showed that the State’s true purpose was to regulate radiological safety: (1) requiring legislative approval for a nuclear power plant that had operated for decades to continue operating pursuant to its NRC license; (2) imposing a \$5 million fee for consideration of an application to build an SNF storage facility; (3) requiring a \$15 million payment for the ability to construct and move SNF to a dry cask storage facility; and (4) enacting a prohibition punishable as a misdemeanor on any person role-playing a county official for purposes of emergency planning. In all of these examples, the

regulations on their face fell within the traditional realm of state authority. And yet, in each of these examples, clear evidence showed that the State's motivating purpose was a concern about radiological safety, resulting in their preemption.

Even when this type of regulation does not result in complete elimination of the nuclear activity within the borders of the State, as it does in the instant case, nuclear plant owners and operators can be subject to what the Federal Circuit has referred to as "blackmail" as a condition of performing activities properly subject to the jurisdiction of the NRC. NRC licensees must consider whether to challenge such improper regulation in costly litigation or comply with the regulation as a business expense. In this manner, a State's ability to impose costs through improper legislation or regulation is one tool that local politicians use to stunt and even eliminate America's nuclear power production in clear violation of federal law and policy. For this reason, the AEA preemption framework should, as the majority of lower courts have held, require an inquiry into the purpose behind state and local laws and regulatory actions. This does not leave States remediless; they are free to bring their nuclear safety concerns to the NRC's attention, and they are barred only from engaging in direct regulation based on their concerns.

Amici do not repeat Petitioners' arguments on the scope of AEA preemption. Rather, they describe several past examples where States have acted from a radiological-safety purpose and discuss the practical costs that those regulations imposed before they were successfully challenged.

ARGUMENT**I. THE LOWER COURTS HAVE PROPERLY HELD PREEMPTED ATTEMPTS OF CERTAIN STATES TO INTERFERE WITH FEDERAL AUTHORITY OVER NUCLEAR SAFETY UNDER THE GUISE OF PERMISSIBLE STATE REGULATION**

Nuclear power provides low-cost energy with little to no greenhouse gas emissions. It is an important source of domestic energy, enabling Americans to reduce reliance on fossil fuels, and an important tool in maintaining the reliability of the United States power grid. In the United States, the NRC regulates radiological health and safety through all phases of nuclear power generation, pursuant to the AEA. As this Court has held, “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* (“*PG&E*”), 461 U.S. 190, 212 (1983). This Court has “defined the pre-empted field, in part, by reference to the motivation behind the state law.” *English v. Gen. Elec. Co.*, 496 U.S. 72, 84 (1990).

Despite the clear language of the AEA, Congress’ clear expression of its intent to occupy the field of nuclear safety, and this Court’s holdings, some States have sought to regulate nuclear facilities based on radiological safety concerns throughout the lifecycle of nuclear power generation in a manner inconsistent with federal law and policy. Contrary to the result reached below by the Fourth Circuit, it is entirely appropriate—and indeed, necessary—for courts to inquire into the purpose behind state actions affecting

nuclear power generation in order to determine whether they are preempted. Time and again, the lower courts have properly determined that state action, although facially permissible, was undertaken for an impermissible radiological safety purpose and hence invaded the field exclusively regulated by the NRC.

A. The Lower Courts Have Invalidated State Laws Whose Facial Neutrality Was Found Pretextual For A Purpose To Regulate For Radiological Safety

1. Vermont

In *Entergy Nuclear Vermont Yankee, LLC v. Shumlin*, 838 F. Supp. 2d 183 (D. Vt. 2012), *aff'd in relevant part*, 733 F.3d 393 (2d Cir. 2013), both the district court and the Second Circuit held invalid as preempted a Vermont law found to be aimed at regulating radiological safety. The Vermont Yankee Nuclear Power Plant (“Vermont Yankee”) had operated for more than 30 years when, in advance of applying to the NRC for a license renewal for a new term of operation, the Vermont legislature passed a law requiring State approval for continued operation. In 2002, Entergy Nuclear Vermont Yankee, LLC (“ENVY”), had purchased the plant, making clear at the time that it would seek to increase the generation capacity of the plant, construct a dry cask storage facility,² and seek the NRC’s approval to operate the

² The fuel rods used to power the reactor are stored in deep pools of treated water after they have been used. These rods can be moved into sealed metal cylinders on a concrete pad, known

plant beyond the March 2012 date in its original NRC operating license. *Entergy Nuclear*, 838 F. Supp. 2d at 191.

After approving the sale of Vermont Yankee to ENVY from the prior state-utility owners, the Vermont State government sought to thwart continued operation of the plant. First, although a state law banning SNF storage had a carve-out for the owners of the nuclear plant, the attorney general interpreted that provision not to apply to ENVY but only to the prior owners. *Entergy Nuclear*, 838 F. Supp. 2d at 194. Next, the Vermont legislature passed two bills, known as Act 74 and Act 160, that effectively gave the Vermont legislature a pocket veto over continued operation of the plant, requiring the legislature to pass a bill affirmatively allowing continued operation. *Id.* at 189. Then, to assist in implementation of Acts 74 and 160, the legislature passed Act 189, which required what it termed a “reliability” assessment of the plant but which in fact called for state investigation into crucial radiological safety systems at the plant. *Id.* at 212-13. At each turn, Vermont legislators sought, in the remarkably candid words of one committee member, to “find another word for safety,” *id.* at 203, 229, such that the State could regulate radiological safety under the guise of permissible state activity. ENVY and Entergy Nuclear Operations, Inc. (“ENOI,” the NRC-licensed operator for the plant) sued, the district court enjoined the relevant state laws as preempted, and

as dry casks, for long-term storage. *Entergy Nuclear*, 733 F.3d at 400 n.7.

the Second Circuit affirmed. *Entergy Nuclear*, 733 F.3d at 398.

As to SNF storage, the legislative history made clear that legislators opposed, on radiological safety grounds, any sort of enactment that would permit construction of a dry cask storage facility. *Entergy Nuclear*, 838 F. Supp. 2d at 195. Indeed, the district court detailed how “more than a dozen witnesses testif[ied] regarding their safety concerns surrounding spent fuel storage.” *Id.* Legislators raised these safety concerns even though an expert witness hired by the legislative counsel had advised them that “a lot of the concerns that citizens have are concerns that you can’t address *directly* the way they want them to be addressed.” *Id.* (emphasis added). One legislator, for example, suggested that a concern about the safety of a dry cask storage facility could be rooted in the need for “some money” because, “if the federal government or Entergy doesn’t protect it, we’re going to have to do it because we are not going to let our citizens . . . blow up.” Another asked whether there might be a “creative use of statute,” whereby “someone might have a safety issue in mind,” but instead invoke the aesthetic interest in shielding “the visible impact of these casks from the river.” *Id.* Indeed, the district court noted that “[o]ther references to safety by legislators and witnesses are too numerous to recount.” *Id.*

Ultimately, the legislature passed Act 74, which compelled ENVY to seek approval from the state public utility commission to construct the dry cask storage facility and, as a condition of its passage, required ENVY to agree to deposit more than \$15 million into a Clean Energy Development Fund. *Id.*

at 200. The bill incorporated a memorandum of understanding ENVY and ENOI had entered into with the State that imposed numerous conditions governing radiological health and safety. *Entergy Nuclear*, 733 F.3d at 402.³ Yet the legislative enactment still required ENVY to obtain legislative approval for storage of SNF generated after the original license term. *Entergy Nuclear*, 838 F. Supp. 2d at 197.

The battle over SNF storage promptly led to one over the continued operation of the Vermont Yankee plant itself. *Id.* at 202. Again, legislators evinced a belief that the NRC would not protect sufficiently the safety of Vermont residents and sought to act based upon nuclear safety concerns. *Id.* at 202-07. Comments on the bill requiring state approval of continued plant operation linked safety to reliability and economics—a plant shut down for nuclear safety reasons could not provide power or economic benefit to the State. *Id.*

These themes echoed throughout the legislature’s consideration of the bill, and legislators again sought

³ The conditions included that the SNF storage pad be located “at least one hundred feet from a floodplain, space the storage casks to permit access to individual casks ‘to the greatest extent possible,’ configure the spent-fuel pool so that high-decay heat assemblies are surrounded by low-decay heat assemblies, perform temperature monitoring and monthly manual radiation surveillance of the storage casks and report the results to the [Vermont state agency], not store waste generated outside Vermont on site, remove ‘high level’ spent nuclear fuel from Vermont ‘as quickly as possible,’ and conduct a study addressing the stability of the proposed new spent nuclear fuel storage facility based upon a stated concern that an adjacent river bank might erode and collapse.” *Entergy Nuclear*, 733 F.3d at 402.

to clothe their safety concerns in non-safety terms by “find[ing] another word for safety.” *Id.* at 203. As the bill progressed, legislators cautioned one another to speak in terms of economic benefit or reliability—because “we don’t say safety when we’re talking Vermont Yankee in this room.” *Id.* at 206. As enacted, Act 160 required legislative approval for operation of the Vermont Yankee plant after March 2012. *Id.* at 210.

Once Act 160 was enacted, the legislature introduced a bill to provide for a comprehensive assessment of the Vermont Yankee plant. *Id.* The bill originally was titled “An Act Relating to an Independent Safety Assessment of the Vermont Nuclear Facility,” and called for “an independent safety assessment” of the Vermont Yankee plant. *Id.* As the legislature considered the bill, “[s]afety” was either replaced with ‘operating,’ ‘operational,’ or ‘emergency,’ or omitted altogether” but otherwise “little change[d] to the substance of the bill.” *Id.* at 211. Notwithstanding these “editorial” revisions, and a change of the title to refer to a “Vertical Audit and Reliability Assessment,” the legislators still referred to it as a safety study. *Id.* at 211-12 (“I support the review of the safety of Vermont Yankee.”). As a senator introducing the bill explained: “[W]hat this bill does, in essence, is the governor has called for an independent safety assessment, the congressional delegation has called for an independent safety assessment, the Legislature has talked about the need to do something. What this bill does is define what we mean by an assessment. And we talk about a reliability assessment because safety is not within our purview.” *Id.* at 212 (alteration in original).

The bill passed and became Act 189, leading to a years-long study of the Vermont Yankee plant that included analyzing systems crucial to the safe generation of nuclear power that are subject to exclusive NRC regulation. *Id.* at 212-13. The 300-page study concluded the plant was “operated reliably.” *Id.* Nonetheless, the legislature never voted to approve continued operation of the Vermont Yankee plant. *Id.* at 215-16. Rather, ENVY and ENOI filed suit, 11 months before expiration of their NRC license. *Id.* at 217.

After examining this legislative history in detail, the district court noted that, although “‘a legislature’s stated reasons will generally get deference,’ a Court cannot be ‘so naive’ in its purpose inquiry to accept ‘any transparent claim.’” *Id.* at 228 (quoting *McCreary County v. ACLU of Ky.*, 545 U.S. 844, 863-64 (2005)). “Inquiry into the legislative history of Act 160 is particularly important here, where there is evidence the statute was motivated by and grounded in radiological safety concerns, and the statute on its face empowers future legislatures to apply the statute to deny continued operation for radiological safety reasons and evade review.” *Id.* The district court thus concluded that “concerns regarding the radiological safety of Vermont Yankee were a primary motivating force for giving the legislature the power to take no action” and thereby disallow continued operation. *Id.* at 229. “[R]eferences, almost too numerous to count . . . reveal legislators’ radiological safety motivations and reflect their wish to empower the legislature to address their constituents’ fear of radiological risk, and beliefs that the plant was too unsafe to operate” *Id.* Beyond that, Act 160

lacked a plausible non-safety purpose, a consideration that, even apart from explicit mentions of safety in the legislative record, demonstrated circumstantially that the law was motivated by safety concerns. *Id.* at 229-30.

Likewise, the district court found Act 74, related to SNF storage, preempted because “the legislature’s desire and intent to regulate the radiological safety of dry cask storage is crystal clear.” *Id.* at 231. Thus, even though the laws at issue had been largely scrubbed of any safety language, the legislative record left no doubt that the legislature had acted based on radiological safety concerns.

The Second Circuit affirmed in relevant part. *Entergy Nuclear*, 733 F.3d at 398. Reasoning that this Court has “defined the preempted field, in part, by reference to the motivation behind the state law” in analyzing preemption under the AEA, the Second Circuit “agree[d] with the district court’s careful analysis of the legislative intent motivating Vermont’s enactment of Act 160 insofar as the district court identified radiological safety as the Vermont legislature’s primary purpose in enacting the statute.” *Id.* at 419-20 (internal quotation marks omitted).⁴

2. New York

The Second Circuit had issued a similar ruling nearly thirty years earlier concerning safety-based regulation by New York’s Suffolk County of the Shoreham Nuclear Plant. As construction of the plant

⁴ Following nearly a decade of disputes, the Vermont Yankee plant announced in 2012 its intention to shut down at the end of 2014 for economic reasons.

neared completion, Suffolk County filed suit against the plant's owner, Long Island Lighting Co. ("LILCO"), bringing an array of state-law claims. *Suffolk County v. Long Island Lighting Co.*, 554 F. Supp. 399, 402 (E.D.N.Y. 1983), *aff'd*, 728 F.2d 52 (2d Cir. 1984). The County alleged that construction defects had caused the cost of constructing Shoreham to balloon and that certain costs would be passed onto ratepayers, and sought damages related to the state-law claims. *Id.* at 402-03. But its complaint pointed to design and construction problems, including those that allegedly failed to comply with AEA regulations, and sought as a remedy an inspection and suspension in operation. *Id.* at 402-03. Although the County purported to base its claims on facially permissible concerns about cost overruns during construction, the district court held that the County had used this cost overrun concern as a pretext for its true purpose—namely, to impose additional safety inspections and regulations on the Shoreham plant. *Id.* at 405.

The Second Circuit affirmed, rejecting the County's argument that the AEA "does not preempt its tort and contract claims because those claims are not directed at radiological safety hazards—an area concededly reserved to the NRC—but rather at the 'pocketbook' issue of unreasonable and excessive cost." 728 F.2d at 56. The Second Circuit explained that "safety concerns pervade the complaint." *Id.* at 59. Beyond the safety concerns animating the complaint, the County impermissibly sought to invade the NRC's exclusive regulatory authority. *Id.* The Second Circuit thus concluded that Suffolk County's "only avenue . . . is to continue its proceedings in the administrative forum—the NRC

for safety-related concerns and the [New York State Public Service Commission] for economic claims.” *Id.* at 64.

Undeterred by this unsuccessful lawsuit, Suffolk County withdrew from emergency response planning to prevent Shoreham from complying with NRC regulations requiring local government participation in such planning. *Long Island Lighting Co. v. Suffolk County*, 628 F. Supp. 654, 659 (E.D.N.Y. 1986). When the NRC appeared prepared to allow Shoreham special dispensation to move toward operation without such local participation, the Suffolk County legislature used its police power to enact a local law that criminalized participation in a test of the emergency plan involving simulation of local government roles. *Id.* at 659. Violation of the local law was a misdemeanor, punishable by a year in jail and \$1,000 fine. *Id.*

With a proposed test of the emergency plan weeks away, LILCO sued Suffolk County, seeking to enjoin application of the local law as preempted. *Id.* at 660. The district court held not only that the Suffolk County law “impermissibly interferes with a preempted federal area,” but also that by “failing to articulate a non-safety rationale, Suffolk County impermissibly intruded into a federally preempted area when it enacted” the law. *Id.* at 665. Despite the fact that States and local governments retain *some* authority with respect to nuclear power plants, *id.*, the district court could not ignore the fact that “[t]he County is on record . . . as opposing the opening of the Shoreham facility on the grounds that no emergency evacuation plan is safe for Suffolk County.” *Id.* Thus, because the County passed the law “in an attempt to

continue its opposition to the Shoreham facility on the basis of a perceived radiological hazard,” the court concluded that the County had “impermissibly intruded into a sphere of authority reserved exclusively to the federal government by Congress.” *Id.* at 666.

In the end, the Shoreham Nuclear Plant never commenced commercial operation due to the dispute over the evacuation plans. Ultimately, LILCO settled with the State of New York in 1989, and billions of dollars in ultimately unnecessary construction costs were funded by the ratepayers.⁵

B. The Lower Courts Also Have Invalidated Pretextual Efforts To Regulate Storage And Disposal Of Nuclear Materials

Certain States also have exercised facially permissible authority to impermissibly regulate the transportation, storage, and management of SNF and other radiologically contaminated materials based on nuclear safety concerns. In this area too, lower courts have found that state action is preempted by federal law.

1. Utah

In 1997, a company named Private Fuel Storage began to lease Skull Valley reservation tribal land in order to build an SNF storage facility. *Skull Valley Band of Goshute Indians v. Nielson*, 376 F.3d 1223, 1228 (10th Cir. 2004), *cert. denied sub nom., Nielson v. Private Fuel Storage, L.L.C.*, 546 U.S. 1060 (2005).

⁵ See Dan Fagin, *Lights Out at Shoreham*, *Newsday* (Nov. 30, 2007), <https://bit.ly/2v3ZLcR>.

The company applied for a spent fuel storage license to the NRC. *Id.*

In the years that followed, Utah enacted a complicated web of state regulations to discourage and to forestall any SNF from being transported or stored in Utah. *See id.* In essence, Utah enacted laws that made the Skull Valley project impossible and the cost associated with even pursuing a license prohibitive.

First, Utah passed a new law prohibiting the transfer, storage, treatment, or disposal of high-level nuclear waste in the State. *Id.* It also provided that the governor, along with county officials and the state legislature, could separately approve an SNF storage facility if a license was issued by the NRC and upheld by a court. *Id.* at 1228-29. The law required state licensing by the Department of Environmental Quality, including an onerous application process. *Id.* at 1229. The State's Department of Transportation had the authority to approve any transportation of SNF. *Id.* Further, the law required substantial fees in order to apply for and obtain a license to manage SNF in Utah, including a non-refundable *application fee* of \$5 million and coverage for 75% of unfunded potential liabilities, potentially in the hundreds of millions or billions of dollars. *Id.* The law also revoked limited liability protections for SNF storage facilities, placing the owners and operators at personal risk, a requirement otherwise unheard of in Utah's corporate governance laws. *See id.*

Second, the Utah legislature empowered county officials to reject all proposals for storing or transporting SNF, or to enact a comprehensive land use plan for health and general well-being if any SNF

work was approved. *Id.* at 1229-30. Additionally, county governments were barred from providing municipal services to SNF facilities, including fire, garbage, water, sewer, and electricity, among others. *Id.* at 1230.

Finally, Utah departed from its general policy of allowing the Department of Transportation to regulate rail crossings in favor of a requirement that any dispute regarding an SNF facility's use of rail crossings be administered only after agreement of the governor and legislature. *Id.* Utah also designated additional roads statewide as public safety interest highways, thereby allowing the Department of Transportation to control those roads, divested the county of control over the access road to the proposed facility, and required gubernatorial and legislative agreement before eminent domain could be used for an SNF company. *Id.*

In 2001, after nearly four years of this expanding web of laws and regulations, Skull Valley Band filed suit, alleging that Utah had overstepped the bounds of its police power in enacting laws designed to frustrate the establishment of an SNF facility based on nuclear safety concerns. *Skull Valley Band of Goshute Indians v. Leavitt*, 215 F. Supp. 2d 1232, 1238 (D. Utah 2002). The district court granted summary judgment to Skull Valley Band, ruling, *inter alia*, that, while Utah normally has every right to regulate the traffic on its roads, it may not do so for an impermissible nuclear safety purpose. *Id.* at 1249 (concluding that the road restrictions "directly and substantially affect the decisions made by those who build or operate nuclear facilities concerning

radiological safety levels and fall within the preempted field”).

The Tenth Circuit affirmed, holding that “a state cannot use its authority” in traditional areas of regulation “as a means of regulating radiological hazards.” 376 F.3d at 1248. The court noted that, among other things, a \$5 million application fee for a license to manage SNF, untethered to any costs the State would bear in processing the application, laid bare the motivating purpose of nuclear safety. *See id.* at 1246.

2. Washington, Kentucky, Maine, and Connecticut

Other cases similarly illustrate that some States have used facially legitimate state authority as a way to regulate storage and disposal of radioactive materials based on radiological safety concerns.

For instance, in *United States v. Manning*, 527 F.3d 828 (9th Cir. 2008), the Ninth Circuit held preempted Washington’s “Cleanup Priority Act,” a law enacted based on a ballot initiative that concerned the treatment of mixed waste. The law related to the Hanford Nuclear Reservation within the State, a facility operated by the Department of Energy that served as a treatment, storage, and disposal site for radioactive and non-radioactive hazardous waste. *Id.* at 830-31. Washington residents had voted on a ballot measure “to prevent the addition of new radioactive and hazardous waste to the Hanford nuclear reservation until the cleanup of existing contamination is complete.” *Id.* at 831 (internal quotation marks omitted).

The United States Government challenged the law as preempted, and the district court and Ninth Circuit both agreed that it was. *Id.* While the State could regulate the non-radioactive hazardous components of mixed waste, in this instance, the law’s policy section revealed as its purpose that it was “the State’s intent to regulate radioactive safety.” *Id.* at 837 (noting law described “Hanford as a dump for ‘radioactive and/or hazardous or toxic wastes’” and “warn[ed] that Washington’s economy could be harmed ‘from any accident releasing radiation’”); *United States v. Manning*, 434 F. Supp. 2d 988, 1003 (E.D. Wa. 2006) (“[T]he true aim of the [law] is not the hazardous waste component of mixed waste, but rather the radioactive component.”). Thus, the Ninth Circuit held that “[a] key purpose of the CPA is to regulate the radioactive component of mixed waste, as well as the nonradioactive component, for health and safety reasons. Accordingly, the CPA is preempted by the AEA.” *Id.* at 839.

In *United States v. Commonwealth of Kentucky*, 252 F.3d 816, 824 (6th Cir. 2001), *cert. denied sub nom.*, *Kentucky Natural Resources & Environmental Protection Cabinet v. United States*, 534 U.S. 973 (2001), the Sixth Circuit rejected Kentucky’s attempt to regulate radioactive waste through permitting conditions for the disposal of solid waste. Kentucky sought to prohibit a uranium enrichment facility owned by the Department of Energy from disposing of “[s]olid waste that exhibits radioactivity above de minimis levels.” *Id.* at 820. The Sixth Circuit noted that “the AEA preempts any state attempt to regulate materials covered by the Act for safety purposes.” *Id.* at 823. The conditions sought to limit “the amount of

‘radioactivity’ and ‘radionuclides’ that DOE may place in its landfill” and “impose these conditions to protect human health and the environment.” *Id.* Thus, although the AEA does not regulate all solid waste, Kentucky was preempted from regulating the radioactive component of solid waste because the permit conditions “regulate materials covered by the AEA based on . . . safety and health concerns.” *Id.*

In both the Washington and Kentucky cases, the courts determined that an impermissible nuclear safety purpose preempted the regulations even though the States facially regulated materials under their authority and the AEA did not authorize the NRC to regulate such materials. *Manning*, 527 F.3d at 836 (“Unquestionably, the State has the authority to regulate nonradioactive hazardous materials.”); *Commonwealth of Kentucky*, 252 F.3d at 822 (noting that, under the applicable regulatory scheme, “state and local governments will play a lead role in solid waste regulation”).

Even when the lower courts have rejected challenges to such State laws, they have inspected the purpose behind the laws, and sent warning signals to States to stay within the permissible realm of their non-preempted police power authority. For instance, in *Connecticut Yankee Atomic Power Co. v. Haddam Planning & Zoning Commission*, 2001 WL 1898262, at *3 (D. Conn. Apr. 23, 2001), *aff’d* 19 F. App’x 21 (2d Cir. 2001), the owners of the Connecticut Yankee nuclear plant sought to enjoin as preempted a zoning regulation that had changed the zoning of the plant to residential after the plant’s construction. When Connecticut Yankee—which already had operated for decades and had started decommissioning—sought

approval to re-zone the property to industrial to allow it to construct a dry cask storage facility, its zoning application was denied. *Id.* Although the local official had “publicly stated that the Town would seek to preclude implementation of the planned dry cask storage system regardless of the outcome of the Zoning proceeding,” the district court required Connecticut Yankee to seek a building permit to begin construction on the dry cask storage facility before the court would address the preemption question. *Id.* at *4. Nonetheless, the district court noted that the preemption argument was strong, and likely would succeed if the State thwarted Connecticut Yankee’s ability to build the dry cask storage facility. *Id.* at *4 n.1.

In *Maine Yankee Atomic Power Co. v. Bonsey*, 107 F. Supp. 2d 47 (D. Me. 2000), the district court likewise cautioned Maine against a nuclear safety-motivated use of its facially legitimate state authority. Maine’s Site Law required approval of the construction or operation of “any development of state or regional significance that may substantially affect the environment.” *Id.* at 49. Although the law had not existed at the time the plant was constructed, Maine asserted that the law applied to the nuclear power plant during its decommissioning, specifically to construction of the dry cask storage facility. *Id.* The owners of Maine Yankee challenged the application of the Site Law to the plant, but the district court held the law could apply to the extent Maine used it to regulate “for purposes other than protection against radiation hazards.” *Id.* at 54. Still, the district court admonished the State to stay within its permissible sphere, in light of the fact that “[o]ne

might take a hint from the Board’s apparent interest in matters nuclear—its demand for the safety report on the proposed storage system for example,” that it intended to regulate for a radiological purpose. *Id.* In this same vein, the State “cannot employ a ‘financial capacity’ requirement to indirectly regulate in the field of spent nuclear fuel storage.” *Id.* at 55.

While the State had not yet exceeded its authority, the district court clearly signaled that it would grant the appropriate relief if Maine did overreach: “Perhaps the state’s conduct of its administrative proceedings will reveal a transparent effort to exercise regulatory authority reserved to the federal government. Perhaps not. Time will tell. If so, declaratory and injunctive relief will surely and swiftly follow.” *Id.* at 56.

C. A State’s Imposition Of Financial Requirements On Decommissioning Is Preempted When Imposed For The Purpose of Nuclear Safety

A preemption challenge to a State’s attempts to regulate decommissioning on an “economic” basis also has been successful when the evidence showed that the State’s true purpose stemmed from a nuclear safety concern.

In 1981, the owners of the Maine Yankee nuclear plant sought approval from FERC to adjust its rates to reflect the costs of decommissioning the plant. *Me. Yankee Power v. Me. Pub. Util.*, 581 A.2d 799, 800 (Me. 1990). While the FERC proceeding was pending, the Maine legislature enacted the Nuclear Decommissioning Financing Act (“NDFA”). *Id.* The NDFA required any nuclear plant operator to file a

decommissioning plan with the Maine Public Utilities Commission (“MPUC”) for review and approval and established decommissioning financing requirements. *Id.* Shortly thereafter, Maine Yankee reached a settlement with FERC to establish a decommissioning financing plan, and Maine Yankee submitted the plan to MPUC under the NDFA, which eventually was approved in 1983. *Id.* at 801-02.

In 1988, FERC permitted Maine Yankee to adjust its decommissioning financing plan. *Id.* at 802. Maine Yankee again moved that the MPUC approve the amendment to the plan, but the MPUC rejected the amendment. *Id.* Maine Yankee appealed MPUC’s decision and challenged the constitutionality of the NDFA. *Id.* Although the MPUC attempted to justify its decommissioning regulations as economic in nature and thus outside of the purview of the NRC and the AEA, this argument failed. *Id.* at 805.

The Maine Supreme Court, following this Court’s decision in *PG&E*, reasoned that, “[b]ecause Congress has clearly manifested an intent to maintain ‘complete control over the safety and nuclear aspects of energy generation,’” the NDFA was preempted by the AEA. *Id.* at 805-06 (quoting *PG&E*, 461 U.S. at 212). This was so even though the State had purportedly targeted the NDFA at the economic impact of decommissioning nuclear facilities. Initially, the court explained that, even if “regulatory actions may have an economic impact,” it “does not mean that they lie outside NRC’s jurisdiction.” *Id.* at 805 (quoting 53 Fed. Reg. 24018-01, 24073). In addition, looking to the legislative history of the NDFA, it was clear that the State sought to regulate safety aspects of nuclear decommissioning. *Id.* The

NDFEA was enacted, in part, because “timely proper decommissioning of any nuclear power plant . . . is essential to protect public health, safety, and the environment.” *Id.* (alteration in original). The court concluded that any attempt to regulate decommissioning is preempted if it impermissibly infringes the NRC’s exclusive regulatory authority regarding the safety aspects of nuclear decommissioning, regardless of how the state legislature frames the regulation. *Id.* at 805-06.

II. STATE REGULATION OF RADIOLOGICAL SAFETY IS COSTLY AND UNNECESSARY GIVEN THE NRC’S COMPREHENSIVE REGULATIONS

When States regulate the nuclear field in an effort to address safety concerns, they not only intrude upon an exclusive federal sphere but also impose inefficiencies and costs that can be prohibitive. When States make pretextual forays into the regulation of the nuclear industry, the owners and operators are forced to undertake additional expense to comply with such regulations or else to challenge them. Such expense hampers the successful operation and decommissioning of the Nation’s nuclear facilities.

The regulatory framework and enforcement mechanisms used by the NRC and reviewing courts to enforce the AEA are clear and predictable. Parties can participate in NRC rulemaking and follow NRC actions and processes to determine how the NRC might act in any particular situation. The operable standards apply across all States, regardless of local political imperatives. Any departure from the clarity provided in NRC regulations and rulemaking introduces uncertainty and inefficiencies and

complicates the operation and administration of America's nuclear power generation.

In the Vermont Yankee case discussed above, the Second Circuit agreed with the district court that ENOI and ENVY would face irreparable harm from enforcement of the preempted statute—to wit, a complete shut down of Vermont Yankee. *Entergy Nuclear*, 733 F.3d at 423. Undoubtedly, such a result would have had deleterious financial consequences for ENVY and ENOI. But the actions of Vermont—motivated by safety concerns—already had imposed substantial costs. ENVY and ENOI were forced to undertake significant political expenditures. *See, e.g., Entergy Nuclear*, 838 F. Supp. 2d at 194-95, 199-202. The threat of a potential shutdown also required costly employment measures to retain the specialized workers who run the Vermont Yankee plant. *Entergy Nuclear Vt. Yankee, LLC v. Shumlin*, No. 1:11-cv-99-jgm, 2011 WL 2811317, at *6 (D. Vt. July 18, 2011). And, of course, the litigation itself imposed additional costs. *See, e.g., Entergy Nuclear*, 838 F. Supp. 2d at 189 (referencing preliminary injunction hearing and three-day bench trial on the merits).

When the Federal Circuit had occasion to review ENVY's payment of millions of dollars into the Clean Energy Development Fund as part of a lawsuit related to the Department of Energy's breach of its contractual obligation to take possession of SNF for permanent disposal, it determined these costs were likely preempted as well. *Vt. Yankee Nuclear Power Corp. v. Entergy Nuclear Vt. Yankee, LLC*, 683 F.3d 1330 (Fed. Cir. 2012). While ENVY had been required to make payments into the Clean Energy Development Fund as one step to securing approval

to construct a dry cask storage facility, the Federal Circuit concluded that those costs were not recoverable because Vermont's action in requiring such payment was preempted (and could have been successfully challenged). *Id.* at 1346-47. As the Federal Circuit explained: "The imposed fees bear no relationship to any costs incurred by the state or its citizens as a result of the construction of the dry storage facility. It would not be inaccurate to characterize the fee as a form of blackmail for the state approval of the construction." *Id.* at 1346. The Federal Circuit concluded that, while ENVY's choice to acquiesce to the State's demand for money may have been reasonable from a business perspective, the costs could not be recovered because these fees were preempted, and therefore not foreseeable as damages for the Department of Energy's breach of contract. *Id.* at 1348 ("Just because it may have been in ENVY's best interest to maintain good relations with the state and to agree to pay a fee that was likely preempted by federal law does not render the fee recoverable.").

In its efforts to secure continued operation of the Vermont Yankee plant, ENVY resisted entering into a below-market agreement with Vermont for the purchase of the power the plant generated, opting to sue instead. But by that point, ENOI and ENVY already had complied with the years-long "reliability" study—the fees for which were all billed back to ENVY. *See* 838 F. Supp. 2d at 233-234.

In the case of Shoreham, LILCO had to defend against numerous lawsuits from Suffolk County and public interest groups and then was forced to bring its own lawsuit. *See Long Island Lighting Co.*, 728 F.2d at 55. As a result of the myriad ways in which Suffolk

County (along with other opponents of the plant) sought to prevent the operation of the Shoreham plant, the plant never commenced commercial operation.⁶

The substantial burden Utah attempted to impose on Skull Valley Band in establishing an SNF facility was not only a regulatory headache, it was also exorbitantly expensive. For example, the *application fee* of \$5 million likely would have been cost prohibitive, and dissuaded any such potential applicant. *Skull Valley*, 376 F.3d at 1228-29. Utah sought to extract from a potential licensee outsized funds that were likely to be unavailable and thus render the project's actual ability to operate in Utah moot. Indeed, even if a storage facility had been able to withstand the application process, disallowing municipal services to any SNF facility would have greatly increased costs for operators, likely rendering such a facility cost prohibitive to operate.

The fact that courts have held such laws preempted has not always dissuaded certain States in their efforts to exceed the bounds of their authority. Despite decades of decisions holding safety-motivated regulation preempted, Massachusetts's legislators have attempted multiple times in recent years to enact laws that would encumber the decommissioning process. For instance, Massachusetts lawmakers sought to require a post-closure fee of \$25 million for every year decommissioning is not completed after a plant has been closed for five years. Mass. Bill S. 1837 (2017), Mass. Bill H. 1765 (2017). A state

⁶ Carl MacGowan, *38 Years After Massive Protest, Shoreham Nuke Plant Sits Empty*, *Newsday* (June 3, 2017), <https://nwsdy.li/2mJfZUQ>.

representative explained that “[e]stablishing the trust fund would also ensure that the spent fuel rods still on site are properly handled post-closure.”⁷ Another bill would have allowed assessments against the owners and operators of nuclear power plants that “could pose potential health risks to the commonwealth’s residents in the event of an incident” of up to \$250,000 per year. Mass. Bill S. 1836 (2017). Yet another bill sought to require each licensee to fund emergency response expenditures by the State or local governments prior to the transfer of SNF to dry cask storage. Mass. Bill H. 1147 (2017).

Judicial inquiry into the purposes behind such laws is necessary to prevent the use of facially legitimate state regulation for preempted ends. Absent judicial review, States would be free, using non-safety language, to frustrate federal policy, federal regulations, and federal law entrusting nuclear safety exclusively to the NRC and preventing the industry from being saddled with unnecessary state-imposed costs. Because the federal government occupies the entire field of nuclear safety, promulgates detailed and wide-ranging regulations to enforce such safety, and provides for the security of nuclear materials and the Nation’s power grid, any additional costs impermissibly imposed by the States hobble the Nation’s ability to meet and to maintain its energy generation needs.

⁷ Matthew Muratore, *Should the Pilgrim Nuclear Power Station Be Required to Pay an Annual \$25 Million Decommissioning Fee*, Bos. Globe (Nov. 22, 2017), <https://bit.ly/2NMrab7>.

CONCLUSION

The Court should reverse the judgment of the Fourth Circuit.

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