Diminishing State Power in Regulating Nuclear Energy: Post-Entergy Nuclear Vermont Yankee v. Shumlin

INTRODUCTION

In Entergy Nuclear Vermont Yankee v. Shumlin, the Second Circuit became one of only a handful of courts to strike down a state statute based on Atomic Energy Act (AEA) preemption. The court held that various sections of the Vermont statutes were preempted by the AEA because the Vermont legislature was primarily motivated by “safety” concerns. The statutes would have required Entergy Nuclear, the owner of the reactor at Vermont Yankee Nuclear Power Plant, to petition the legislature for permission to build storage facilities for spent nuclear fuel and continue operating beyond March 2012. In striking down the statutes, the Second Circuit limited Vermont’s control over its reactors, and, as some have suggested, stripped the state of its sovereign right to decide whether a reactor should operate within its borders. Because the opinion represents a significant restriction of state power, it provides a new lens by which to evaluate the virtues and faults of the AEA’s complex scheme for regulating nuclear power.

Copyright © 2014 Regents of the University of California.

1. See Entergy Nuclear Vt. Yankee v. Shumlin, 733 F.3d 393, 437 (2d Cir. 2013) (Carney, J., concurring) (“The parties have not directed our attention to any case in which the Supreme Court has struck down a state statute or tort judgment on AEA preemption.”).


3. Spent nuclear fuel is the used fuel removed from nuclear reactors. It typically contains radioactive substances, such as krypton-90, cesium-137, and strontium-90, as well as heavier radioisotopes, such as plutonium-239, that can remain hazardous for thousands of years. U.S. GOV’T ACCOUNTABILITY OFFICE, REP. NO. GAO-12-797, SPENT NUCLEAR FUEL: ACCUMULATING QUANTITIES AT COMMERCIAL REACTORS PRESENT STORAGE AND OTHER CHALLENGES 1, 7 (2012).


6. See Entergy Nuclear, 733 F.3d at 428. This In Brief focuses exclusively on the Second Circuit’s decision on the AEA preemption claim and does not discuss Entergy Nuclear’s dormant Commerce Clause and Federal Power Act preemption claims. The court deemed both claims unripe for review. See id. at 433–34.
I. CASE BACKGROUND

In 2013, Entergy Nuclear announced plans to decommission Vermont Yankee.\(^7\) The announcement came days after the Second Circuit’s decision in Entergy Nuclear,\(^8\) and left Vernon, Vermont, a town of just 2206 people, in a state of shock.\(^9\) Vermont Yankee had operated in Vernon since 1972, supporting 630 jobs and paying half of all local property taxes.\(^10\) The reaction to the closure is emblematic of the push-and-pull relationship that can exist between nuclear plants and power plant communities.\(^11\) On the one hand, the plants are a promise of prosperity; on the other, they are a source of concern.\(^12\)

Although national attention to nuclear safety reached an apex in the aftermath of September 11 and again after the explosions at the Fukushima Daiichi plant in Japan,\(^13\) officials in the thirty-one states that contain reactors have long harbored concerns about nuclear safety.\(^14\) One of the most pressing safety concerns is the issue of how to store spent nuclear fuel.\(^15\) To date, the Nuclear Regulatory Commission (NRC), the federal agency responsible for regulating nuclear reactors and nuclear material safety, has not developed a safe

---

8. The announcement had little to do with the Second Circuit’s decision and more to do with the availability of cheap natural gas, which contributed to the closure of four other nuclear reactors in 2014. Rebecca Smith, Vermont Nuclear Plant’s Closure Shows Impact of Cheap Gas, WALL ST. J. (Aug. 27, 2013), http://online.wsj.com/news/articles/SB10001424127887323407104579038682331577924.
12. See id.
15. See U.S. GOV’T ACCOUNTABILITY OFFICE, supra note 3, at 22–23. The Government Accountability Office estimates that the amount of spent fuel stored on-site at commercial nuclear reactors increases by approximately 2000 metric tons per year and will likely reach a high of 140,000 metric tons by 2055. Id. at 19.
way to dispose of spent nuclear fuel, which will remain radioactive for thousands of years. In that time, the neighborhoods around nuclear reactors will face a threat of contamination that could lead to cancer and fatalities.

In 2005 and 2006, the Vermont legislature passed two statutes aimed at more directly regulating spent fuel and nuclear safety. The statutes required Entergy Nuclear to obtain permission from the legislature before (1) building spent nuclear storage facilities and (2) continuing operation beyond March 21, 2012. In passing the statutes, the state sought to regulate “power, the economic and environmental impacts of long-term storage of nuclear waste, and choice of power sources among various alternatives.” The text of the bills did not mention safety concerns, which are preempted by the AEA.

The legislature did not act on the statutes until 2010, when it considered Entergy Nuclear’s petition to extend its operating license beyond 2012. At the time, the NRC had already approved a twenty-year renewal for the operation of Vermont Yankee through 2032. The legislature’s timing was particularly inauspicious for Entergy Nuclear, which had reported a leak of tritium, a decay product of nuclear energy, at Vermont Yankee in January 2010. Predictably, the Senate did not approve the extension, and Entergy Nuclear filed suit in the U.S. District Court for the District of Vermont in April 2011. Entergy Nuclear argued successfully, in both the district court and on appeal, that the AEA preempted Vermont’s effort to regulate nuclear power.

II. The Atomic Energy Act and Pacific Gas

The AEA established a complex regulatory scheme for the possession, use, and production of atomic energy. It fundamentally shifted the conception of atomic energy in this country from federal monopoly control for national security purposes to private development for peaceful purposes. The AEA established the federal government as the chief regulator of the nuclear industry, with the states filling in any gaps in the regulatory authority.

In 1959, Congress amended the AEA in an attempt to clearly delineate the

---

16. Id. at 28.
17. Id. at 7.
23. Id.
24. Id.
25. VT. STAT. ANN. tit. 10, § 6522; tit. 30, §§ 248, 254; Entergy Nuclear, 733 F.3d at 434.
28. GARVEY, supra note 2, at 1.
29. Entergy Nuclear, 733 F.3d at 405.
roles of states and the federal government in the regulation of nuclear power.\textsuperscript{30} The amendment provided states with an “explicit avenue” for increasing regulatory authority while simultaneously reaffirming exclusive federal control over radiological safety.\textsuperscript{31} Although the amendment sought to clarify roles, federal courts interpreted the amendment’s text a number of different ways.\textsuperscript{32}

The U.S. Supreme Court first stepped into the fray to clarify the scope of the amendment with its 1983 decision in \textit{Pacific Gas}.\textsuperscript{33} The case involved a challenge to a California law that required the State Energy Resources Conservation and Development Commission to certify that adequate storage facilities for spent nuclear fuel exist before approving the construction of new plants.\textsuperscript{34} The California law, still in force today, has amounted to a moratorium on the construction of new power plants.\textsuperscript{35}

\textit{Pacific Gas} established both the authoritative rule for AEA preemption and the analytical framework by which courts assess whether a state act is preempted. The test preserved “complete [federal] control of the safety and ‘nuclear aspects,’ of energy generation” while granting states power over “the type of generating facilities to be licensed, land use, ratemaking, and the like.”\textsuperscript{36} In applying this test, the Court first looked for a plausible “non-safety rationale” for the California law.\textsuperscript{37} Relying almost exclusively on the Commission’s stated rationale, the Court found that California was primarily motivated by “economic problems, not radiation hazards.”\textsuperscript{38} It thus refused to perform a more searching inquiry and held that the law was not preempted.\textsuperscript{39}

\section*{III. Legal Analysis of Entergy Nuclear: Time to Reassess \textit{Pacific Gas}?}

In its decision in \textit{Entergy Nuclear}, the Second Circuit relied on \textit{Pacific Gas} in finding that the Vermont statutes were “‘grounded in [radiological] safety concerns’” and preempted by the AEA.\textsuperscript{40} Indeed, \textit{Pacific Gas} remains

\begin{itemize}
\item 30. Garvey, supra note 2, at 5.
\item 31. \textit{Id.} The amendment read: “Nothing in this section shall be construed to affect the authority of any state or local agency to regulate activities for purposes other than protection against radiation hazards.” 42 U.S.C. § 2021(k).
\item 33. \textit{Id.}
\item 35. Garvey, supra note 2, at 6.
\item 36. \textit{Pacific Gas}, 461 U.S. at 212. The Court later clarified the scope of the \textit{Pacific Gas} test, requiring not that safety be a “paramount” purpose, but only that the state’s decision be “‘grounded in safety concerns.’” English v. Gen. Elec. Co., 496 U.S. 72, 83–84 (1990).
\item 37. \textit{Pacific Gas}, 461 U.S. at 213. The Commission stated the rationale in the package that accompanied the bills to the state legislature. \textit{Id.}
\item 38. \textit{Id.} at 213–16.
\item 39. \textit{Id.} at 214, 216.
\item 40. Entergy Nuclear Vt. Yankee v. Shumlin, 733 F.3d 393, 422 (2d Cir. 2013).
\end{itemize}
the standard by which courts determine the scope of nuclear preemption; however, as Judge Susan L. Carney’s concurrence in Entergy Nuclear suggests, it may be time to reassess the Pacific Gas framework in two respects.\footnote{See id. at 434–38.}

First, the Pacific Gas framework relies too heavily on a court’s ability to decipher the legislative intent behind the law.\footnote{The merits of such extensive use of legislative history have been debated extensively elsewhere and are beyond the scope of this In Brief. For more information on this topic, see generally Stephen Breyer, On the Uses of Legislative History in Interpreting Statutes, 65 S. CAL. L. REV. 845 (1992); William N. Eskridge, Jr., The New Textualism, 37 UCLA L. REV. 621 (1990).} As Entergy Nuclear demonstrated, courts cannot always rely on the legislature’s stated intent.\footnote{Entergy Nuclear, 733 F.3d at 420–21.} In Entergy Nuclear, the Vermont legislature stated an intent to diversify power sources and promote more cost-effective energy sources, but the legislative history indicated that safety concerns were also in play.\footnote{Id. at 416, 420–21, 424 (“[L]et’s find another word for safety’ . . . ‘I understand that only the feds are allowed to think of safety issues, and we carefully don’t use that word here.’”).} In such situations, the use of legislative history is rarely reliable and if used widely, could incentivize legislators to disguise the true purpose behind the law.\footnote{Id. at 437.}

Second, the Pacific Gas test fails to account for the broad array of interests that could drive a state’s decision to regulate nuclear power. In Vermont, safety concerns undoubtedly played a role in the decision not to reauthorize Vermont Yankee.\footnote{Id. at 420–21.} However, the decision also reflected a broader judgment about the value of nuclear energy.\footnote{Id. at 437.} The legislative history, although replete with references to safety, shows that Vermont consciously valued the potential safety and health costs over the economic virtues of nuclear energy.\footnote{See id.} By requiring the Second Circuit to determine only whether the decision was “grounded in radiological safety concerns,” the Pacific Gas test undermined the state’s holistic value judgment about the relative weight of competing interests.\footnote{See Pac. Gas & Elec. Co. v. State Energy Res. Conserv. & Dev. Comm’n, 461 U.S. 190, 212 (1983).} The result too narrowly limits a state’s role in the nuclear regulatory field and likely strays too far from the congressional intent behind the AEA.

\section*{A. Implications of the Pacific Gas Preemption Test}

The Pacific Gas framework requires a court to discern a legislature’s true motives to determine whether a state act is “‘grounded in [radiological] safety concerns.’”\footnote{See English v. Gen. Elec. Co., 496 U.S. 72, 84 (1990); Entergy Nuclear, 733 F.3d at 422; see also Entergy Nuclear, 733 F.3d at 435 (Carney, J., concurring) (“[O]ur decision seems to me to invite a reconsideration—one that our Court is not free to undertake—of the preemptive boundaries set in Pacific Gas.”).} Yet, while the Pacific Gas and Entergy Nuclear courts applied the same test, they diverged greatly in the extent to which they deferred to the
legislature’s stated purpose.\textsuperscript{51} In Pacific Gas, the Court largely assumed that the Commission’s stated objectives were true.\textsuperscript{52} In marked contrast, the Second Circuit found both of Vermont’s stated objectives implausible.\textsuperscript{53} It held that (1) both could be achieved without cutting power at Vermont Yankee,\textsuperscript{54} and (2) neither would be achieved by “conferring unreviewable power” over the continued operation of the reactor to the Vermont legislature.\textsuperscript{55}

The Second Circuit’s decision to engage more closely with the legislative history determined the outcome of Entergy Nuclear. Having decided to conduct a more searching review, the court found a record filled with “references, almost too numerous to count,” showing that legislators were concerned with safety, knew about a preemption problem, and actively sought ways to avoid it.\textsuperscript{56} As Professor Donald M. Kreis of Vermont Law School described, the record is replete with “talk of health effects, three-headed turtles, and sterile sheep” that is truly hard to ignore.\textsuperscript{57} Given the record, the court had little trouble finding that the statutes were preempted.\textsuperscript{58}

Although the special circumstances in this case justify the court’s decision to look beyond Vermont’s stated objectives, there are compelling reasons to avoid wide use of legislative history.\textsuperscript{59} As Judge Carney’s concurrence suggests, the widespread use of legislative history may provide an “irresistible incentive” for states to “do their best to mask their concerns about safety.”\textsuperscript{60} The judge’s comment reflects a concern that states will look to Entergy Nuclear for lessons on how to hide their real intent. The judge’s fear may be overstated for the same reason that the use of legislative history is inherently unreliable: legislatures rarely speak with one voice.\textsuperscript{61} Nonetheless, it is a strong point because it speaks to a vulnerability of the Pacific Gas test, which hinges on the court’s ability to identify the legislature’s “true motive.”\textsuperscript{62}

\textsuperscript{51} Pacific Gas, 461 U.S. at 213.
\textsuperscript{52} \textit{Id.} at 214, 216.
\textsuperscript{53} Entergy Nuclear, 733 F.3d at 416, 424. The statutes aimed to “(1) increase[] use of a diverse array of renewable power sources; and (2) promote energy sources that are more cost-effective.” \textit{Id.}
\textsuperscript{54} \textit{Id.} at 417–18.
\textsuperscript{55} \textit{Id.} at 424.
\textsuperscript{56} \textit{Id.} at 420–21.
\textsuperscript{57} \textit{Id.} at 420; Donald M. Kreis, \textit{State to Court of Appeals: Act 160 Just a “Process Statute,”} VT. YANKEE LAWSUIT: COMMENT. (June 6, 2012), http://vtyankeelawsuit.vermontlaw.edu/all-posts.
\textsuperscript{58} Entergy Nuclear, 733 F.3d at 422 (finding that the record “meets any conceivable standard for the allowable threshold level of impermissible concerns under Pacific Gas”).
\textsuperscript{59} \textit{See generally} Breyer, \textit{supra} note 42; Eskridge, \textit{supra} note 42.
\textsuperscript{60} Entergy Nuclear, 733 F.3d at 437 (Carney, J., concurring).
\textsuperscript{61} Zedner v. United States, 547 U.S. 489, 510 (2006) (Scalia, J., dissenting) (“[T]here is no basis either in law or in reality for th[e] naïve belief that “what is said by a single person in a floor debate or by a committee represents the view of Congress as a whole.”).}
B. The Pacific Gas Standard Too Narrowly Limits the Role of the State in Regulating Nuclear Industries Within Its Borders

The Pacific Gas test necessarily reflects tough choices about the role of the AEA in the ever-evolving and complex field of nuclear regulation. Yet the test, at least as applied in Entergy Nuclear, is overly broad and disconnected from the original congressional intent behind the AEA. Because the test too narrowly limits the role of state governments, it may be time, as Judge Carney suggested, to reconsider the preemptive boundaries set in Pacific Gas.63

Both Pacific Gas and Entergy Nuclear are difficult cases because the statutes at issue do not fall squarely within the preempted field of nuclear safety.64 In Pacific Gas, the California law, which required the state to certify the existence of adequate storage facilities for spent nuclear waste, reflected multiple legislative priorities.65 It embodied concerns about the safety of spent nuclear fuel, but it also reflected California’s long-term economic interest in ensuring the sustainability of its power grid, which the state perceived as threatened by the rate at which fuel tanks were filling up with nuclear waste.67 The same can be said of the Vermont statutes, which, if upheld, would have affected the safety, sustainability, and efficiency of Vermont’s power grid.68

The AEA provides little guidance to courts on how to address such complex cases, and as Judge Carney’s concurrence pointed out, the Pacific Gas test and its weaknesses are largely a product of this ambiguity.69 On the one hand, the Supreme Court acknowledged that the AEA preserves state authority over “the type of generating facilities to be licensed, land use, and ratemaking.”70 Further, it noted that the AEA does not force a state to approve the construction of a plant within its borders,71 and conceded that state authority over the need for nuclear facilities is “clear.”72 On the other hand, the Court “pointedly declined” to adopt the narrow interpretation of the AEA offered by Justice Harry Blackmun’s dissenting opinion.73 Justice Blackmun argued that the AEA did not preempt the “broad field of ‘nuclear safety concerns,’ but only the narrower area of how a nuclear plant should be constructed and operated to protect against radiation hazards.”74 The Pacific Gas compromise gave the Court enough leeway to strike the right balance in that case. Yet, as Judge Carney notes, the language of the test likely overstated

63. See Entergy Nuclear, 733 F.3d at 437 (Carney, J., concurring).
64. See Pacific Gas, 461 U.S. at 195–98.
65. Id.
66. Id.
67. Id.
68. See Entergy Press Release, supra note 7.
70. Pacific Gas, 461 U.S. at 212. See supra text accompanying note 36.
71. Entergy Nuclear, 733 F.3d at 436 (citing Pacific Gas, 461 U.S. at 205).
72. Pacific Gas, 461 U.S. at 216.
73. Entergy Nuclear, 733 F.3d at 434.
74. Pacific Gas, 461 U.S. at 224 (Blackmun, J., dissenting).
the scope of the preempted field and overly restricted state regulatory powers.\(^{75}\)

The *Pacific Gas* standard leaves states with few substantive protections under the AEA and does not acknowledge a state’s legitimate interest in regulating nuclear activity. As Judge Carney discusses: “To rule that concern for safety is fatal to a state’s legislative initiatives is to disable the states from legislating within their borders to respond to the legitimate economic concerns of their citizens.”\(^{76}\) The Second Circuit left Vermont and similarly-situated states with three options to play a regulatory role in nuclear safety: (1) requesting that the NRC hold hearings on issues relevant to safety, (2) participating in public notice-and-comment periods, and (3) appealing NRC decisions to federal courts who have exclusive jurisdiction over NRC final orders.\(^{77}\) Although states may pursue these options, none of them are likely to satisfy legislators who are now left with “very little power to control their own policies, while bearing the cost when the federal government gets it wrong.”\(^{78}\)

**CONCLUSION**

The *Pacific Gas* test and the result in *Entergy Nuclear* send the wrong message to state legislators that want to play a more active watchdog role over nuclear safety. For states like Vermont that have led the call to develop new sources of energy and progressive environmental policies, *Entergy Nuclear* presents a significant obstacle to reform. For this reason and the weaknesses of the *Pacific Gas* test described above, the test ought to be reevaluated to more accurately reflect the congressional intent behind the AEA and to bolster the important watchdog role of states in the field of nuclear energy.

*Lora Krsulich*

---

75. *Entergy Nuclear*, 733 F.3d at 434.
76. *Id.* at 437.
77. *Id.* at 427–28; *see also* 42 U.S.C. § 2239 (2006) (granting federal circuit courts exclusive jurisdiction over NRC final orders).
78. *See* Hanna, *supra* note 5.

We welcome responses to this In Brief. If you are interested in submitting a response for our online companion journal, *Ecology Law Currents*, please contact ecologylawcurrents@boalt.org. Responses to articles may be viewed at our website, http://www.boalt.org/elq.