

**UNITED STATES COURT OF APPEALS
FOR THE SECOND CIRCUIT**

August Term, 2012

(Argued: January 14, 2013)

Decided: August 14, 2013)

Docket Nos. 12-707-cv (L) 12-791-cv (XAP)

-----X

ENTERGY NUCLEAR VERMONT YANKEE, LLC, ENTERGY NUCLEAR OPERATIONS, INC.,

Plaintiffs-Appellees-Cross-Appellants,

v.

PETER SHUMLIN, in his official capacity as Governor of the State of Vermont, WILLIAM
SORRELL, in his official capacity as Attorney General of the State of Vermont, JAMES VOLZ, in
his official capacity as a member of the Vermont Public Service Board, JOHN BURKE, in his
official capacity as a member of the Vermont Public Service Board, DAVID COEN, in his official
capacity as a member of the Vermont Public Service Board,

Defendants-Appellants-Cross-Appellees.

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Before: CARNEY and DRONEY, *Circuit Judges*, and GARDEPHE, *District Judge*.*

Owners of nuclear power plant brought action against officials of the State of Vermont,
seeking declaratory judgment and permanent injunction that three Vermont statutes are
preempted by the Atomic Energy Act, and that Vermont’s efforts to require a below-market
power purchase agreement is preempted by the Federal Power Act and violates the dormant
Commerce Clause. Following a bench trial, the United States District Court for the District of
Vermont (Murtha, *J.*) ruled in plaintiffs’ favor on Atomic Energy Act preemption claim and
dormant Commerce Clause claim, and found that the Federal Power Act preemption claim was
not ripe. We AFFIRM the district court as to the Atomic Energy Act and Federal Power Act
preemption claims, and REVERSE the district court as to the dormant Commerce Clause claim.

Judge CARNEY concurs in a separate opinion.

* The Honorable Paul G. Gardephe, United States District Judge for the Southern District of New York, sitting by designation.

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Sandra Levine, Conservation Law Foundation, Montpelier, VT; Jared Margolis, New England Coalition, Brattleboro, VT; Jamey Fidel, Paul Brierre, Vermont Natural Resources Council, Montpelier, VT; James Dumont, Vermont Public Interest Research Group, Montpelier, VT, *for amici curiae Conservation Law Foundation, New England Coalition, Vermont Natural Resources Council, and Vermont Public Interest Research Group in support of Defendants-Appellants-Cross-Appellees.*

Steven F. Huefner, The Ohio State University, Moritz College of Law, *for amicus curiae National Conference of State Legislatures in support of Defendants-Appellants-Cross-Appellees.*

Eric T. Schneiderman, Attorney General of the State of New York, Barbara D. Underwood, Solicitor General, Monica Wagner, Deputy Bureau Chief, Environmental Protection Bureau, Denise A. Hartman and Andrew B. Ayers, Assistant Solicitors General of Counsel, Albany, NY,

1 *for amici curiae States of New York,*
2 *Connecticut, Iowa, Maryland,*
3 *Massachusetts, Mississippi, Missouri, New*
4 *Hampshire, and Utah in support of*
5 *Defendants-Appellants-Cross-Appellees.*
6

7 DRONEY, *Circuit Judge:*
8

9 Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.,
10 (collectively, “Entergy”)¹ own and operate the Vermont Yankee Nuclear Power Station
11 (“Vermont Yankee”), a nuclear power plant in Vernon, Vermont. Entergy brought suit in the
12 United States District Court for the District of Vermont against the Governor and Attorney
13 General of the State of Vermont and the members of the Vermont Public Service Board in their
14 official capacities (collectively, “Vermont”), and asserted three claims. Count One alleged that
15 three recently enacted Vermont statutes governing Vermont Yankee – Acts 74, 160, and 189 –
16 concerned issues of radiological safety and thus were preempted by the federal Atomic Energy
17 Act. Count Two alleged that Vermont had attempted to condition its grant of permission to
18 operate Vermont Yankee on the execution of a power purchase agreement that favored Vermont
19 retail consumers, and that this attempt was preempted by the Federal Power Act. Count Three
20 asserted that these same actions with respect to the power purchase agreement also violated the
21 dormant Commerce Clause of the United States Constitution. Following a bench trial, the district
22 court (Murtha, *J.*) found in favor of Entergy as to Count One with respect to Acts 74 and 160 and
23 found the challenge to Act 189 to be moot.² The district court also found in favor of Entergy as
24 to Count Three. Lastly, the district court found Count Two to be premature. We affirm the
25 district court as to Counts One and Two, and reverse the district court as to Count Three.
26

27 **BACKGROUND**

28

29 We summarize here those findings of fact relevant to this appeal that were made by the
30 district court following the bench trial.

¹ Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc., are co-holders of the Nuclear Regulatory Commission Facility Operating License No. DPR-28 and Renewed Facility Operating License No. DPR-28. They are also indirect subsidiaries of parent Entergy Corporation, a Delaware corporation headquartered in New Orleans, Louisiana, that owns and operates twelve nuclear reactors in ten locations in the United States.

² Entergy does not appeal the district court’s determination as to Act 189.

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I. The History of Vermont Yankee

In 1972, Vermont Yankee opened and began operating under the ownership and management of the Vermont Yankee Nuclear Power Corporation (VYNPC), a joint venture of eight New England retail electric utilities. Among the eight members of the joint venture were two Vermont electric companies (Central Vermont Public Service and Green Mountain Power), which owned a collective fifty-five percent share of Vermont Yankee. Vermont Yankee had been granted a forty-year Facility Operating License by the Atomic Energy Commission, the federal agency that preceded the Nuclear Regulatory Commission (NRC). The forty-year license was to expire on March 21, 2012.

In 1999, VYNPC sought to sell Vermont Yankee. After an initial bid by one firm was rejected by the Vermont Public Service Board (the “Board”),³ Entergy submitted a bid for Vermont Yankee in the summer of 2001 and sought a “certificate of public good” (CPG), a license from the Board to continue to operate Vermont Yankee under Vermont state law.⁴ As it was negotiating with the Board, Entergy entered into a memorandum of understanding (MOU) (the “2002 MOU”) with the Vermont Department of Public Service (the “Department”).⁵ The 2002 MOU incorporated a power purchase agreement (PPA) Entergy executed in 2001 (the “2001 PPA”) that promised Vermont retail electric utilities favorable pricing terms for the purchase of power from Vermont Yankee until 2012.⁶ Entergy maintains it agreed to the 2001 PPA because it feared that the Department would not otherwise recommend a CPG for Vermont Yankee. Entergy also agreed in the 2002 MOU to “waive any claim . . . that federal law preempts the jurisdiction of the Board.”

³ The Board is a three-member quasi-judicial state agency that regulates a variety of public utilities in Vermont, including power facilities. It supervises the utilities’ rates, service quality, and overall financial management. *See* Vt. Stat. Ann. tit. 30, §§ 9, 203.

⁴ The criteria the Board must consider in deciding whether to issue a CPG relate to such issues as power generation stability, economic impact on the State, aesthetic and environmental issues, and likelihood of compliance with federal regulations. *See* Vt. Stat. Ann. tit. 30, § 248(b).

⁵ The Department oversees laws relating to public service corporations and represents the State of Vermont in the procurement of energy in hearings before the Board in an advocacy capacity. *See* Vt. Stat. Ann. tit. 30, §§ 1, 2, 203.

⁶ Although VYNPC included retail utilities from outside Vermont, by 2009, Central Vermont Public Service and Green Mountain Power had accumulated a combined stake of 92.5% of VYNPC.

1 On June 13, 2002, the Board approved the sale of Vermont Yankee to Entergy and issued
2 a new CPG. In its Decision and Final Order, the Board stated that the sale of Vermont Yankee to
3 Entergy would “promote the general good” in part because, “under most reasonably foreseeable
4 scenarios, the transactions are highly likely to produce an economic benefit for Vermont
5 ratepayers.” *In re Vt. Yankee Nuclear Power Corp.*, Docket No. 6545, 2002 WL 1997942, at *1
6 (Vt. Pub. Serv. Bd. June 13, 2002). The Order specifically endorsed the 2001 PPA because it
7 allowed Vermont retail utilities to purchase power from Vermont Yankee at prices that “are
8 substantially below the ‘currently committed’ operating costs of Vermont Yankee over the
9 remaining term of its license.” *Id.* The Order noted that the 2001 PPA also imposed a “cap on the
10 charges for Vermont Yankee power.” *Id.*

11
12 In 2002, Entergy obtained from the Federal Energy Regulatory Commission (FERC)
13 authorization to sell power into the interstate market under a market-based tariff, which remains
14 in effect. The authorization permits Entergy to sell power wholesale through ISO-New England
15 (“ISO-NE”), a nonprofit independent system operator under FERC regulation that administers
16 New England’s energy markets. ISO-NE’s stated responsibilities are to maintain “reliable power
17 system operations,” ensure “efficient and competitive markets,” and to “administer [the] regional
18 transmission tariff, including comprehensive regional system planning.”

19

20 **II. The Recent Vermont Legislation Concerning Vermont Yankee**

21 22 **A. Act 74: The Vermont Legislation Concerning Increased Nuclear Waste Storage** 23 **by Vermont Yankee**

24
25 In 2003, Entergy petitioned the Board to obtain a twenty-percent “uprate,” which would
26 allow an increase in Vermont Yankee’s power output and also result in a concomitant increase in
27 nuclear waste. *See Entergy Nuclear Vt. Yankee, LLC v. United States*, 95 Fed. Cl. 160, 173
28 (2010), *aff’d in part, rev’d in part sub nom., Vt. Yankee Nuclear Power Corp. v. Entergy Nuclear*
29 *Vt. Yankee, LLC*, 683 F.3d 1330 (Fed. Cir. 2012). Under a statute enacted in 1977 – five years
30 after Vermont Yankee first began operating – the construction of new nuclear waste storage
31 facilities in Vermont was prohibited unless the Vermont Legislature passed a bill or joint

1 resolution finding that the facilities promoted the “general good of the state.” Vt. Stat. Ann. tit.
2 10, § 6501(a). However, two years later, in 1979, the Vermont Legislature enacted an
3 “exemption” provision stating that the requirements imposed by § 6501 do “not apply to any
4 temporary storage by Vermont Yankee Nuclear Power Corporation of spent nuclear fuel
5 elements or other radioactive waste at its present site.” *Id.* § 6505.

6
7 At the same time that Entergy sought the uprate, it also entered into a new MOU (the
8 “2003 MOU”) with the Department under which Entergy would pay \$6 million into new “State
9 Benefits Funds,” namely the “Environmental Benefit Fund,” the “Low Income Benefit Fund,”
10 and the “Entergy Fund for Economic Benefit.” *See Entergy Nuclear*, 95 Fed. Cl. at 173-74; *In re*
11 *Entergy Nuclear Vt. Yankee, LLC*, 232 P.U.R.4th 219, 223 (Vt. Pub. Serv. Bd. Mar. 15, 2004).
12 The Board then issued a CPG approving the uprate on March 24, 2004. *Entergy Nuclear*, 95 Fed.
13 Cl. at 188. However, Entergy also needed to obtain approval to construct the new dry cask spent
14 nuclear fuel storage facility, even though it had recently received approval for it from the NRC.⁷
15 Entergy then petitioned the Board, requesting permission to expand its spent fuel storage facility.
16 Entergy maintained that the exemption provision of section 6505 applied to the Vermont Yankee
17 site in general, as opposed to a particular owner of the plant. The Board sought guidance from
18 the Vermont Senate, which, in turn, obtained a letter from the Office of the Vermont Attorney
19 General opining that section 6505 was owner-specific. *See* Letter from Michael McShane, Asst.
20 Att’y Gen., to Sen. Peter Welch, Pres. Pro Tempore of the Vt. Senate, 2004 WL 1737093, at *1-
21 2 (Apr. 30, 2004). Since Vermont Yankee had changed ownership from VYNPC to Entergy, the
22 letter provided that Entergy would need the approval of the Vermont Legislature to add spent
23 fuel storage capacity. *Id.* at *4.

24
25 In response, Entergy presented proposed legislation clarifying that section 6505 was site-
26 specific, rather than owner-specific. This proposal failed to obtain support from the Vermont

⁷ Spent fuel rods are typically stored in deep pools of treated water at the reactor site for a period of at least five years. Once the spent fuel rods’ temperature and radiation emissions have sufficiently diminished, they can be moved into dry casks – consisting of sealed metal cylinders on a concrete pad – for long-term storage. Dry casks are monitored by the NRC for public health and safety. *See* 10 C.F.R. § 961.11. at App. E(B)(3); U.S. Nuclear Regulatory Comm’n, Backgrounder on Dry Cask Storage of Spent Nuclear Fuel (Feb. 28, 2013), *available at* <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/dry-cask-storage.html>.

1 Legislature, however. The Vermont Legislature then began hearings on the bill that would
2 eventually become Act 74.

3
4 Act 74, which was enacted on June 21, 2005, had two principal effects. First, Entergy
5 would only need to seek a CPG from the Board before constructing storage facilities for new
6 spent nuclear fuel, rather than the Vermont Legislature as had been required by section 6501(a).
7 However, this CPG would remain in effect only until March 21, 2012. The second effect of Act
8 74 was that after March 21, 2012, the storage of any new spent nuclear fuel in Vermont would
9 require an affirmative vote by the Vermont Legislature. If no such affirmative vote occurred,
10 storage of nuclear waste generated from operations after March 21, 2012, would not be
11 permitted. Thus, Vermont Yankee would have to shut down.

12
13 The post-March 21, 2012, shift of responsibility for approving the storage of spent
14 nuclear fuel generated by Vermont Yankee from the Board to the Vermont Legislature had
15 important ramifications. Decisions of the Board may be appealed to the Vermont Supreme Court.
16 Vt. Stat. Ann. tit. 30, § 12. No such review mechanism would exist for the Vermont Legislature’s
17 decision not to approve additional spent nuclear fuel storage space.

18
19 Act 74 added three new sections to title 10 of the Vermont Statutes: sections 6521, 6522,
20 and 6523. Section 6521 outlines the Vermont Legislature’s findings, including recognition of the
21 need to develop renewable and environmentally sustainable energy sources in Vermont. Vt. Stat.
22 Ann. tit. 10, § 6521. To support this objective, section 6521 references the state’s creation of an
23 “energy efficiency fund . . . to support cost-effective investments in end-use energy efficiency
24 resources,” and a statewide energy purchasing pool with a “related program to accelerate
25 investments in new renewable and combined-heat and power projects.” *Id.*

26
27 Section 6522 restates the requirement that the owners of Vermont Yankee cannot
28 construct new spent fuel storage facilities for the period up to March 21, 2012, unless they obtain
29 a CPG from the Board. *Id.* § 6522(a). Section 6522 also mandates that the Board find that the
30 owners of Vermont Yankee have adequate resources to manage spent fuel and decommission the
31 plant, if necessary, and a plan “to remove all spent fuel from Vermont to a federally certified

1 long-term storage facility in a timely manner,” and that the owners comply with any existing
2 MOUs with the state. *Id.* § 6522(b). Lastly, section 6522 states that any CPG issued by the Board
3 pursuant to Act 74 will apply to spent nuclear fuel generated by Vermont Yankee only until
4 March 21, 2012, which is the “end of the current operating license.” *Id.* § 6522(c)(2). This
5 provision states that the owners have no “expectation or entitlement to continued operation of
6 Vermont Yankee following the expiration of its current operating license on March 21, 2012.”
7 *Id.* § 6522(c)(5). Section 6522(c)(4) provides that Vermont Yankee cannot store spent nuclear
8 fuel generated after March 21, 2012, on site, unless the Vermont Legislature enacts legislation
9 granting such permission. In the absence of any other storage options, this would effectively shut
10 down Vermont Yankee.

11
12 Section 6523⁸ established a “Clean Energy Development Fund” (the “Fund”), which
13 Entergy agreed to when it received permission for its update. *See* Vt. Stat. Ann. tit. 10, §
14 6523(a).⁹ Under section 6523(a), the money Entergy had promised to pay into the State Benefits
15 Funds under the 2003 MOU would instead be paid into the Fund. The Fund’s purpose is to
16 “promote the development and deployment of cost-effective and environmentally sustainable
17 electric power and thermal energy or geothermal resources for the long-term benefit of Vermont
18 consumers.” *Id.* § 6523(c). Section 6523(d) outlines various types of renewable energy
19 investments that the Fund can undertake, such as energy projects on farms, biofuel production,
20 and thermal energy facility development. *Id.* § 6523(d). Entergy estimated that its total obligation
21 under section 6523 to the Fund would be \$2.5 million per year, or about \$15 million over the
22 period from 2005 to 2012.¹⁰

23
24 Act 74 also explicitly incorporates the MOUs, including the 2002 and 2003 MOUs, as
25 well as a new MOU executed on June 21, 2005 (the “2005 MOU”). Vt. Stat. Ann. tit. 10, §
26 6522(b)(4).¹¹ The 2005 MOU mandated, *inter alia*, that Entergy locate the spent nuclear fuel

⁸ Section 6523 was subsequently recodified to title 30 of the Vermont Statutes relating to the powers of the Board. *See* Vt. Stat. Ann. tit. 30, § 8015.

⁹ Entergy is not challenging section 6523 in the instant appeal.

¹⁰ In its subsequent Order, the Board confirmed that Entergy’s total obligation under the 2005 MOU to make payments into the Fund would be \$15,625,000 from 2005 to 2012, made in quarterly payments of \$625,000. *In re Entergy Nuclear Vt. Yankee, LLC*, 249 P.U.R.4th 1, 2006 WL 1418626, at *21 (Vt. Pub. Serv. Bd. Apr. 26, 2006).

¹¹ The 2005 MOU was not included in the record on appeal, but was introduced below as Plaintiffs’ Trial Exhibit 465 (Document 46-19).

1 storage pad at least one hundred feet from a floodplain, space the storage casks to permit access
2 to individual casks “to the greatest extent possible,” configure the spent-fuel pool so that high-
3 decay heat assemblies are surrounded by low-decay heat assemblies, perform temperature
4 monitoring and monthly manual radiation surveillance of the storage casks and report the results
5 to the Department, not store waste generated outside Vermont on site, remove “high level” spent
6 nuclear fuel from Vermont “as quickly as possible,” and conduct a study addressing the stability
7 of the proposed new spent nuclear fuel storage facility based upon a stated concern that an
8 adjacent river bank might erode and collapse. *See* 2005 MOU at 1-2; *see also Entergy Nuclear*
9 *Vt. Yankee*, 95 Fed. Cl. at 179; *In re Entergy Nuclear Vt. Yankee, LLC*, 249 P.U.R.4th 1, 2006
10 WL 1418626, at *48 (Vt. Pub. Serv. Bd. Apr. 26, 2006).¹² This “flood analysis” was more
11 extensive than that required by the NRC’s licensing process for the same spent nuclear fuel
12 storage facility and, although Entergy believed that the Board’s concerns regarding the
13 probability of a collapse were “not credible,” Entergy agreed to undertake the study. *In re*
14 *Entergy Nuclear Vt. Yankee, LLC*, 2006 WL 1418626, at *28, *51. As with the earlier MOUs,
15 Entergy agreed to waive any federal preemption claim concerning the 2005 MOU. 2005 MOU at
16 3.

17
18 On June 22, 2005, the day after Act 74 went into effect, Entergy filed a petition with the
19 Board seeking to construct a dry fuel storage facility at Vermont Yankee, which, as mentioned,
20 the NRC had already pre-licensed. *In re Entergy Nuclear Vt. Yankee, LLC*, 2006 WL 1418626, at
21 *6. In the subsequent eight months, the Board held a series of public meetings and conducted
22 technical hearings to evaluate the petition. *Id.* at *6-7. The Board also received public comments,
23 of which the “vast majority . . . highlighted public concerns about the public uprate that [the
24 Board has] previously approved, and the desire for an independent safety assessment, general
25 nuclear safety concerns, and Vermont Yankee as a terrorist target.” *Id.* at *9. In addition, most of
26 those who attended the Board’s public meetings “opposed the proposed dry fuel storage facility”
27 for reasons relating to the facility’s “vulnerability to natural or manmade disasters,” the adequacy
28 of dry fuel storage technology, and the potential for environmental harm. *Id.* at *9-10. On April
29 26, 2006, the Board issued an Order granting the petition until 2012, and issuing a new CPG for

¹² The Board imposed the flood analysis requirement in part in response to the U.S. Department of Energy’s “failure to remove the spent nuclear fuel [generated by Vermont Yankee] in a timely fashion.” *Entergy Nuclear Vt. Yankee*, 95 Fed. Cl. at 179-80.

1 the construction of the storage facility. *Id.* at *1. The Board stated that the “most significant
2 factor” in its decision was the “economic benefit of the facility.” *Id.* at *5. Noting that Vermont
3 Yankee “now provides approximately one-third of the power consumed by the state of
4 Vermont,”¹³ an early shutdown of the plant due to the absence of spent nuclear fuel storage
5 facilities would “impose substantial costs on Vermont ratepayers.” *Id.* “Without the favorably-
6 priced power from Vermont Yankee, Vermont utilities would need to purchase replacement
7 power from sources that are presently expected to be more expensive over this period. Approval
8 of the dry fuel storage facility provides a direct economic benefit to the state by preserving the
9 power.” *Id.* The Board estimated the likely savings to Vermont ratepayers arising from the 2001
10 PPA, under which Vermont Yankee power “has been sold to Vermont utilities at prices
11 consistently below the spot-market price of energy in New England,” at “approximately \$61
12 million over the period from 2008 to 2012.” *Id.* at *21.

13

14 **B. Act 160: The Vermont Legislation Requiring State Legislative Approval To**
15 **Operate Vermont Yankee After 2012**

16

17 On January 25, 2006, Entergy applied to the NRC for a renewal license to operate
18 Vermont Yankee through March 21, 2032. One week later, on February 1, 2006, the Vermont
19 Legislature began considering the bill that would eventually become Act 160. Act 160 was
20 passed on May 18, 2006, and provides that “a nuclear energy generating plant may be operated
21 in Vermont only with the explicit approval of the General Assembly.” Act 160, § 1(a).¹⁴

22

23 Act 160 provides that, in deciding whether to approve operation of a nuclear power plant,
24 the Vermont Legislature should consider “the state’s need for power, the economics and
25 environmental impacts of long-term storage of nuclear waste, and choice of power sources
26 among various alternatives.” *Id.* The preamble states that Act 160’s general purpose is to provide
27 the Vermont Legislature with the authority to determine whether to issue a new CPG for
28 Vermont Yankee after March 21, 2012. *Id.* § 1(c). Act 160 would also help foster a “larger

¹³ This, in turn, represents fifty-five percent of Vermont Yankee’s total power output. The remainder is sold on the wholesale market to retail utilities in other states. *See In re Proposed Sale of Vt. Yankee Nuclear Power Station*, 829 A.2d 1284, 1285 (Vt. 2003); *In re Entergy Nuclear Vt. Yankee, LLC*, 2006 WL 1418626, at *12.

¹⁴ The preamble to Act 160 was not published in the Vermont Statutes, but is contained in West’s historical notes to Chapter 157 of title 10, Vermont Statutes Annotated (West 2011).

1 societal discussion of broader economic and environmental issues relating to the operation of a
2 nuclear facility in the state, including an assessment of the potential need for the operation of the
3 facility and its economic benefits, risks, and costs,” and of alternative methods of power
4 generation as well. *Id.* § 1(d). Act 160 also includes a stated purpose of ensuring that the
5 evaluation of new CPGs be conducted under new cost-benefit assumptions and analyses, rather
6 than those that supported the previous CPG. *Id.* § 1(e).

7
8 Act 160 adds three new sections to title 30 of the Vermont Statutes: sections 248(e)(2),
9 248(m), and 254. Section 248(e)(2) requires that the Vermont Legislature approve an extension
10 of the Vermont Yankee operating lease before the Board issues a new CPG. *See* Vt. Stat. Ann.
11 tit. 30, § 248(e)(2). Legislative approval for continued operation of Vermont Yankee is no longer
12 limited to issues concerning spent fuel storage, as under section 6522(c)(4) of Act 74; rather, Act
13 160 requires that the Vermont Legislature approve all aspects of the continued operation of
14 Vermont Yankee. Section 248(m) requires that the Board “evaluate the application [for a new
15 CPG] under current assumptions and analyses” and not apply “an extension of the cost benefit
16 assumptions and analyses forming the basis of the previous certificate of public good for the
17 operation of the facility.” *Id.* § 248(m). Lastly, section 254 requires that the owners of Vermont
18 Yankee apply for a new CPG at least four years prior to the expiration of the current CPG, and
19 that the Board inform the Vermont Legislature of the receipt of any new CPG application. *Id.* §
20 254(a)(1)-(2). When any new CPG application is submitted, the Department is directed to engage
21 in fact-finding with three stated objectives in mind:

- 22
- 23 (A) to facilitate public discussion of long-term economic and environmental issues relating to the
24 operation of any nuclear facility in the state;
 - 25 (B) to identify and assess the potential need for the operation of the facility and its long-term
26 economic and environmental benefits, risks, and costs; and
 - 27 (C) to assess all practical alternatives to those set forth in the applicant’s petition that may be
28 more cost-effective or that otherwise may better promote the general welfare.

29
30 *Id.* § 254(b)(1).

1 Section 254 also requires that the Department collect information relating to Entergy's
2 "funding plans for guardianship of nuclear waste after licensure but before removal of nuclear
3 waste from the site," plant closure procedures, and funding for emergency management systems.
4 One subsection of section 254 requires the Department to "identify, collect information on, and
5 provide analysis of long-term environmental, economic, and public health issues, including
6 issues relating to dry cask storage of nuclear waste and decommissioning options." *Id.* §
7 254(b)(2)(B). The Department is further directed to report its findings to the Board and to the
8 Vermont Legislature. *Id.* § 254(a)(2)-(3). The Board, in turn, is directed to consider the findings
9 of the Department in assessing an application for a new CPG. *Id.* § 254(c).

10
11 **C. Act 189: The Vermont Legislation Requiring State Inspections of Vermont**
12 **Yankee**

13
14 On June 5, 2008, then-Vermont Governor Jim Douglas signed into law Act 189, entitled
15 "An Act Relating to a Comprehensive Vertical Audit and Reliability Assessment of the Vermont
16 Yankee Nuclear Facility." The purpose of Act 189 was to assist the Vermont Legislature in
17 making its determination as to whether Vermont Yankee should be permitted to operate past
18 2012, and to reconfirm the "obligation and authority of the general assembly to examine the
19 reliability of the nuclear power station of Entergy Nuclear Vermont Yankee." Act 189, § 1(a).¹⁵
20 Act 189 further provides that, because Entergy was applying to extend the life of Vermont
21 Yankee beyond its original forty-year design, the Vermont Legislature needed to assess any
22 "reliability issues associated with operating [Entergy] for an additional 20 years after its
23 scheduled closure in 2012." *Id.* § 1(b). Act 189's text also addresses concerns relating to the
24 operating reliability of Vermont Yankee and issues relating to its performance that might arise
25 from expanding the plant. *Id.* § 2.

26
27 Act 189 calls for Department inspections of Vermont Yankee's operations, such as its
28 electrical, emergency, and mechanical systems. *Id.* §§ 3(a), 5(a). The Act also sets out
29 documentation requirements and inquiries that must be undertaken by the Department relating to

¹⁵ Though the original bill called for Act 189 to be codified as an addition to section 254 of title 30 of the Vermont Statutes, the final version of Act 189 was not codified. *Entergy Nuclear Vt. Yankee, LLC v. Shumlin*, 838 F. Supp. 2d 183, 213 (D. Vt. 2012).

1 the installation, maintenance, and inspection of safety systems in Vermont Yankee. *Id.* § 4. To
2 maximize the public visibility of these inspections of Vermont Yankee, Act 189 creates an
3 oversight panel consisting of experts in nuclear power appointed by the governor and the
4 Vermont Legislature. *Id.* § 6. The panel’s findings and evaluation of Vermont Yankee were to be
5 reported to the Vermont Legislature, which would use this information to determine whether to
6 extend the operating license for the plant beyond March 21, 2012. *Id.* § 6(d).

7
8 **D. S.289: The Vermont Senate Bill That Would Have Permitted the Continued**
9 **Operation of Vermont Yankee Beyond 2012, as Required by Act 160**

10
11 On January 7, 2010, Entergy disclosed a leak of tritium, a decay product of nuclear
12 energy, emanating from Vermont Yankee. Entergy stopped the leak and remediated its impact on
13 the surrounding soil, and after a subsequent investigation, the NRC concluded that the “public’s
14 health and safety and the off-site environment were not adversely affected.” A report by an
15 independent consulting group retained by the State of Vermont concluded, on April 30, 2010,
16 that the leak did not affect the reliability of Vermont Yankee.

17
18 At the time of the leak, the Vermont Senate was considering S.289, which was originally
19 titled, “An Act Relating to Approval for Continued Operation of the Vermont Yankee Nuclear
20 Power Station.” S.289, if passed, would have authorized the operation of Vermont Yankee for an
21 additional twenty years past March 21, 2012, as required by Act 160. Although the NRC granted
22 a twenty-year renewal for the operation of Vermont Yankee on March 21, 2011, S.289 failed to
23 pass in the Vermont Senate. As a result, Vermont Yankee has not been granted permission by the
24 Vermont Legislature to operate past March 21, 2012.

25
26 * * *

27
28 Collectively, under Acts 74 and 160, and due to the failure to pass S.289, the operation of
29 Vermont Yankee after March 21, 2012, depends upon the Vermont Legislature approving the
30 power plant’s continued operation. As the Vermont Legislature has failed to act, Vermont

1 Yankee’s CPG expired on March 21, 2012, and the plant would have been forced to shut down
2 absent the district court’s decision below.

3
4 In making its determination whether to permit further operation, the Vermont Legislature
5 is required by Acts 74 and 160 to consider the impact of the local storage of spent nuclear fuel on
6 the local economy and environment, and on the diversity of power sources available to Vermont
7 retail utilities. Under the two Acts, the Vermont Legislature must also consider the following in
8 determining whether to allow Vermont Yankee to continue operating: (1) the “public health”
9 implications related to dry cask storage of nuclear waste and decommissioning of the plant; (2)
10 Entergy’s resources for emergency management systems, management of spent nuclear fuel
11 storage, and decommissioning of the plant; (3) Entergy’s planning for the removal of nuclear
12 waste; and (4) Entergy’s long-term plan for the closure of Vermont Yankee.

13
14 In addition, Acts 74 and 160 require that Entergy comply with the 2002, 2003, and 2005
15 MOUs. Those MOUs impose, *inter alia*, the following additional requirements on Entergy, apart
16 from making payments into a fund used to promote alternative energy sources: (1) analysis of the
17 operational safety of Vermont Yankee in the event of flooding in excess of federal licensing
18 requirements; (2) compliance with specific requirements for the construction and monitoring of
19 spent nuclear fuel casks; (3) monitoring of the temperature and radiation of the storage casks and
20 regular reporting to the Department; (4) no storage of any nuclear waste generated outside of
21 Vermont; (5) removal of the nuclear waste generated by Vermont Yankee from the state as
22 quickly as possible; and (6) waiver of any federal preemption challenge to the Board’s authority
23 to regulate the plant. Lastly, the MOUs require that Entergy comply with the 2001 PPA under
24 which Vermont retail utilities must receive favorable pricing terms for the power produced by
25 Vermont Yankee relative to retail utilities in other states.

26
27 **III. Proceedings Before the District Court**

28
29 On April 18, 2011, Entergy brought suit in the United States District Court for the
30 District of Vermont against the Governor and Attorney General of the State of Vermont and the
31 members of the Vermont Public Service Board. The complaint sets forth three claims:

- 1 • **Count One:** Entergy sought a permanent injunction and declaration that Act 74, Act 160,
2 and Act 189 are invalid under the Supremacy Clause of the United States Constitution
3 because they are preempted by the Atomic Energy Act. *Entergy Nuclear Vt. Yankee, LLC v.*
4 *Shumlin*, 838 F. Supp. 2d 183, 188-89 (D. Vt. 2012).
- 5 • **Count Two:** Entergy sought a permanent injunction and declaration that the Federal Power
6 Act preempts the State of Vermont from conditioning Vermont Yankee’s continued
7 operation on the existence of a power purchase agreement between Vermont Yankee and
8 Vermont’s retail utilities, because FERC has exclusive jurisdiction over the regulation of
9 power transmission and sale. *Id.* at 189.
- 10 • **Count Three:** Entergy sought a permanent injunction and declaration that Vermont may not
11 condition continued operation of Vermont Yankee on the existence of a power purchase
12 agreement, because doing so places substantial burdens on interstate commerce, in violation
13 of the dormant Commerce Clause. *Id.*
- 14

15 On January 19, 2012, the district court issued its opinion following a bench trial. The
16 court first concluded that the Atomic Energy Act facially preempts Act 160, which, through the
17 operation of section 248(e)(2), effectively allows the Vermont Legislature to “deny a pending
18 renewal petition by taking no action on the petition, for any reason, procedural or substantive,
19 stated or unstated, permissible or impermissible under federal law.” *Entergy Nuclear*, 838 F.
20 Supp. 2d at 227. The court also pointed to section 254(b)(2)(B), which calls upon the Department
21 to support the Vermont Legislature’s fact-finding by conducting studies on, *inter alia*, “long-
22 term environmental, economic, and public health issues, including issues relating to dry cask
23 storage of nuclear waste and decommissioning options.” *Id.* at 227-28. In light of the statute’s
24 required consideration of “public health issues,” which are not defined elsewhere in the statute,
25 the court then examined the actual legislative purpose leading to the passage of Act 160. *Id.*
26 Finding the stated legislative policy and purposes offered by Vermont for Act 160 to be
27 unpersuasive, the court conducted an extensive review of the act’s legislative history, including
28 statements made by legislators and state regulators during both committee hearings and on the
29 floor. *See id.* at 229-31. On the basis of this review, the court held that there was “overwhelming
30 evidence in the legislative record that Act 160 was grounded in radiological safety concerns and
31 the concomitant desire to empower the legislature to act on those concerns in deciding the

1 question of Vermont Yankee’s continued operation.” *Id.* at 230. The court concluded that Act
2 160 was thus preempted on its face by the Atomic Energy Act under the standards articulated by
3 the Supreme Court in *Pacific Gas & Electric Co. v. State Energy Resources Conservation &*
4 *Development Commission*, 461 U.S. 190 (1983) (“*Pacific Gas*”).

5
6 The district court performed the same analysis of Act 74. The court reasoned that by not
7 permitting Entergy to store spent nuclear fuel generated after March 21, 2012, in Vermont,
8 “absent affirmative action by the General Assembly,” section 6522(c)(4) effectively “permits the
9 General Assembly to fail to act on a pending petition to store spent fuel for radiological safety
10 reasons, in a manner that evades review.” *Entergy Nuclear*, 838 F. Supp. 2d at 231. The court
11 conducted another extensive analysis of the legislative history behind Act 74, and determined
12 that Act 74 was “enacted with radiological safety purposes in mind,” and that by “giving the
13 General Assembly the unreviewable power to prohibit storage of fuel, and therefore to prohibit
14 continued operation for preempted radiological safety reasons,” Act 74 was facially preempted
15 under the Atomic Energy Act. *Id.* at 232-33.

16
17 As to Entergy’s preemption challenge to the PPA under the Federal Power Act, the
18 district court considered the scope of FERC authority under the Act and the “filed-rate doctrine,”
19 which holds that “state courts and regulatory agencies are preempted by federal law from
20 requiring the payment of rates other than the federal filed rate.” *Id.* at 233-34. The district court
21 noted that Vermont Yankee has been operating under a market-based tariff filed with FERC,
22 which only requires that the seller of power “enter into *freely negotiated* contracts with
23 purchasers,” as opposed to setting a prescribed rate. *Id.* at 234 (quoting *Morgan Stanley Capital*
24 *Grp., Inc. v. Pub. Util. Dist. No. 1 of Snohomish Cnty.*, 554 U.S. 527, 537 (2008) (emphasis in
25 *Entergy Nuclear*) (internal quotation marks omitted)). The court then held that even if Entergy
26 were to be forced to enter into a new PPA in violation of the market-based tariff, its recourse
27 would be to have the agreement reviewed by FERC. *Id.* at 235. However, the court concluded
28 that “it is not clear what preemptive effect the [Federal Power Act] has to prevent [Vermont]
29 from refusing to consider continued operation without such an agreement,” as there would be no
30 such agreement to review. *Id.* The court thus declined to enjoin the defendants on the basis of
31 Entergy’s Federal Power Act claim.

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Lastly, the district court found merit in Entergy’s claim that Vermont had conditioned “approval of a CPG for continued operation on the existence of a power purchase agreement at below-wholesale market rates” in violation of the dormant Commerce Clause. *Id.* at 235. The court concluded that an injunction was an appropriate remedy in this case, even though no new PPA past March 21, 2012, had yet been issued, because there was “evidence of intent to condition continued operation on the demonstration of some marked ‘economic benefit,’ . . . in the form of below-wholesale-market long-term power purchase agreements for Vermont utilities.” *Id.* at 236. The court made this finding by examining the materials submitted and testimony of the representatives of the Department in proceedings before the Board, as well as the statements of state legislators, to find impermissible intent on the part of the defendants. *Id.* at 236-39. On this basis, the court issued an injunction “enjoin[ing] Defendants from conditioning Vermont Yankee’s continued operation on the existence of a below-market PPA with Vermont utilities.” *Id.* at 239.

In sum, the district court permanently enjoined Vermont from taking any action to shut down Vermont Yankee after March 21, 2012, pursuant to Act 160 or pursuant to section 6522(c)(4) of title 10, as enacted in Act 74. *Id.* at 243. It also permanently enjoined Vermont from conditioning the issuance of a CPG on the execution of a favorable power purchase agreement. *Id.* After the district court rendered its decision, Vermont suggested in a statement dated February 22, 2012, that it still had authority over Vermont Yankee’s storage of spent nuclear fuel pursuant to section 6522(c)(2) of title 10 of the Vermont Statutes. **ECF No. 192.** On March 19, 2012, the district court entered an injunction enjoining Vermont from seeking to shut down Vermont Yankee on the basis of this statute as well. **ECF No. 209.**

Vermont appeals the district court’s determinations with respect to Entergy’s challenges to Acts 74 and 160 under the Atomic Energy Act and Entergy’s claim under the dormant Commerce Clause. Entergy cross-appeals the district court’s determination that its preemption challenge under the Federal Power Act is premature. Neither party appeals the district court’s determination that the challenge to Act 189 is moot because the safety assessments mandated by Act 189 had been completed by the time of trial.

1
2 **DISCUSSION**
3

4 **I. Standard of Review**
5

6 “We review *de novo* a district court’s application of preemption principles.” *N.Y. SMSA*
7 *Ltd. P’ship v. Town of Clarkstown*, 612 F.3d 97, 103 (2d Cir. 2010) (per curiam). “Findings of
8 fact in a bench trial are reviewed for clear error; application of law to those facts is reviewed *de*
9 *novo*.” *Goodspeed Airport LLC v. E. Haddam Inland Wetlands & Watercourses Comm’n*, 634
10 F.3d 206, 209 n.3 (2d Cir. 2011).
11

12 A district court’s grant of a permanent injunction is reviewed for abuse of discretion.
13 *ACORN v. United States*, 618 F.3d 125, 133 (2d Cir. 2010). “A district court abuses its discretion
14 ‘when (1) its decision rests on an error of law (such as application of the wrong legal principle)
15 or a clearly erroneous factual finding, or (2) its decision – though not necessarily the product of a
16 legal error or a clearly erroneous factual finding – cannot be located within the range of
17 permissible decisions.’” *Id.* (quoting *Kickham Hanley P.C. v. Kodak Ret. Income Plan*, 558 F.3d
18 204, 209 (2d Cir. 2009)).
19

20 **II. Analysis**
21

22 **A. Atomic Energy Act Preemption Claim**
23

24 **A(1). Preemption Principles**
25

26 The Supremacy Clause of the United States Constitution provides that federal law “shall
27 be the supreme Law of the Land.” U.S. Const. art. VI, cl. 2. In determining whether preemption
28 exists, we must “start with the assumption that the historic police powers of the States were not
29 to be superseded by the Federal Act unless that was the clear and manifest purpose of Congress.”
30 *Wyeth v. Levine*, 555 U.S. 555, 565 (2009) (internal quotation marks omitted). “This assumption
31 provides assurance that the federal-state balance will not be disturbed unintentionally by

1 Congress or unnecessarily by the courts.” *Jones v. Rath Packing Co.*, 430 U.S. 519, 525 (1977)
2 (internal citation and quotation marks omitted). “[O]ur task is to ascertain Congress’ intent in
3 enacting the federal statute at issue.” *Shaw v. Delta Air Lines, Inc.*, 463 U.S. 85, 95 (1983). “The
4 purpose of Congress is the ultimate touchstone.” *Allis-Chalmers Corp. v. Lueck*, 471 U.S. 202,
5 208 (1985) (internal quotation marks omitted).

6
7 There are several forms of preemption. “The most obvious is where Congress expressly
8 states that it is preempting state authority.” *Cnty. of Suffolk v. Long Island Lighting Co.*, 728 F.2d
9 52, 57 (2d Cir. 1984) (citing *Jones*, 430 U.S. at 525). Preemption may also occur “where
10 compliance with both federal and state regulations is a physical impossibility,” *Fla. Lime &*
11 *Avocado Growers, Inc. v. Paul*, 373 U.S. 132, 142-43 (1963), or where state law impedes the
12 “execution of the full purposes and objectives of Congress.” *Hines v. Davidowitz*, 312 U.S. 52,
13 67 (1941). In the absence of such explicit or functionally overt preemption, “Congress’ intent to
14 supersede state law may be found from ‘a scheme of federal regulation . . . so pervasive as to
15 make reasonable the inference that Congress left no room for the States to supplement it.’” *Cnty.*
16 *of Suffolk*, 728 F.2d at 57 (quoting *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947)).
17 In this latter context, “federal law occupies an entire field of regulation.” *Wachovia Bank, N.A. v.*
18 *Burke*, 414 F.3d 305, 313 (2d Cir. 2005).

19 20 **A(2). The Atomic Energy Act and *Pacific Gas***

21
22 The domestic nuclear power industry had its genesis in the Atomic Energy Act of 1946,
23 in which Congress “contemplated that the development of nuclear power would be a
24 Government monopoly.” *Duke Power Co. v. Carolina Env'tl. Study Grp., Inc.*, 438 U.S. 59, 63
25 (1978). This view changed with the passage of the Atomic Energy Act of 1954, 42 U.S.C. §§
26 2011-2281, which “stemmed from Congress’ belief that the national interest would be served if
27 the Government encouraged the private sector to develop atomic energy for peaceful purposes
28 under a program of federal regulation and licensing.” *English v. Gen. Electric Co.*, 496 U.S. 72,
29 80-81 (1990). “The Act implemented this policy decision by providing for licensing of private
30 construction, ownership, and operation of commercial nuclear power reactors.” *Pacific Gas*, 461
31 U.S. at 207. The Atomic Energy Commission, the predecessor to the present-day NRC, “was

1 given exclusive jurisdiction to license the transfer, delivery, receipt, acquisition, possession and
2 use of nuclear materials. Upon these subjects, no role was left for the states.” *Id.* (internal
3 citations omitted). “Congress’ decision to prohibit the states from regulating the safety aspects of
4 nuclear development was premised on its belief that the [Atomic Energy] Commission was more
5 qualified to determine what type of safety standards should be enacted in this complex area.”
6 *Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238, 250 (1984). Indeed, the congressional findings
7 supporting the Atomic Energy Act affirm that the “processing and utilization of source,
8 byproduct, and special nuclear material must be regulated in the national interest,” and that the
9 regulation of such materials “by the United States . . . is necessary in the national interest to
10 assure the common defense and security and to protect the health and safety of the public.” 42
11 U.S.C. § 2012(c)-(e). Radiological safety therefore represents an arena of field preemption that
12 “Congress, acting within its proper authority, has determined must be regulated by its exclusive
13 governance,” thus precluding any regulation by the states. *Arizona v. United States*, 132 S. Ct.
14 2492, 2501 (2012); *see also Skull Valley Band of Goshute Indians v. Nielson*, 376 F.3d 1223,
15 1242 (10th Cir. 2004) (“[S]tate laws within ‘the entire field of nuclear safety concerns’ are
16 preempted, even if they do not directly conflict with federal law.” (quoting *Pacific Gas*, 461 U.S.
17 at 212)).

18
19 Nonetheless, “[t]here is little doubt that under the Atomic Energy Act of 1954, state
20 public utility commissions or similar bodies are empowered to make the initial decision
21 regarding the need for power.” *Vt. Yankee Nuclear Power Corp. v. Natural Res. Def. Council,*
22 *Inc.*, 435 U.S. 519, 550 (1978). The Atomic Energy Act also contains two savings clauses
23 reserving certain regulatory powers not related to nuclear safety to the states. The first clause
24 states that the Atomic Energy Act does not limit state authority regarding regulation of the
25 “generation, sale, or transmission of electric power produced through the use of nuclear facilities
26 licensed by the Commission.” 42 U.S.C. § 2018. The second clause provides that the Atomic
27 Energy Act shall not “be construed to affect the authority of any State or local agency to regulate
28 activities for purposes other than protection against radiation hazards.” *Id.* § 2021(k).

29
30 It was against this background that the Supreme Court issued its 1983 decision in *Pacific*
31 *Gas*, which concerned whether the Atomic Energy Act preempted a California state statute, the

1 Warren-Alquist State Energy Resources Conservation and Development Act (the “Warren-
2 Alquist Act”). 461 U.S. at 197. Under the Warren-Alquist Act, a utility seeking to build a new
3 nuclear power plant in California was first required to obtain permission from the California
4 State Energy Resources and Conservation Commission (the “State Energy Commission”). *Id.*
5 Section 25524.2 of the Warren-Alquist Act imposed a moratorium on the construction of new
6 power plants until the State Energy Commission determined that a viable long-term spent
7 nuclear fuel disposal method had been developed. *Id.* at 197-98. The State Energy Commission
8 was also required to report this determination to the California Legislature, which could override
9 it. *Id.* at 198. The Supreme Court noted that laws similar to the Warren-Alquist Act had been
10 enacted in response to two emerging societal concerns about nuclear waste management:

11
12 [F]irst, if not properly stored, nuclear wastes might leak and endanger both the environment and
13 human health; second, the lack of a long-term disposal option increases the risk that the
14 insufficiency of interim storage space for spent fuel will lead to reactor-shutdowns, rendering
15 nuclear energy an unpredictable and uneconomical adventure.

16
17 *Id.* at 196-97.¹⁶

18
19 The Court then considered whether the Warren-Alquist Act was preempted because “it
20 regulates construction of nuclear plants and because it is allegedly predicated on safety
21 concerns.” *Id.* at 204. The Court reviewed the legislative history of the Atomic Energy Act and
22 concluded that while the “federal government maintains complete control of the safety and
23 ‘nuclear’ aspects of energy generation,” “the states exercise their traditional authority over the
24 need for additional generating capacity, the type of generating facilities to be licensed, land use,
25 ratemaking, and the like.” *Id.* at 211-12. Examples of sole federal authority include the
26 “construction and operation of any production or utilization facility,” and the disposal of
27 “byproduct, source or special nuclear material . . . because of the hazards or potential hazards
28 thereof.” *Id.* at 209 (quoting 42 U.S.C. § 2021(c)). However, states retain authority over “the

¹⁶ The Court also considered a challenge to section 25524.1(b), which required the State Energy Commission to determine on a case-by-case basis whether there would be “adequate capacity” for the short-term storage of spent nuclear fuel before granting certification for the construction of a new plant. *Pacific Gas*, 461 U.S. at 197. The Court determined that the challenge to section 25524.1(b) was not ripe for review because, under the case-by-case methodology required by the statute, the Court could not “know whether the [State] Energy Commission will ever find a nuclear plant’s storage capacity to be inadequate.” *Id.* at 203 (internal quotation marks omitted).

1 economic question [of] whether a particular plant should be built”; indeed, “utility financial
2 qualifications are only of concern to the NRC if related to public health and safety.” *Id.* at 207.
3 Examples of exclusive state authority therefore include “ratemaking and plant-need questions.”
4 *Id.* at 208.

5
6 The Court then examined the purposes underlying section 25524.2, emphasizing that a
7 state statute that seeks to “regulate the construction or operation of a nuclear powerplant . . . even
8 if enacted out of non-safety concerns, would nevertheless directly conflict with the NRC’s
9 exclusive authority over plant construction and operation.” *Id.* at 212. The Court focused on the
10 state legislative committee report that accompanied section 25524.2, which articulated a purely
11 economic rationale for the bill. The committee report noted that in the absence of “a federally
12 approved method of waste disposal,” a “‘clog’ in the nuclear fuel cycle” would emerge because
13 “[s]torage space was limited while more nuclear wastes were continuously produced.” *Id.* at 213.
14 This scenario could lead to “unpredictably high costs to contain the problem or, worse,
15 shutdowns in reactors.” *Id.* at 213-14. Because section 25524.2 was “concerned not with the
16 adequacy of the method [of spent nuclear fuel storage], but rather its existence,” the Court
17 concluded that it was not preempted by the Atomic Energy Act. *Id.* at 214 (quoting *Pac. Legal*
18 *Found. v. State Energy Res. Conservation & Dev. Comm’n*, 659 F.2d 903, 925 (9th Cir. 1981)).

19 20 **A(3). The Evolution of the Wholesale Energy Market After *Pacific Gas***

21
22 Critical to appreciating the Supreme Court’s concern in *Pacific Gas* about the prospect of
23 state responsibility for rising nuclear energy costs is an understanding of the structure of the
24 retail energy market in the 1970s and 1980s. In that era, electric utilities were typically vertically
25 integrated entities that sold the power they generated directly to in-state retail consumers. State
26 regulatory agencies would focus on the “retail rates charged directly to the public.” *Pub. Util.*
27 *Dist. No. 1 of Snohomish Cnty. Wash. v. FERC*, 471 F.3d 1053, 1062 (9th Cir. 2006) (“*PUD No.*
28 *I*”), *vacated on other grounds*, 547 F.3d 1081 (9th Cir. 2008). These state agencies would
29 determine the rates at which power could be sold by the electric utility to ensure that such rates
30 were reasonable. *See, e.g., Consol. Edison Co. of N.Y., Inc. v. Pataki*, 292 F.3d 338, 343 (2d Cir.
31 2002). Federal agencies, on the other hand, would regulate the “wholesale rates charged among

1 businesses involved in providing” power. *PUD No. 1*, 471 F.3d at 1062 (internal quotation marks
2 omitted). Nonetheless, prior to the 1980s, the dominance of retail utilities ensured that “arms-
3 length transactions on wholesale markets were relatively few.” David B. Spence & Robert
4 Prentice, *The Transformation of American Energy Markets and the Problem of Market Power*,
5 53 B.C. L. Rev. 131, 146 (2012).

6
7 As a result of this market structure, “electricity generation, transmission, and distribution
8 for a particular geographic area were generally provided by and under the control of a single
9 regulated utility.” *Midwest ISO Transmission Owners v. FERC*, 373 F.3d 1361, 1363 (D.C. Cir.
10 2004) (Roberts, J.). “Although there were some interconnections among utilities, most operated
11 as separate, local monopolies subject to state or local regulation.” *New York v. FERC*, 535 U.S.
12 1, 5 (2002). This concentration of market power meant that if a local utility’s operating costs rose
13 – due to the expense associated with long-term storage of spent nuclear fuel, for example – then
14 consumers would likely experience direct increases in prices as well. As a result, the *Pacific Gas*
15 Court accepted California’s argument that the spent nuclear “waste disposal problem was largely
16 economic or the result of poor planning, not safety related.” *Pacific Gas*, 461 U.S. at 213
17 (internal quotation marks omitted).¹⁷

18
19 The national marketplace for power began to evolve in the late 1970s. First, Congress
20 passed the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 U.S.C. §§ 2601 *et seq.*,
21 which sought “to promote the development of new generating facilities and to conserve the use
22 of fossil fuels.” *New York*, 535 U.S. at 9. To do so, PURPA “directed FERC to promulgate rules
23 requiring utilities to purchase electricity from ‘qualifying cogeneration and small power
24 production facilities.’” *Id.* (quoting *FERC v. Mississippi*, 456 U.S. 742, 751 (1982)). Even more
25 significant, Congress enacted the Energy Policy Act of 1992, which “authorized FERC to order
26 individual utilities to provide transmission services to unaffiliated wholesale generators (*i.e.*, to
27 ‘wheel’ power) on a case-by-case basis.” *Id.* (citing 16 U.S.C. §§ 824j-824k). FERC exercised
28 this authority in 1996 by promulgating Orders 888 and 889, which require “all public utilities
29 owning and/or controlling transmission facilities to offer non-discriminatory open access

¹⁷ Indeed, the power market in California was not opened to competition until the late 1990s. See David B. Spence, *Can Law Manage Competitive Energy Markets?*, 93 Cornell L. Rev. 765, 779-81 (2008).

1 transmission service.” *Transmission Access Policy Study Grp. v. FERC*, 225 F.3d 667, 682 (D.C.
2 Cir. 2000) (per curiam), *aff’d sub nom., New York*, 535 U.S. 1.¹⁸

3
4 By the late 1990s, the structure of the power industry had changed dramatically. Many
5 integrated utilities had divested their generating assets, and new participants entered the market
6 “in the form of both independent and affiliated power marketers and generators as well as
7 independent power exchanges.” Regional Transmission Organizations, Order No. 2000, 89
8 F.E.R.C. ¶ 61,285, at *7 (Dec. 20, 1999). Many formerly retail utilities became independent
9 “merchant generators,” selling the power they generated wholesale across state lines. The
10 emergence of merchant generators placed a significant strain on existing power grids. In
11 response, FERC sought to organize owners of transmission lines into “independent system
12 operators” (ISOs) and “regional transmission organizations” (RTOs) “to help manage the grid,
13 ensure system reliability, and guard against discrimination and the exercise of market power in
14 the provision of transmission services.” Spence & Prentice, *supra*, at 148. These ISOs and RTOs
15 gave rise to several large regional electricity trading hubs, including the California ISO, the
16 Pennsylvania-New Jersey-Maryland (PJM) ISO, the New York ISO, the Electric Reliability
17 Council of Texas (ERCOT) ISO, and ISO New England.¹⁹

18
19 The development of merchant generators had two effects on the marketplace for power
20 that are relevant here. First, consumers gained access to new sources of power, which meant that
21 they were no longer captive to a single in-state provider. *See Transmission Access*, 225 F.3d at
22 683. Correspondingly, “[l]ocal energy utilities, could, rather than producing their own power to
23 sell to the public, choose between various competing producers and then transfer the expected
24 savings from this competition to the public.” *PUD No. 1*, 471 F.3d at 1065. The development of
25 large regional power grids gave consumers access to power generated by out-of-state merchant
26 generators. As the Supreme Court has noted, it is now “possible for a customer in Vermont [to]
27 purchase electricity from an environmentally friendly power producer in California or a

¹⁸ The orders may be read in full at Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities, Order 888, 61 Fed. Reg. 21,540, 21,541-43 (FERC May 10, 1996) (codified at 18 C.F.R. pt. 37); and at Open Access Same-Time Information System (Formerly Real-Time Information Networks) and Standards of Conduct, Order 889, 61 Fed. Reg. 21,737, 21,740-41 (FERC Apr. 24, 1996) (codified at 18 C.F.R. pt. 37).

¹⁹ *See* U.S. Energy Info. Admin., *The Changing Structure of the Electric Power Industry 2000: An Update*, at 74-77 (2000), available at http://www.eia.gov/cneaf/electricity/chg_stru_update/update2000.pdf.

1 cogeneration facility in Oklahoma.” *New York*, 535 U.S. at 8 (internal quotation marks omitted).
2 Indeed, Vermont Yankee presently supplies only one-third of the power consumed by Vermont
3 residents; the rest is purchased by Vermont electrical companies from other sources. *See In re*
4 *Entergy Nuclear Vt. Yankee, LLC*, 2006 WL 1418626, at *12. Second, because states may obtain
5 power from energy plants located in other states, there is less public support for continued
6 operation of in-state nuclear power plants and greater opposition to such local plants on safety as
7 well as non-safety grounds.²⁰

8
9 With the advent of merchant generators, the challenge of identifying a long-term spent
10 nuclear fuel storage solution has grown even more pressing. After a useful life of four-to-six
11 years, spent nuclear fuel rods are thermally hot when removed from reactors and emit substantial
12 amounts of radiation. *New York v. NRC*, 681 F.3d 471, 474 (D.C. Cir. 2012) (citing Blue Ribbon
13 Commission on America’s Nuclear Future, *Report to the Secretary of Energy* 10-11 (2012)). The
14 rods are transferred to deep, water-filled pools for cooling; they may then be transferred to large
15 concrete and steel “casks” for storage, even though they will continue to emit dangerous
16 radiation “for time spans seemingly beyond human comprehension.” *Id.* (quoting *Nuclear*
17 *Energy Inst., Inc. v. EPA*, 373 F.3d 1251, 1258 (D.C. Cir. 2004) (per curiam)). Nonetheless,
18 despite the continued production of nuclear waste, and despite “years of ‘blue ribbon’
19 commissions, congressional hearings, agency reports, and site investigations, the United States
20 has not yet developed a permanent solution.” *Id.* Most recently, plans to develop a federally-
21 sponsored storage site at Yucca Mountain in Nevada were abandoned when the Department of
22 Energy withdrew its license application for the facility. *See Nat’l Ass’n of Regulatory Util.*
23 *Comm’rs v. U.S. Dep’t of Energy*, 680 F.3d 819, 822-23 (D.C. Cir. 2012). “At this time, there is
24 not even a prospective site for a repository, let alone progress toward the actual construction of
25 one.” *New York v. NRC*, 681 F.3d at 474.

26
27

²⁰ *See, e.g., New York v. United States*, 505 U.S. 144, 197 (1992) (noting that “public opposition” undermined a state’s efforts to identify sites for nuclear waste disposal); *State of Nev. v. Watkins*, 914 F.2d 1545, 1550-51 (9th Cir. 1990) (noting the opposition of the Nevada Legislature to the storage of spent nuclear fuel in the state); *see also* Michael B. Gerrard, *Fear and Loathing in the Siting of Hazardous and Radioactive Waste Facilities: A Comprehensive Approach to a Misperceived Crisis*, 68 Tul. L. Rev. 1047, 1137-46 (1994) (discussing the sources of public opposition to spent nuclear fuel storages sites).

1 **A(4). Act 160**
2

3 With this general background in mind, we begin our preemption analysis of Act 160, the
4 most recent of Vermont’s legislative enactments at issue.²¹ The proper place to begin the analysis
5 of a statute is its text. *See, e.g., United States v. Am. Trucking Ass’ns*, 310 U.S. 534, 543 (1940)
6 (“There is, of course, no more persuasive evidence of the purpose of a statute than the words by
7 which the legislature undertook to give expression to its wishes.”). As described previously, Act
8 160 adds three new sections to the Vermont Statutes: sections 248(e)(2), 248(m), and 254 of title
9 30. Section 248(e)(2) requires the Vermont Legislature to determine whether an extension of the
10 Vermont Yankee operating lease should be granted (that is, to determine whether the lease
11 advances the “general welfare”) before the Board can issue a new CPG. Vt. Stat. Ann. tit. 30, §
12 248(e)(2). Section 248(m) requires that the evaluation of a new CPG be conducted using current
13 cost-benefit assumptions, rather than those that informed the issuance of the previous CPG. *Id.* §
14 248(m). Section 254 requires that an application to operate Vermont Yankee past March 21,
15 2012, be submitted at least four years in advance, and that the Department engage in extensive
16 fact-finding to support the legislative determination that the lease advances the general welfare.
17 *Id.* § 254(a). The statute requires that the Department “identify, collect information on, and
18 provide analysis of long-term environmental, economic, and *public health issues*, including
19 issues relating to dry cask storage of nuclear waste and decommissioning options.” *Id.* §
20 254(b)(2)(B) (emphasis added). These are factors that the Board “shall consider” in “acting on a
21 petition” subject to the statute, *id.* § 254(b)-(c), and the Board’s conclusions are reported to the
22 Vermont Legislature to inform its own determination regarding the status of Vermont Yankee,
23 *id.* § 254(a)(2)-(3).
24

25 As an initial matter, we must consider whether it is appropriate to consider a facial
26 challenge to Act 160. In this regard, we find it important that Act 160, through the operation of
27 section 248(e)(2), transfers the process for determining whether to approve a new operating

²¹ As the party asserting preemption, Entergy carries the burden of proof. *See Silkwood*, 464 U.S. at 255 (stating that Kerr-McGee, as the party asserting the preemption claim, bore the “burden to show that Congress intended to [preempt] such [punitive damages] awards in the Atomic Energy Act); *see also English*, 496 U.S. at 85-86 (following the approach set out in *Silkwood*). We thus reject the burden-shifting approach that the district court imported from Equal Protection Clause and First Amendment jurisprudence. *See Entergy Nuclear*, 838 F. Supp. 2d at 225, 230-31 (citing *Vill. of Arlington Heights v. Metro. Hous. Dev. Corp.*, 429 U.S. 252, 271 n.21 (1977), and *Mt. Healthy City Sch. Dist. Bd. of Educ. v. Doyle*, 429 U.S. 274, 285-86 (1977)).

1 license for Vermont Yankee from the Board to the Vermont Legislature. Before the passage of
2 Act 160, the Board’s decision regarding whether to approve the continued operation of Vermont
3 Yankee would have been subject to review by the Vermont Supreme Court. Vt. Stat. Ann. tit. 30,
4 § 12. Such a review likely would have encompassed legal questions regarding whether Act 160
5 was preempted by federal law. *See, e.g., Petition of E. Ga. Cogeneration Ltd. P’ship*, 614 A.2d
6 799, 804-05 (Vt. 1992). After the passage of Act 160, if the Vermont Legislature chose not to
7 act, the operating license for Vermont Yankee would lapse on March 21, 2012, and that decision
8 would not be subject to judicial review. *See Bd. of Educ. of Kiryas Joel Vill. Sch. Dist. v.*
9 *Grumet*, 512 U.S. 687, 703 (1994) (“[U]nlike an administrative agency’s denial of an exemption
10 from a generally applicable law, which would be entitled to a judicial audience, a legislature’s
11 failure to enact a special law is itself unreviewable.” (internal citations and quotation marks
12 omitted)).

13

14 Because a “state moratorium” on the operation of Vermont Yankee “grounded in safety
15 concerns falls squarely within the prohibited field,” *Pacific Gas*, 461 U.S. at 213, a law enacted
16 for that purpose would facially lack any “plainly legitimate sweep.” *Wash. State Grange v.*
17 *Wash. State Republican Party*, 552 U.S. 442, 449 (2008) (internal quotation marks omitted). We
18 also note several other reasons why it is appropriate to consider Entergy’s facial challenge to the
19 validity of Act 160. First, because of the extensive legislative record accompanying Act 160 and
20 the detailed inquiry conducted by the district court below, it “is not the case . . . that the Court
21 today is premature in interpreting [Act 160] on the basis of a factually barebones record.”
22 *Citizens United v. FEC*, 130 S. Ct. 876, 894 (2010) (internal quotation marks and alterations
23 omitted). Second, because Act 160 shifts the decision regarding whether to approve the operation
24 of Vermont Yankee into the unreviewable province of the Vermont Legislature’s “failure to
25 enact a special law,” *Grumet*, 512 U.S. at 703, we will not otherwise have any “occasion to
26 construe the law in the context of actual disputes.” *Wash. State Grange*, 552 U.S. at 450. Lastly,
27 we believe that “the issues before the court are concrete and sharply presented” so as to permit
28 meaningful review. *Dickerson v. Napolitano*, 604 F.3d 732, 741 (2d Cir. 2010) (quoting
29 *Thibodeau v. Portuondo*, 486 F.3d 61, 71 (2d Cir. 2007)). It is therefore “necessary to determine
30 whether there is a non-safety rationale” for Act 160 by considering whether the decision to

1 effectively shut down Vermont Yankee serves the policy interests articulated in the statute.
2 *Pacific Gas*, 461 U.S. at 213.

3
4 The legislative policy and purpose section of Act 160 sets forth several rationales for the
5 statute. Section 1(a) states that “a nuclear energy generating plant may be operated in Vermont
6 only with the explicit approval of the General Assembly expressed in law,” and that legislative
7 approval requires a “public deliberation” of such factors as “the state’s need for power, the
8 economics and environmental impacts of long-term storage of nuclear waste, and choice of
9 power sources among various alternatives.” Act 160 § 1(a). The statute later states that the issue
10 of long-term spent fuel storage should be framed as

11
12 a part of the larger societal discussion of broader economic and environmental issues relating to
13 the operation of a nuclear facility in the state, including an assessment of the potential need for the
14 operation of the facility and its economic benefits, risks, and costs; and in order to allow
15 opportunity to assess alternatives that may be more cost-effective or that otherwise may better
16 promote the general welfare.

17
18 *Id.* § 1(d). Drawing on the language in sections 1(a) and 1(d), Vermont argues that Act 160
19 advances two policy interests: (1) increased use of a diverse array of renewable power sources;
20 and (2) promotion of energy sources that are more cost-effective.

21
22 Although Vermont’s asserted policy interests would not necessarily interfere with the
23 preempted concern of radiological safety, our inquiry does not end at the text of the statute.

24
25 We do not blindly accept the articulated purpose of [a state statute] for preemption purposes. If
26 that were the rule, legislatures could “nullify nearly all unwanted federal legislation by simply
27 publishing a legislative committee report articulating some state interest or policy – other than
28 frustration of the federal objective – that would be tangentially furthered by the proposed state
29 law.”

30
31 *Greater N.Y. Metro. Food Council, Inc. v. Giuliani*, 195 F.3d 100, 108 (2d Cir. 1999) (quoting
32 *Gade v. Nat’l Solid Wastes Mgmt. Ass’n*, 505 U.S. 88, 106 (1992)) (internal citation omitted),
33 *abrogated on other grounds by Lorillard Tobacco Co. v. Reilly*, 533 U.S. 525 (2001). As a result,

1 “we have refused to rely solely on the legislature’s professed purpose and have looked as well to
2 the effects of the law.” *Gade*, 505 U.S. at 105; *see also Vango Media, Inc. v. City of N.Y.*, 34
3 F.3d 68, 73 (2d Cir. 1994) (“[T]he question of preemption is defined, in part, by the purpose of
4 the state law, and, in part, by the state law’s actual effect. Both must be considered in answering
5 the question whether state regulation in a given field so interferes with federal regulation as to be
6 deemed preempted by the federal statute.” (citing *Gade*, 505 U.S. at 103-06) (internal citations
7 omitted)).²² Although the *Pacific Gas* Court did not explicitly delineate the level of scrutiny a
8 court must perform to determine whether a statute is preempted by the Atomic Energy Act, we
9 believe the Court’s admonition against a “state judgment that nuclear power is not safe enough to
10 be further developed,” 461 U.S. at 213, requires us to conduct a more searching review to
11 determine whether a statute was enacted based upon radiological safety concerns. *See also Cnty.*
12 *of Suffolk*, 728 F.2d at 58 (“[A] state, in evaluating the need for a nuclear generating facility,
13 [can] not even consider the safety aspects.” (citing *Pacific Gas*, 461 U.S. at 213)). We therefore
14 decline Vermont’s invitation to apply an analytic framework akin to “rational basis review,”
15 which would preclude us from identifying the true purpose of a statute as required by *Pacific*
16 *Gas* and would allow states to implement a “moratorium on nuclear construction grounded in
17 safety concerns [that] falls squarely within the prohibited field.” *Pacific Gas*, 461 U.S. at 213.²³

18
19 As to the goal of diversifying the State’s means of producing power, Vermont argues that
20 the presence of Vermont Yankee “hamper[s] efforts at diversification and has a dampening effect
21 on the development of alternatives.” Citing the testimony of the State’s former Director of
22 Regulated Utility Planning, Vermont argues that closing Vermont Yankee “would free up space
23 in the electrical generation market and make it easier to promote diversity and sustainable
24 resources.” Vermont also quotes a former Maine state power regulator and NRC commissioner,
25 who testified before the district court that the State has a “legitimate interest in energy planning

²² *See also Loyal Tire & Auto Ctr., Inc. v. Town of Woodbury*, 445 F.3d 136, 145 (2d Cir. 2006) (Sotomayor, J.) (noting, in the context of Interstate Commerce Act preemption, that a court must inquire into whether the state or local regulation is “genuinely responsive” to the proffered rationale).

²³ Moreover, the statute provides that “public health issues,” including those related to storage of nuclear waste, are to be considered in determining whether to permit the continued operation of Vermont Yankee. As this phrase is not defined in the statute, we must look to the legislative intent to determine its meaning. *See Universal Church v. Geltzer*, 463 F.3d 218, 223 (2d Cir. 2006) (“[W]e may look to the legislative history to determine the legislative intent where the plain statutory language is ambiguous . . .”).

1 and promoting renewables” and argued that “any sensible energy planner would be anticipating a
2 time when Vermont would be without Vermont Yankee.”

3
4 However, this argument presupposes that Vermont retail utilities lack choices with
5 respect to the sources of the energy they purchase. “[S]tates have broad powers under state law
6 to direct the planning and resource decisions of utilities under their jurisdiction. States may, for
7 example, order utilities to build renewable generators themselves, or . . . order utilities to
8 purchase renewable generation.” *S. Cal. Edison Co. San Diego Gas & Elec. Co.*, 71 FERC ¶
9 61,269, at *8 (June 2, 1995). Vermont Yankee provides only one third of the power consumed in
10 the State, so it is clear that the Vermont Legislature can direct retail utilities to “purchase
11 electricity from an environmentally friendly power producer in California or a cogeneration
12 facility in Oklahoma,” if it so chooses. *New York*, 535 U.S. at 8 (internal quotation marks
13 omitted). Vermont can also direct or encourage its utilities to purchase power from nuclear
14 power plants located out-of-state. Indeed, Vermont recently pursued this exact approach by
15 approving a petition to allow its retail utilities to purchase power from the Seabrook Station
16 Nuclear Power Plant in New Hampshire, a merchant generator like Vermont Yankee. *In re*
17 *Green Mountain Power Corp.*, Docket No. 7742, 2011 WL 5507224, at *1 (Vt. Pub. Serv. Bd.
18 Nov. 4, 2011). Closing Vermont Yankee would thus have little effect on the actual array of
19 energy sources from which Vermont utilities can purchase power.²⁴

20
21 As to the second goal of containing costs, Vermont argues that the economic rationale
22 relied on by the *Pacific Gas* Court applies with equal force here. Vermont suggests that shutting
23 down Vermont Yankee might assist the State in identifying “alternatives that may be more cost-

²⁴ Indeed, the Board recognized alternative sources of energy in its Order approving the sale of Vermont Yankee to Entergy in 2002, but noted some of the related problems:

We cannot assume, as urged by several members of the public, that the power from Vermont Yankee can be quickly replaced by renewable resources. Vermont already gets a higher percentage of its power from renewable sources (mostly large hydro-power dams) than many other states. With the exception of large hydro dams, renewable energy resources tend to be relatively small sources of generation, particularly in relation to Vermont Yankee. Thus, instead of renewable sources, Vermont utilities would need to rely on fossil fuel generating stations to replace much of the power now provided by Vermont Yankee. This option would have the very serious disadvantage of significantly increasing the emission of air contaminants and greenhouse gases.

In re Vt. Yankee Nuclear Power Corp., 2002 WL 1997942 (footnote omitted).

1 effective.” However, this argument is also not persuasive in light of Vermont Yankee’s status as
2 a merchant generator. Increases in the prices Vermont Yankee charges for its power would not
3 be borne directly by a captive audience of retail consumers, as was the case for California
4 residents in *Pacific Gas*. Instead, Vermont Yankee is “a merchant generator, which means that it
5 sells power on the open wholesale market.” *Envtl. Law & Policy Ctr. v. NRC*, 470 F.3d 676, 679
6 (7th Cir. 2006). For that reason, local energy utilities could simply “choose between various
7 competing producers” and purchase power from the more cost-effective provider. *See PUD No.*
8 *I*, 471 F.3d at 1065. Closing Vermont Yankee would not affect the availability of other sources
9 of power from which local retail utilities could purchase power that might be more “cost-
10 effective;” indeed, they are free to do so now.²⁵

11
12 Vermont’s second economic argument regarding the State’s potential future liability for
13 decommissioning costs is also of little weight. Vermont contends that the recent collapse of the
14 plan to construct a long-term spent nuclear fuel storage facility in Yucca Mountain means that
15 “[i]f plant operators such as Entergy become insolvent or abandon their obligations, the financial
16 burdens will fall on host states.” However, “[i]n 1988, the Nuclear Regulatory Commission
17 adopted a final rule requiring operators of nuclear facilities to file decommissioning plans, and to
18 pre-fund decommissioning by placing money aside in an external sinking fund.” *Neb. Pub.*
19 *Power Dist. v. MidAmerican Energy Co.*, 234 F.3d 1032, 1037 (8th Cir. 2000) (citing Nuclear
20 Regulatory Commission Final Rule, General Requirements for Decommissioning Nuclear
21 Facilities, 53 Fed. Reg. 24018-01 (June 27, 1988) (codified at 10 C.F.R. § 50.82)). “By
22 regulation, decommissioning funds may not be used for non-decommissioning related expenses,
23 such as [spent nuclear fuel] storage.” *Bos. Edison Co. v. United States*, 93 Fed. Cl. 105, 136
24 (2010), *rev’d on other grounds*, 658 F.3d 1361 (Fed. Cir. 2011). Nuclear power plants must
25 provide periodic reports to the NRC concerning the status of such funds for the purpose of

²⁵ We note that in its 2006 Order granting a new CPG to Vermont Yankee to store additional spent nuclear fuel on site, the Board made the following argument regarding the effect of the plaintiff shutting down:

In the absence of the dry fuel storage project, a substantial likelihood exists that Vermont Yankee would shut down by 2008 due to the inability to store the spent nuclear fuel it generates. [Vermont retail utilities] could replace the power with other purchases, but such replacement power would probably cost more (perhaps significantly more) than the Vermont Yankee power.

In re Entergy Nuclear Vt. Yankee, LLC, 2006 WL 1418626, at *20.

1 providing “reasonable assurance that funds will be available for the decommissioning process.”
2 10 C.F.R. § 50.75(a).²⁶

3
4 We must also look to the statute’s legislative history to determine if it was passed with an
5 impermissible motive. Vermont argues that *Pacific Gas* forecloses the use of legislative history
6 to analyze a state statute for Atomic Energy Act preemption, noting the Court’s dictum
7 describing “inquiry into legislative motive [as] often an unsatisfactory venture.” 461 U.S. at 216.
8 In analyzing the purpose of the Warren-Alquist Act, however, the Court looked to a report issued
9 by the state legislative committee that presented the bill. *Id.* at 214. Moreover, in a subsequent
10 decision, the Court interpreted *Pacific Gas* to hold that a “state moratorium on nuclear
11 construction grounded in safety concerns falls squarely within the prohibited field.” *English*, 496
12 U.S. at 84 (quoting *Pacific Gas*, 461 U.S. at 213). “In other words, the Court defined the
13 preempted field, in part, by reference to the *motivation behind the state law.*” *Id.* (emphasis
14 added); *see also Gade*, 505 U.S. at 105-06 (“We can no longer adhere to the aberrational
15 doctrine . . . that state law may frustrate the operation of federal law as long as the state
16 legislature in passing its law *had some purpose in mind* other than one of frustration [of the
17 federal regulatory scheme].” (quoting *Perez v. Campbell*, 402 U.S. 637, 651-52 (1971))
18 (emphasis added)). Indeed, several other courts applying *Pacific Gas* have endorsed the use of
19 legislative history to determine whether the Atomic Energy Act preempts a particular state
20 statute or local ordinance. *See, e.g., Skull Valley*, 376 F.3d at 1251-53; *Long Island Lighting Co.*
21 *v. Cnty. of Suffolk, N.Y.*, 628 F. Supp. 654, 665-66 (E.D.N.Y. 1986); *see also Loyal Tire & Auto*
22 *Ctr., Inc. v. Town of Woodbury*, 445 F.3d 136, 145 (2d Cir. 2006) (Sotomayor, J.) (holding, in
23 the context of Interstate Commerce Act preemption, that a court “must consider any specific
24 expressions of legislative intent in the statute itself as well as the legislative history”); *Greater*
25 *N.Y. Metro.*, 195 F.3d at 108 & n.1 (examining legislative history to determine whether a New
26 York City local law was preempted by the Federal Cigarette Labeling and Advertising Act). We

²⁶ In conducting this analysis, we do not suggest that Vermont Yankee’s status as a merchant generator precludes every possible economic argument Vermont could offer as a basis for regulating the plant. *See Pacific Gas*, 461 U.S. at 208-09, 215; *see also Nieman v. NLO, Inc.*, 108 F.3d 1546, 1552 (6th Cir. 1997) (“[W]hile recognizing that Congress has preempted the entire field of nuclear safety regulation, the Supreme Court has been willing to uphold the application of state law where it affects nuclear regulation only indirectly, *i.e.*, where state law amounted to economic regulation . . .”). We note only that the rationales proffered here are implausible in light of the actual effect of Act 160, and that the non-safety-related rationales for a legislative decision to shut down Vermont Yankee are not adequately supported by the record.

1 therefore believe that legislative history is an important source for determining whether a
2 particular statute was motivated by an impermissible motive in the preemption context.²⁷

3
4 Vermont argues that the task of determining the legislative intent behind Act 160 is
5 particularly difficult in this case because the Vermont Legislature, as a “part-time citizen body,
6 does not produce formal committee reports like those Congress prepares, and it has no
7 requirement to preserve complete records of its proceedings.” In addition, “[c]ommittee hearings
8 are generally recorded, but are not contemporaneously transcribed, and often do not identify the
9 speaker. Floor debates are usually recorded in the Senate, but not in the House of
10 Representatives.” For this reason, Vermont argues that much of the legislative history behind Act
11 160 is “missing or incomplete.”

12
13 Acknowledging these conditions does not change the fact that a “court’s primary purpose
14 in statutory interpretation is to discern legislative intent.” *Morgan v. Gay*, 466 F.3d 276, 277 (3d
15 Cir. 2006).²⁸ Although the lack of systemized record-keeping may make our task more
16 challenging, the informality of the proceedings of the Vermont Legislature and the State’s
17 decision to not document its legislative history do not immunize Act 160 from judicial inquiry
18 into legislative motivation. *Cf. Blanton v. City of Murfreesboro*, 856 F.2d 731, 734 (6th Cir.
19 1988) (“While we recognize today that the use of legislative history, much of which is not
20 recorded until after the final congressional action, in trying to understand the intent of Congress,
21 is not as meaningful as it once was, we find ourselves with no other means of determining the
22 intent of Congress in enacting this legislation.”).

²⁷ We acknowledge that *Pacific Gas* does not explain with precision the role legislative history plays in the analysis of an Atomic Energy Act preemption claim. *See English*, 496 U.S. at 84 n.7 (“Whether the suggestion of the majority in *Pacific Gas* that legislative purpose is relevant to the definition of the pre-empted field is part of the holding of that case is not an issue before us today”); *see also Kerr-McGee Chem. Corp. v. City of W. Chi.*, 914 F.2d 820, 827 (7th Cir. 1990) (“It is not clear how heavily legislative purpose is to be weighed in determining preemption.”); *Norris v. Lumbermen’s Mut. Cas. Co.*, 881 F.2d 1144, 1150-51 (1st Cir. 1989) (interpreting the “teaching of *Pacific Gas & Electric*” as requiring an analysis of a state statute’s text and effect). *But see Skull Valley*, 376 F.3d at 1252 (“[W]e are required to follow the preemption analysis set forth in *Pacific Gas*, *Silkwood*, and *English*, which requires consideration of the purpose of the allegedly preempted statute, along with its effects.”). Moreover, the *Pacific Gas* Court conducted a methodical analysis of the legislative intent undergirding the federal Atomic Energy Act to determine its scope and effect, 461 U.S. at 205-11, and we see no reason why the state statute at issue should not be so scrutinized as well.

²⁸ *See also Belanger v. Salvation Army*, 556 F.3d 1153, 1155 (11th Cir. 2009); *Nike, Inc. v. McCarthy*, 379 F.3d 576, 581-82 (9th Cir. 2004); *Femedeer v. Haun*, 227 F.3d 1244, 1249 (10th Cir. 2000).

1 We agree with the district court’s careful analysis of the legislative intent motivating
2 Vermont’s enactment of Act 160 insofar as the district court identified radiological safety as the
3 Vermont legislature’s primary purpose in enacting the statute.²⁹ The district court concluded that
4 the legislative record contained “references, almost too numerous to count, [that] reveal
5 legislators’ radiological safety motivations and reflect their wish to empower the legislature to
6 address their constituents’ fear of radiological risk, and [the legislators’] beliefs that the plant
7 was too unsafe to operate, in deciding a petition for continued operation.” *Entergy Nuclear*, 838
8 F. Supp. 2d at 229. We need not repeat the entirety of the district court’s examination, which
9 included considering many hours of audiotapes of floor debates and committee meetings for
10 which written transcriptions are not typically maintained, except to note the remarkable
11 consistency with which both state legislators and regulators expressed concern about radiological
12 safety and expressed a desire to evade federal preemption. *See Disabled in Action of Metro. N.Y.*
13 *v. Hammons*, 202 F.3d 110, 124 (2d Cir. 2000) (noting that the “sponsor/floor manager statement
14 and floor and hearing colloquy” are among “the most authoritative and reliable materials of
15 legislative history”).

16
17 The Vermont Senate Finance Committee conducted its first hearings on the bill that
18 would ultimately become Act 160 only days after Entergy filed its application with the NRC for
19 an extension of its operating license for Vermont Yankee past 2012. During those first hearings,
20 the committee chair and the chairman of the Board engaged in an extended colloquy regarding
21 the permissible legislative purposes for the bill, with particular emphasis on *Pacific Gas* and its
22 roadmap for appropriate state legislative regulation of nuclear facilities. After being informed
23 that regulation based on radiological safety was preempted and impermissible, the committee
24 chair responded, “Okay, let’s find another word for safety,” an approach also adopted by the
25 Board chairman. A state legislator participating in the hearing responded to testimony from a law
26 professor regarding the permissible scope of the bill by stating, “I understand that only the feds
27 are allowed to think of safety issues, and we carefully don’t use that word here.” Another

²⁹ Our analysis focuses on whether radiological safety was the primary purpose undergirding the passage of Act 160, not simply whether safety was only one of several considerations. *See Pacific Gas*, 461 U.S. at 196, 213 (identifying “both safety and economic aspects to the nuclear waste issue,” yet finding no preemption where the Warren-Alquist Act had “a non-safety rationale” (emphasis added)); *cf. Vango Media, Inc. v. City of N.Y.*, 34 F.3d 68, 73 (2d Cir. 1994) (finding that while the challenged statute had “an associated economic impact on society,” its “primary interest” was the preempted field of “public health”).

1 member of the Finance Committee expressed concern that “all of our work [will] get overturned .
2 . . . by the feds because it’s based on safety? That’s all it’s going to be based on.” A third member
3 of the committee asserted that the federal government likely would not be able to transport
4 Vermont Yankee’s spent nuclear fuel out of the state, and then asked rhetorically, “[D]o we want
5 another 40 years’ worth of radioactive materials sitting somewhere in this State? I think the
6 people . . . are getting a little concerned and obviously the closer you live to that radioactivity,
7 the more concerned you are.” That same senator also referenced the incidents at Three Mile
8 Island and Chernobyl, and stated that the potential for a similar disaster was sufficiently serious
9 that “the legislature felt [that the bill presented] a public policy decision that they needed to
10 make.” The Committee also considered testimony from the Vermont Legislature’s Chief
11 Legislative Counsel and a Department representative concerning ways of writing the bill so as to
12 avoid overt references to radiological safety.
13

14 The record also indicates that during hearings on the bill that would become Act 160,
15 members of the Department, regulators, and Vermont legislators repeatedly demonstrated
16 awareness of the potential for a preemption problem and disguised their comments accordingly.
17 For example, during a hearing of the Senate Finance Committee on the bill that would become
18 Act 160, a member of the Vermont State Nuclear Advisory Panel told the committee chair that
19 the Board “is not allowed to think about safety, as you know,” but then proceeded to opine on
20 various safety risks. The committee chair then admonished the panel member to speak purely
21 about “economic risks,” which led that individual to suggest that “a safety problem has economic
22 implications, too.” The committee also heard testimony from a professor at a local law school
23 and former chairman of the Board, who warned the committee that because “the State is
24 preempted in its concerns about radiological safety,” the “State has to make its decision on other
25 grounds, which would include anything from aesthetics to the obvious ones about financial
26 implication to such things as reliability of the electric grid.” During a subsequent exchange, the
27 current chairman of the Board instructed the committee on whether and in what circumstances it
28 could “talk about public health.” A member of the Department then recommended that “some
29 alternative language be placed into the bill” so as to avoid the issues referenced by the chairman
30 of the Board. These are not merely isolated comments by a few legislators, but rather a part of a
31 consistent effort by those responsible for drafting and passing Act 160 to obfuscate the record

1 through the use of misleading statements that they thought would pass muster under *Pacific Gas*.
2 We conclude that the district court carefully, fairly, and properly analyzed the legislative intent
3 undergirding Act 160 and found that it demonstrated an impermissible primary purpose on the
4 part of the Vermont Legislature.³⁰

5
6 In concluding that the Vermont Legislature was improperly motivated by concerns
7 relating to radiological safety in enacting Act 160, we recognize that many legislators were likely
8 acting with some non-preempted concerns in mind as well. “What motivates one legislator to
9 vote for a statute is not necessarily what motivates scores of others to enact it.” *Pacific Gas*, 461
10 U.S. at 216. We also acknowledge that the mere transfer of authority from a state administrative
11 board to the legislature does not require a finding of preemption. We further recognize that the
12 extent to which a state legislature’s permissible concerns outweigh its impermissible motive in
13 passing a statute is not an issue that the *Pacific Gas* Court elucidated with great clarity. *Compare*
14 *id.* at 213 (“A state prohibition on nuclear construction *for safety reasons* would also be in the
15 teeth of the Atomic Energy Act’s objective to insure that nuclear technology be safe enough for
16 widespread development and use – and would be preempted for that reason.” (emphasis added)),
17 *with id.* (“[I]t is necessary to determine whether there is a *non-safety rationale* for [the Warren-
18 Alquist Act].” (emphasis added)). Nonetheless, our task is not “[t]o look for *the sole purpose*” of
19 the Vermont Legislature; that exercise would require us “probably to look for something that
20 does not exist.” *Edwards v. Aguillard*, 482 U.S. 578, 637 (1987) (Scalia, *J.*, dissenting). Our task
21 is to determine whether the Vermont Legislature’s decision to pass Act 160 was “grounded in
22 [radiological] safety concerns.” *Pacific Gas*, 461 U.S. at 213. A record as consistent and replete

³⁰ We reach this conclusion without needing to consider the legislative history behind S.289, which – had it passed – would have permitted Vermont Yankee to operate for twenty years after March 21, 2012. We note that although S.289 arguably shares “a common heritage” with Act 160, it is “not before the Court, and indeed, . . . was not passed.” S.289’s “provisions and [its] pedigree do not taint other parts of” Act 160. *Pacific Gas*, 461 U.S. at 215-16; *see also Pension Benefit Guar. Corp. v. LTV Corp.*, 496 U.S. 633, 650 (1990) (“[S]ubsequent legislative history is a hazardous basis for inferring the intent of an earlier Congress.” (internal quotation marks omitted)). However, we note that consideration of S.289’s legislative history would nonetheless confirm our analysis of Act 160, as its record contains numerous references to radiological safety concerns. For instance, during a meeting of the Senate Finance Committee debating the bill, a Department commissioner adverted to the recent tritium leak at the Vermont Yankee site and suggested delaying the vote on S.289, commenting that determining “what sort of public health and safety issues . . . we need to address is sort of priority one.” Various senators also reiterated concerns regarding the potential safety risks to Vermont residents living near the plant during the hearings on S.289. Echoing an earlier comment by the chair of the Senate Finance Committee during its debates regarding Act 160, one senator argued on the Senate floor that the other senators should consider “safety concerns, although I’m not supposed to talk about that so I won’t go into detail on that, but it’s certainly in everybody’s mind in this room, we all know it.”

1 with references to radiological safety as that here meets any conceivable standard for the
2 allowable threshold level of impermissible concerns under *Pacific Gas*. As such, we affirm the
3 district court’s determination that Act 160 is preempted on its face by the Atomic Energy Act.
4

5 We likewise affirm the district court’s grant of a permanent injunction enjoining the
6 defendants from enforcing Act 160. A plaintiff seeking a permanent injunction must
7 demonstrate:

- 8
- 9 (1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary
10 damages, are inadequate to compensate for that injury; (3) that, considering the balance of
11 hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the
12 public interest would not be disserved by a permanent injunction.
13

14 *Monsanto Co. v. Geertson Seed Farms*, 130 S. Ct. 2743, 2756 (2010) (quoting *eBay, Inc. v.*
15 *MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006)). Each of these four factors is clearly satisfied
16 here. First, Entergy would suffer an irreparable injury if the defendants were able to enforce Act
17 160 and shut down Vermont Yankee. *See Tom Doherty Assocs., Inc. v. Saban Entm’t, Inc.*, 60
18 F.3d 27, 37 (2d Cir. 1995) (finding irreparable harm in part because “the right to continue a
19 business ‘is not measurable entirely in monetary terms’” (quoting *Semmes Motors, Inc. v. Ford*
20 *Motor Co.*, 429 F.2d 1197, 1205 (2d Cir. 1970))). Second, Entergy would be unable to recover
21 monetary damages from Vermont because of the Eleventh Amendment. *See United States v.*
22 *State of N.Y.*, 708 F.2d 92, 93 (2d Cir. 1983) (per curiam). Third, the balance of hardships favors
23 Entergy because it would suffer irreparable losses from Vermont Yankee being shut down while
24 Act 160 would not meaningfully advance the rationales offered by Vermont. Lastly, the public
25 interest would not be disserved by a permanent injunction, because Vermont would be able to
26 continue purchasing the power generated by Vermont Yankee while still diversifying its energy
27 base and purchasing power from more cost-effective sources if it so chooses. The district court
28 thus did not abuse its discretion in granting the permanent injunction enjoining the defendants
29 from enforcing Act 160.
30
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32

1 **A(5). Act 74**
2

3 As with Act 160, our analysis of Act 74 begins with the text of the statute. Act 74 adds
4 three sections to title 10 of the Vermont statutes: sections 6521, 6522, and 6523. As discussed
5 above, section 6521 summarizes the stated legislative findings. Vt. Stat. Ann. tit. 10, § 6521.
6 Section 6522 requires that the Board make certain findings before issuing a CPG allowing an
7 expansion of the spent nuclear fuel storage facility beyond the capacity previously authorized,
8 and for any such expansion after the expiration of the CPG on March 21, 2012, the affirmative
9 approval of the Vermont Legislature is required. *Id.* § 6522(c)(2), (c)(4). Section 6523
10 establishes a “Clean Energy Development Fund” into which, pursuant to the 2003 MOU entered
11 into between Entergy and the Department, Entergy would make payments for the purpose of
12 promoting “cost-effective and environmentally sustainable” power for the “long-term benefit of
13 Vermont electric consumers.” *Id.* § 6523 (current version at Vt. Stat. Ann. tit. 30, § 8015).
14

15 Act 74 also incorporates the 2005 MOU, which imposes on Entergy a variety of
16 requirements related to radiological safety. These requirements include rules regarding the
17 placement and configuration of dry-fuel-storage facilities that exceed the licensing standards
18 required by the NRC; the spacing of casks; temperature and radiation monitoring with
19 concomitant reporting requirements to the Department; and the density of spent-fuel pools. 2005
20 MOU at 1-2. The 2005 MOU also prohibits the storage of waste generated outside Vermont on
21 site, and requires Entergy to use its best efforts to move the spent nuclear fuel generated by
22 Vermont Yankee to a permanent location outside the state as soon as possible. *Id.* at 2.
23

24 Lastly, much like Act 160, section 6522 allows the Vermont Legislature to terminate the
25 operation of Vermont Yankee after March 21, 2012, by refusing to act affirmatively. This
26 effectively codifies the Vermont Attorney General’s opinion that section 6505, which had
27 previously exempted Vermont Yankee from the provision requiring legislative approval of new
28 dry cask storage facilities codified at section 6501(a), did not apply to Entergy. As a result, the
29 decision regarding whether to permit Entergy to build additional spent nuclear fuel storage
30 facilities was vested in the Vermont Legislature. Unlike a decision of the Board, which would be
31 subject to review by the Vermont Supreme Court, the Vermont Legislature’s decision not to

1 authorize the construction of new storage facilities – even those already approved by the NRC, as
2 in this case – would be unreviewable.

3
4 The reasons for the statute articulated in Act 74’s legislative findings section mirror many
5 of those offered in the preamble to Act 160. For instance, section 6521 expresses the State’s goal
6 of making its “future power supply . . . diverse, reliable, economically sound, and
7 environmentally sustainable.” Vt. Stat. Ann. tit. 10, § 6521(3). The statute also emphasizes the
8 State’s need “to make a smooth transition to the future,” which requires accelerating “Vermont’s
9 investment in electricity resources that are economically and environmentally sound and that can
10 be acquired in modest increments.” *Id.* § 6521(4). To make this “transition,” the statute states,
11 “there is a great value in investing in renewable energy sources, efficient, combined heat and
12 power facilities, and energy efficiency.” *Id.* § 6521(5).

13
14 These statements of legislative purpose reflect the two policy interests Vermont argues
15 are advanced by Act 160: (1) increased use of a diverse array of renewable power sources; and
16 (2) promotion of energy sources that are more cost-effective. For the reasons discussed above,
17 we believe that neither of these interests is plausibly served by Act 74’s conferring unreviewable
18 power over the continued operation of Vermont Yankee past March 21, 2012, on the Vermont
19 Legislature. In addition, the regulations relating to radiological safety incorporated into Act 74
20 from the 2005 MOU demonstrate that the Vermont Legislature’s primary motivation in enacting
21 Act 74 relates to neither diversifying the State’s power supply nor reducing costs. We therefore
22 turn to the legislative history behind Act 74 to determine the actual intent motivating its passage.

23
24 As with Act 160, we find that the district court’s comprehensive review of the legislative
25 history demonstrates convincingly that Act 74 was motivated by impermissible concerns about
26 the radiological safety of spent nuclear fuel storage. We note again the frequency with which
27 concerns about radiological safety appear in the legislative record in Senate committee meetings
28 and floor debates from legislators and regulators, notwithstanding obvious and frequent attempts
29 to avoid specific mention of safety concerns and of deference to *Pacific Gas*. In hearings of the
30 House Natural Resources Committee considering the bill that would become Act 74, for
31 example, representatives asked numerous questions about the relative safety of spent nuclear fuel

1 storage methods Entergy was considering and heard testimony questioning the competence of the
2 NRC to evaluate safety. One witness described the legislative “problem that we’re dealing with
3 here [is] that a lot of the concerns that citizens have are concerns that you can’t address directly
4 the way they want them to be addressed.” Several representatives asked questions about the
5 dangers posed by an accidental release of radioactive waste. One member of the committee
6 admonished another for referring to radiological safety, stating, “but we can’t say that, anything
7 about safety. It can only be about economics and aesthetics.” A member of the Department
8 expressed the same sentiment and advised a representative to frame his questions about the value
9 of maintaining Vermont Yankee as an “aesthetic issue,” rather than one concerned with safety. In
10 a concluding committee meeting on the bill, one representative praised the committee’s work to
11 ensure that “the findings have been emasculated and sanitized,” noting that the bill no longer
12 makes any “mention of high-level nuclear waste” or “the fact that [nuclear waste] lasts, it’s
13 dangerous for 100,000 years.” During the subsequent floor debate on Act 74, one senator stated
14 candidly, “none of us wants to have nuclear waste stored on the soil of Vermont. . . . The reality
15 is that [Vermont Yankee] will require some temporary storage . . . in order to [e]nsure safety for
16 our environment.” Other speeches adverted to the problem of storing radioactive nuclear waste in
17 Vermont while the federal government worked on developing a long-term storage facility, and to
18 the need to ensure that the method of waste storage employed by Vermont Yankee was safe. As
19 with our analysis of Act 160, the deficiencies in the record-keeping of Vermont legislative
20 history, as well as the obvious coaching of Vermont legislators to avoid explicit statements about
21 nuclear safety, make our task in determining the principal purpose of Act 74 more difficult.
22 Nonetheless, this does not make our task less important, and the volume, frequency, and content
23 of the legislators’ comments show clearly that their actions were motivated by preempted safety
24 concerns.

25
26 The record also contains several statements by state legislators about the value of
27 assigning their concerns regarding radiological safety to the 2005 MOU, which required Entergy
28 to take several actions specifically addressing radiological safety. *In re Entergy Nuclear Vt.*
29 *Yankee, LLC*, 2006 WL 1418626, at *48.³¹ During a meeting of the Senate Natural Resources

³¹ As previously discussed, sections 6522(b)(4) and 6523(a)(1)(A) sweep all MOUs executed before July 1, 2005, into the ambit of Act 74, including the MOU executed on June 21, 2005.

1 Committee, for example, the State’s legislative council remarked that an earlier draft of Act 74
2 contained a “laundry list of [nuclear-waste] cask-related issues . . . [that] are now covered by the
3 [2005] MOU.” A member of the Department testified that “the federal government takes
4 jurisdiction over any radiological safety and health. And so anything that touched on that, it’s
5 better to have in an agreed upon MOU than to have in the bill itself.” Other legislators echoed
6 this sentiment at several other junctures. On the Senate floor, one senator stated explicitly that a
7 favorable aspect of Act 74 was that it left regulations relating to radiological safety to the 2005
8 MOU entered into by Entergy and the Department, which, the senator believed, could save Act
9 74 from a preemption challenge.³² Indeed, the 2005 MOU endorsed by Act 74 includes a
10 provision under which Entergy “waived” any right to bring a preemption challenge to the
11 Board’s authority to regulate Vermont Yankee, which clearly demonstrates the concern of the
12 Vermont Legislature and the Board as to whether their actions would withstand scrutiny under
13 the Atomic Energy Act and *Pacific Gas*.³³

14
15 These statements demonstrate the Vermont Legislature’s impermissible motive in passing
16 Act 74 – namely, to shut down Vermont Yankee based on concerns of radiological safety while
17 attempting to avoid a preemption challenge under *Pacific Gas*. Vermont legislators and
18 regulators attempted to achieve this objective by shifting provisions regarding radiological safety
19 into the 2005 MOU and by creating an unreviewable mechanism by which the construction of
20 new spent nuclear fuel storage facilities based on safety concerns would not be authorized. This
21 is a legislative approach that *Pacific Gas* does not permit. We therefore also affirm the district
22 court’s judgment that sections 6522(c)(2) and 6522(c)(4) of title 10 of the Vermont Statutes, as
23 enacted by Act 74, are preempted on their face by the Atomic Energy Act. For the reasons
24 discussed above regarding Act 160, we also affirm the district court’s grant of a permanent

³² Our concerns regarding the intent behind Act 74 are consistent with a recent opinion of the Federal Circuit, which examined the provision in the 2005 MOU requiring that Entergy perform an analysis of the stability of the river bank near a proposed spent nuclear storage facility “due to the perceived inadequacies of a previously performed NRC-required flood analysis.” *Vt. Yankee Nuclear Power Corp. v. Entergy Nuclear Vt. Yankee, LLC*, 683 F.3d 1330, 1349 (Fed. Cir. 2012). The Federal Circuit noted that “because the requirement to perform an additional analysis was directly motivated by safety concerns, it is clear that the flood analysis requirement was likely preempted under *Pacific Gas*.” *Id.*

³³ We cite this provision of the 2005 MOU not for the purpose of ruling on whether a party may validly waive the right to bring a preemption challenge, but only to demonstrate the impermissible intent on the part of the Vermont Legislature. *But see Olympic Pipe Line Co. v. City of Seattle*, 437 F.3d 872, 883 (9th Cir. 2006) (“Preemption is a power of the federal government, not an individual right of a third party that the party can ‘waive.’ [The plaintiff] could not, therefore, waive a right that it did not possess.”).

1 injunction enjoining the defendants from enforcing sections 6522(c)(2) or 6522(c)(4) of the
2 Vermont Statutes.

3
4 * * *

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6 In conducting this analysis of Acts 74 and 160 and their adoption, we are mindful of the
7 traditional “presumption against preemption with respect to areas where states have historically
8 exercised their police powers.” *N.Y. SMSA Ltd. P’ship*, 612 F.3d at 104. Vermont would have us
9 conclude that Acts 74 and 160 are merely “process statutes” that simply reallocate the
10 responsibility for approving the continued operation of Vermont Yankee from an administrative
11 agency to the state legislature. Indeed, Justice Brandeis once observed that the “franchise to
12 operate a public utility . . . is a special privilege which . . . may be granted or withheld at the
13 pleasure of the state.” *Frost v. Corp. Comm’n*, 278 U.S. 515, 534 (1929) (Brandeis, *J.*,
14 dissenting). Vermont further contends that it enacted Acts 74 and 160 on several bases, such as
15 diversifying the state’s power supply and controlling economic costs, that, if true, would surely
16 be permissible reasons to deny the construction of a nuclear power plant. *See Pacific Gas*, 461
17 U.S. at 211. However, the Supreme Court has instructed us that the regulation of nuclear power
18 is different from the “areas where states have historically exercised their police powers.” *N.Y.*
19 *SMSA Ltd. P’ship*, 612 F.3d at 104. “The federal government has occupied the entire field of
20 nuclear safety concerns, except the limited powers expressly ceded to the states.” *Silkwood*, 464
21 U.S. at 249 (internal quotation marks and alteration omitted). We have conducted a review that
22 reflects the Supreme Court’s specific directive that a “state judgment that nuclear power is not
23 safe enough to be further developed would conflict directly with the countervailing judgment of
24 the NRC . . . and would be preempted for that reason.” *Pacific Gas*, 461 U.S. at 212. We
25 conclude that Vermont legislators and regulators have undertaken a sustained effort to shut down
26 Vermont Yankee based on this impermissible reason.

27
28 We have considered the legislative history behind Acts 74 and 160 – undertaken in large
29 part through the district court’s exhaustive examination of audiotape recordings – and found that
30 it contains innumerable expressions of concern for radiological safety from Vermont legislators

1 and regulators.³⁴ We have taken note of the fact that the Vermont Legislature began considering
2 the bill that would become Act 160 – requiring Entergy to seek legislative approval to operate
3 Vermont Yankee past 2012 – only one week after Entergy applied to the NRC for an extension
4 of its operating license. We have observed that witnesses at committee meetings, legislators,
5 executive officials, and regulators were obviously coached to avoid making references to
6 radiological safety to navigate the shoals of *Pacific Gas*. We have sought to reconcile the
7 rationales proffered by the Vermont Legislature for Acts 74 and 160 with those Acts’ operative
8 effects and found them to be untethered from Vermont Yankee’s status as a merchant generator
9 and from the oversight already provided by the NRC. We have noted Vermont’s efforts to evade
10 court review by shunting requirements that concern radiological safety to MOUs, which in turn
11 contain provisions requiring Entergy to “waive” its right to bring a preemption challenge in
12 court. We have concluded that Vermont shifted decision-making responsibility for approving the
13 continued operation of Vermont Yankee from the Board, whose decisions were subject to review
14 by the Vermont Supreme Court, to the Vermont Legislature, where no judicial review of its
15 action – or inaction – would be available. Providing an inadequate and misleading legislative
16 record, failing to provide plausible legislative rationales, and imposing impermissible safety-
17 related obligations through non-statutory memoranda of understanding, do not and cannot shield
18 Acts 74 and 160 from this Court’s review.

19

³⁴ We have limited our analysis to Acts 74 and 160 in light of the district court’s determination that Entergy’s challenge to Act 189 is moot, a ruling that neither party challenges. Moreover, we recognize that the legislative history of Act 189, which was passed after Act 160, is an imperfect indicator of the legislative intent behind Acts 74 and 160. *See Pension Benefit Guar. Corp.*, 496 U.S. at 650. However, we nonetheless note that Act 189 directly regulates on the basis of radiological safety by requiring assessments of Vermont Yankee’s electrical, emergency, primary containment, and heat removal systems, with periodic audits to be conducted by a public oversight panel. Act 189, §§ 3, 6. Furthermore, the legislative history behind Act 189 demonstrates that the purpose of the Act was to allow Vermont regulators to conduct an “independent safety inspection” of Vermont Yankee, in large part because Vermont legislators doubted the competence of the NRC. Several Vermont legislators also expressed concern that a nuclear accident could tarnish Vermont’s “environmentally friendly” image. In addition, the testimony of Department commissioners and Vermont legislators contains familiar examples of coaching to avoid explicit references to radiological safety. Indeed, the committee chairperson drafting Act 189 specifically described the bill as a “reliability assessment because safety is not within our purview.” Moreover, during a hearing of the House Natural Resources Committee, a member of the Department distributed a handout entitled, “Everything You Wanted to Ask About Preemption But Shouldn’t,” and provided testimony advising Vermont legislators on how to discuss Act 189 in a manner that disguised their concerns about radiological safety. Testimony presented to the Committee explicitly referenced *Pacific Gas* and recommended that Vermont legislators discuss closing Vermont Yankee because it caused non-radiological environmental problems or was “unreliable,” so as to avoid a preemption challenge. During later hearings, legislators openly admonished each other for using the word “safety” and similar terms and expressed concerns over the prospect of preemption.

1 We do not question the legitimacy or sincerity of those Vermont residents and officials
2 who have safety-related concerns about Vermont Yankee, but Vermont has other avenues
3 available to air its concerns. For example, the Atomic Energy Act mandates that the NRC hold
4 hearings – if requested by “any person whose interest may be affected” – when taking certain
5 actions relating to the licensing of a nuclear power plant. *See Brodsky v. U.S. Nuclear Regulatory*
6 *Comm’n*, 578 F.3d 175, 177-78 (2d Cir. 2009) (quoting 42 U.S.C. § 2239(a)(1)(A)). The NRC
7 has also promulgated regulations requiring a public notice-and-comment period before amending
8 any aspect of a nuclear power plant’s operating license. *See* 10 C.F.R. § 50.91. Lastly, “the
9 federal courts of appeals have exclusive jurisdiction to adjudicate appeals from ‘all final orders
10 of the [NRC] made reviewable by section 2239 of title 42.’” *Riverkeeper, Inc. v. Collins*, 359
11 F.3d 156, 164 (2d Cir. 2004) (quoting 28 U.S.C. § 2342(4)). Such reviewable final orders include
12 “all final orders in licensing proceedings whether or not a hearing before the [NRC] occurred or
13 could have occurred.” *Id.* (quoting *Fla. Power & Light Co. v. Lorion*, 470 U.S. 729, 737 (1985)).
14 Vermont and its residents are free to pursue any of these routes to express their concerns
15 regarding the potential public safety hazards posed by Vermont Yankee. The legislation passed
16 here, however, was not the way to resolve those concerns.

17
18 As the Supreme Court has held, the one avenue Vermont may not pursue is to pass a
19 “state moratorium” on nuclear energy “grounded in safety concerns.” *Pacific Gas*, 461 U.S. at
20 213. For this reason, we hold that sections 6522(c)(2) and 6522(c)(4) of title 10 of the Vermont
21 Statutes and Act 160 in its entirety are preempted on their face by the Atomic Energy Act.³⁵ We
22 affirm the district court’s grant of a permanent injunction enjoining the defendants from
23 enforcing Act 160 or section 6522(c)(4) of title 10 of the Vermont Statutes, as enacted by Act 74.
24 *Entergy Nuclear*, 838 F. Supp. 2d at 243. We also affirm the district court’s subsequent order of
25 March 19, 2012, enjoining the defendants from enforcing section 6522(c)(2) of title 10 of the
26 Vermont Statutes.

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³⁵ We agree with the district court’s determination that Entergy’s initial challenge to Act 189 is moot, as Entergy has already completed the studies of Vermont Yankee’s safety systems required by the statute, and the results have been reported to the Vermont Legislature. In addition, because we hold that Act 160 is preempted by the Atomic Energy Act, the Board will no longer be able to consider the studies mandated by Act 189. *See Entergy Nuclear*, 838 F. Supp. 2d at 233.

1 **B. Dormant Commerce Clause Claim**

2

3 Entergy argues that Vermont’s efforts to condition the approval of a new CPG for
4 Vermont Yankee on the execution of a new PPA (to replace the 2001 PPA) represents a demand
5 “that Entergy provide more favorable rates to in-state than out-of-state retail utilities” in
6 contravention of the dormant Commerce Clause. The district court agreed, after examining
7 materials submitted by the Department to the Board, statements by state legislators and
8 regulators during committee meetings, and floor debates in the Vermont Legislature advocating
9 for a new favorable PPA. *Entergy Nuclear*, 838 F. Supp. 2d at 236-39. The district court found
10 “evidence of intent to condition continued operation [of Vermont Yankee] on the demonstration
11 of some marked ‘economic benefit,’ or ‘incremental value,’ beyond that reflected in market rates
12 for long-term contracts, in the form of below-wholesale-market long-term power purchase
13 agreements for Vermont utilities.” *Id.* at 236. The district court held that this conduct violated the
14 dormant Commerce Clause. Vermont argues, however, that the district court erred in issuing an
15 injunction on the basis of its finding mere intent on the part of the defendants to seek a favorable
16 PPA, and that the issue was therefore not ripe for judicial review. We agree.

17

18 The “basic rationale” of the ripeness doctrine is to “prevent the courts, through avoidance
19 of premature adjudication, from entangling themselves in abstract disagreements over
20 administrative policies, and also to protect the agencies from judicial interference until an
21 administrative decision has been formalized and its effects felt in a concrete way by the
22 challenging parties.” *Abbott Labs. v. Gardner*, 387 U.S. 136, 148-49 (1967), *overruled on other*
23 *grounds by Califano v. Sanders*, 430 U.S. 99 (1977). Ripeness encompasses two overlapping
24 doctrines concerning the exercise of federal court jurisdiction. *See Reno v. Catholic Soc. Servs.,*
25 *Inc.*, 509 U.S. 43, 57 n.18 (1993). The first of these is drawn from “Article III limitations on
26 judicial power,” *id.*, and “hence goes, in a fundamental way, to the existence of jurisdiction.”
27 *Simmonds v. INS*, 326 F.3d 351, 357 (2d Cir. 2003). “The second is a more flexible doctrine of
28 judicial prudence, and constitutes an important exception to the usual rule that where jurisdiction
29 exists a federal court must exercise it.” *Id.* In either case, “the question of ripeness may be
30 considered on a court’s own motion.” *Nat’l Park Hospitality Ass’n v. Dep’t of Interior*, 538 U.S.
31 803, 808 (2003).

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“Constitutional ripeness is a doctrine that, like standing, is a limitation on the power of the judiciary. It prevents courts from declaring the meaning of the law in a vacuum and from constructing generalized legal rules unless the resolution of an actual dispute requires it.” *N.Y. Civil Liberties Union v. Grandeau*, 528 F.3d 122, 131 (2d Cir. 2008) (internal quotation marks omitted). The district court held that Vermont’s efforts to secure favorable pricing for its in-state retail utilities violated the prohibition discussed in *New England Power Co. v. New Hampshire*, 455 U.S. 331, 335-36 (1982), against providing “residents an ‘economic benefit’ not available to customers in other states.” *Entergy Nuclear*, 838 F. Supp. 2d at 239. However, we believe that the district court erred in applying this “generalized legal rule” in the absence of a fully-formed PPA.

The dormant Commerce Clause, a doctrine inferred from the Commerce Clause of the United States Constitution, *see* U.S. Const. art. I, § 8 cl. 3, is a “restriction on permissible state regulation.” *Hughes v. Oklahoma*, 441 U.S. 322, 326 (1979). The dormant Commerce Clause stands for the “principle that one state in its dealings with another may not place itself in a position of economic isolation.” *H.P. Hood & Sons, Inc. v. DuMond*, 336 U.S. 525, 538 (1949) (internal quotation marks omitted). A state law may burden interstate commerce when it “has the practical effect of requiring out-of-state commerce to be conducted at the regulating state’s direction.” *Am. Booksellers Found. v. Dean*, 342 F.3d 96, 102 (2d Cir. 2003) (internal quotation marks omitted). When a statute “directly controls commerce occurring wholly outside the boundaries of a State,” it is invalid under the dormant Commerce Clause because it “exceeds the inherent limits of the enacting State’s authority.” *Healy v. Beer Inst.*, 491 U.S. 324, 336 (1989). “The transmission of electric current from one state to another . . . is interstate commerce” subject to the Commerce Clause. *Pub. Utils. Comm’n of R.I. v. Attleboro Steam & Elec. Co.*, 273 U.S. 83, 86 (1927), *abrogated on other grounds by Quill Corp. v. North Dakota ex rel. Heitkamp*, 504 U.S. 298 (1992).

The district court largely based its conclusion on the Supreme Court’s decision in *New England Power*, which considered an order of a New Hampshire regulatory commission prohibiting an in-state power plant from exporting some of its output to out-of-state retail utilities

1 in an effort to reduce prices for in-state consumers. 455 U.S. at 335-36. The Supreme Court
2 stated that the Commerce Clause “precludes a state from mandating that its residents be given a
3 preferred right of access, over out-of-state consumers, to natural resources located within its
4 borders or to the products derived therefrom.” *Id.* at 338. On this basis, the Court held that New
5 Hampshire’s “exportation ban” constituted “precisely the sort of protectionist regulation that the
6 Commerce Clause declares off-limits to the states,” because it was “designed to gain an
7 economic advantage for New Hampshire citizens at the expense of [the power plant’s] customers
8 in neighboring states.” *Id.* at 339.

9
10 The order at issue in *New England Power* did not violate the dormant Commerce Clause
11 simply because it conferred an economic benefit on New Hampshire residents, however. Rather,
12 by preventing a power plant from exporting its output to other states, the effect of the order was
13 to “overtly block[] the flow of interstate commerce at a State’s borders.” *City of Phila. v. New*
14 *Jersey*, 437 U.S. 617, 624 (1978). Such laws have “the undeniable effect of controlling
15 commercial activity occurring wholly outside the boundary of the State.” *Healy*, 491 U.S. at 337.
16 “While a State may seek lower prices for its consumers, it may not insist that producers or
17 consumers in other States surrender whatever competitive advantages they may possess.” *Brown-*
18 *Forman Distillers Corp. v. N.Y. State Liquor Auth.*, 476 U.S. 573, 580 (1986). Although the
19 record shows that Vermont was interested in obtaining favorable pricing for the power produced
20 by Vermont Yankee for Vermont retail utilities, it does not show that Vermont was also seeking
21 to prevent retail utilities in other states from negotiating favorable rates with Entergy as well. *Cf.*
22 *SPGGC, LLC v. Blumenthal*, 505 F.3d 183, 194 (2d Cir. 2007) (holding that a statute prohibiting
23 the in-state sale of certain types of “gift certificates” did not violate the dormant Commerce
24 Clause because it did “not, by its terms or its effects, directly regulate sales of gift cards in other
25 states [or] prevent other states from regulating gift card sales differently within their own
26 territories”). The record also does not demonstrate that Vermont sought to impose a
27 “prohibition[] on out-of-state access to in-state resources,” *Camps Newfound/Owatonna, Inc. v.*
28 *Town of Harrison, Me.*, 520 U.S. 564, 578 (1997), by limiting the extent to which Vermont
29 Yankee could sell power to other states, as was the case in *New England Power*.

1 At present, in the absence of a completed PPA and without evidence regarding its effect
2 on out-of-state power consumers, we cannot determine whether the PPA Vermont has sought
3 will have a direct impact on commerce in other states. We also do not have a factual record
4 concerning incidental effects of such an agreement on interstate commerce and the
5 commensurate benefits of the agreement within Vermont. Entergy’s claim cannot be
6 characterized as “purely legal” in that it “may be decided without further factual development.”
7 *Gary D. Peake Excavating Inc. v. Town Bd. of Town of Hancock*, 93 F.3d 68, 72 (2d Cir. 1996).
8 This case therefore does not present a “concrete dispute affecting cognizable current concerns of
9 the parties within the meaning of Article III,” and is therefore not “ripe within the constitutional
10 sense.” *Ehrenfeld v. Mahfouz*, 489 F.3d 542, 546 (2d Cir. 2007) (internal quotation marks
11 omitted).

12
13 Of course, we do not suggest that any PPA providing favorable pricing for Vermont
14 residents would pass muster under the dormant Commerce Clause. A regulation that “evinces”
15 discriminatory purpose against interstate commerce, “or unambiguously discriminates in its
16 effect . . . almost always is ‘invalid *per se*.’” *Brown & Williamson Tobacco Corp. v. Pataki*, 320
17 F.3d 200, 209 (2d Cir. 2003) (quoting *Nat’l Elec. Mfrs. Ass’n v. Sorrell*, 272 F.3d 104, 108 (2d
18 Cir. 2001)). For example, an agreement requiring Entergy “to seek regulatory approval in
19 [Vermont] before undertaking a transaction in another” state would likely be *per se* invalid under
20 the dormant Commerce Clause. *Brown-Forman*, 476 U.S. at 582; *see also Baldwin v. G.A.F.*
21 *Seelig, Inc.*, 294 U.S. 511, 521 (1935) (holding that one state “has no power to project its
22 legislation into [another state] by regulating the price to be paid in that state for [products]
23 acquired there”). It is also likely that Vermont could not require Entergy to “affirm that [its]
24 prices are no higher than the prices being charged in [other] states.” *Healy*, 491 U.S. at 335. An
25 agreement requiring Vermont Yankee to allot a certain percentage of its output to satisfy local
26 demand would also likely violate the dormant Commerce Clause. *See New Eng. Power*, 455 U.S.
27 at 338-39.³⁶ Finally, we note that a facially-neutral statute that imposes an incidental “burden on
28 interstate commerce incommensurate with the local benefits secured,” *Nat’l Elec. Mfrs. Ass’n*,

³⁶ Agreements of this nature would be “scrutinized strictly, *i.e.*, ‘the burden falls on the State to justify [the discrimination] both in terms of the local benefits flowing from the statute and the unavailability of nondiscriminatory alternatives adequate to preserve the local interests at stake.’” *Brown & Williamson*, 320 F.3d at 209 (quoting *Hunt v. Wash. State Apple Advertising Comm’n*, 432 U.S. 333, 353 (1977)).

1 272 F.3d at 108, would fail the balancing test articulated by the Supreme Court in *Pike v. Bruce*
2 *Church, Inc.*, 397 U.S. 137, 142 (1970).³⁷

3
4 However, no agreement is before us. Accordingly, the analysis required under the
5 dormant Commerce Clause may not be performed, and so Entergy’s claim is unripe at this time.
6 *Cf. Middle S. Energy, Inc. v. City of New Orleans*, 800 F.2d 488, 491 (5th Cir. 1986) (“When and
7 how the Council exercises its option, if it ever does, are the critical determinants of the propriety
8 of federal court jurisdiction over this matter. Until the City Council actually votes to exercise the
9 purchase option, we must be careful to ‘avoid imposition under [our] jurisdiction through
10 obtaining futile or premature interventions, especially in the field of public law.’” (quoting *Pub.*
11 *Serv. Comm’n of Utah v. Wycoff Co.*, 344 U.S. 237, 243 (1952))). We therefore vacate the
12 district court’s grant of a permanent injunction enjoining the defendants from conditioning a new
13 CPG for Vermont Yankee on the execution of a favorable PPA.³⁸

14 15 **C. Federal Power Act Claim**

16
17 Under the Federal Power Act, FERC has jurisdiction over “the transmission of electric
18 energy in interstate commerce and . . . the sale of electric energy at wholesale in interstate
19 commerce.” 16 U.S.C. § 824(b)(1). FERC’s authority includes “exclusive jurisdiction over the
20 rates to be charged [a utility’s] interstate wholesale customers.” *Nantahala Power & Light Co. v.*
21 *Thornburg*, 476 U.S. 953, 966 (1986). This authority is exclusive, “without regard to the source
22 of production.” *New Eng. Power*, 455 U.S. at 340. After a rate has been approved by FERC, “a
23 State may not conclude in setting retail rates that the FERC-approved wholesale rates are
24 unreasonable. A State must rather give effect to Congress’ desire to give FERC plenary authority

³⁷ A statute or regulation would discriminate against commerce itself when the statute

(i) shifts the costs of regulation onto other states, permitting in-state lawmakers to avoid the costs of their political decisions, (ii) has the practical effect of requiring out-of-state commerce to be conducted at the regulating state’s direction, or (iii) alters the interstate flow of the goods in question, as distinct from the impact on companies trading in those goods.

Am. Booksellers Found. v. Dean, 342 F.3d 96, 102 (2d Cir. 2003) (internal quotation marks omitted).

³⁸ Because we vacate the district court’s grant of an injunction regarding Entergy’s dormant Commerce Clause claim, we need not address the question of whether Entergy’s suit sought to enjoin the proper officials under *Ex Parte Young*, 209 U.S. 123 (1908), and *Verizon Maryland Inc. v. Public Service Commission of Maryland*, 535 U.S. 635 (2002).

1 over interstate wholesale rates, and to ensure that the States do not interfere with this authority.”
2 *Nantahala*, 476 U.S. at 966. Under the filed-rate doctrine, “the right to a reasonable rate is the
3 right to the rate which [FERC] files or fixes, and that, except for review of [FERC’s] orders, the
4 courts can assume no right to a different one on the ground that, in its opinion, it is the only or
5 the more reasonable one.” *Mont.-Dakota Utils. Co. v. Nw. Pub. Serv. Co.*, 341 U.S. 246, 251-52
6 (1951). The filed-rate doctrine applies with equal force to federal and state courts. *See Ark. La.*
7 *Gas Co. v. Hall*, 453 U.S. 571, 581-82 (1981). The filed-rate doctrine also applies to efforts by
8 state regulators to modify the terms of a FERC-mandated rate determination or cost allocation.
9 *See Entergy La., Inc. v. La. Pub. Serv. Comm’n*, 539 U.S. 39, 47-49 (2003).

10
11 In recent years, FERC has “encouraged transmission providers to establish ‘Regional
12 Transmission Organizations’ – entities to which transmission providers would transfer
13 operational control of their facilities for the purpose of efficient coordination.” *Morgan Stanley*
14 *Capital Grp.*, 554 U.S. at 536. Regional transmission organizations (RTOs), in turn, are managed
15 by “independent system operators” (ISOs), which are nonprofit entities that coordinate the
16 transmission of power and auctions for energy across regional markets. *Id.* at 536-37 (citing
17 *Midwest ISO Transmission Owners*, 373 F.3d at 1364). To accommodate the development of
18 regional power markets, FERC “has begun to permit sellers of wholesale electricity to file
19 ‘market-based’ tariffs,” which, “instead of setting forth rate schedules or rate-fixing contracts,
20 simply state that the seller will enter into freely negotiated contracts with purchasers.” *Id.* at 537.
21 In *Simon v. KeySpan Corp.*, we held that there was “no need for us to decide whether the filed
22 rate doctrine always applies to market-based auction rates.” 694 F.3d 196, 204-05 (2d Cir. 2012).
23 However, when the doctrine does apply, as when the auction process for establishing market-
24 based rates is adequately safeguarded by FERC, a plaintiff’s claim that the rates for energy are
25 unreasonable is barred by the filed-rate doctrine. *Id.* at 207-08.

26
27 Entergy argues that Vermont’s efforts to obtain a favorable PPA violate the market-based
28 tariff approved by FERC for the New England regional wholesale market. According to Entergy,
29 capping the prices it can charge Vermont residents would interfere with the rates FERC has
30 approved for the market, and so the PPA is “preempted” under the filed-rate doctrine. However,
31 the market-based tariff approved by FERC for Vermont Yankee states only that Entergy “may

1 sell electric energy and capacity from time to time at rates, terms and conditions established by
2 agreement with the purchaser All such transactions shall be voluntary.” The market-based
3 tariff’s only other guidance on rates is that “[a]ll sales shall be made at rates established by
4 agreement between the purchaser and Entergy Nuclear VY.”

5
6 We agree with the district court’s determination that this claim is not ripe. In addition to
7 the fact that a new favorable PPA has not yet been executed, Entergy has not sought a
8 determination from FERC about whether the terms of such a PPA would violate the market-
9 based tariff.³⁹ Because FERC has the exclusive jurisdiction to “determine just and reasonable
10 wholesale rates or to insure that agreements affecting wholesale rates are reasonable,” Entergy’s
11 recourse should be first to FERC to determine whether the PPA – if and when executed –
12 complies with this standard. *See Miss. Power & Light Co. v. Miss. ex rel. Moore*, 487 U.S. 354,
13 374 (1988); *see also In re Permian Basin Area Rate Cases*, 390 U.S. 747, 767 (1968) (“[C]ourts
14 are without authority to set aside any rate *selected by the Commission* which is within a ‘zone of
15 reasonableness.’” (quoting *Fed. Power Comm’n v. Natural Gas Pipeline Co. of Am.*, 315 U.S.
16 575, 585 (1942)) (emphasis added)); *Pub. Util. Dist. No. 1 of Snohomish Cnty. v. Dynergy Power*
17 *Mktg., Inc.*, 384 F.3d 756, 761-62 (9th Cir. 2004) (holding that a utility may not seek injunctive
18 relief alleging manipulation of FERC-approved market based tariffs because doing so would
19 “encroach[] upon the substantive provisions of the tariff, an area reserved exclusively to FERC,
20 both to enforce and to seek remedy” (internal quotation marks omitted)); *Cal. Pub. Utils.*
21 *Comm’n*, 132 FERC ¶ 61,047, at *17 (“The Commission’s authority under the [Federal Power
22 Act] includes the *exclusive jurisdiction* to regulate the rates, terms and conditions of sales for
23 resale of electric energy in interstate commerce by public utilities.” (emphasis added)), *clarified*
24 *on reh’g*, 133 FERC ¶ 61,059 (2010). We therefore agree with the district court that Entergy’s
25 claim under Count Two is unripe at the present time. *Entergy Nuclear*, 838 F. Supp. 2d at 234-
26 35.

27

28

³⁹ Entergy also has not offered an explanation for why it did not seek review of the 2001 PPA before FERC, and the record does not reveal any prior attempts to do so. Nonetheless, FERC’s “passive permission for a rate to go into effect does not constitute a finding that the rate is just and reasonable,” as required by the Federal Power Act pursuant to 16 U.S.C. § 824d(a). *See Morgan Stanley Capital Grp.*, 554 U.S. at 546.

1 **CONCLUSION**

2

3 For the reasons stated above, we AFFIRM the district court’s grant of a declaratory
4 judgment that Act 74 and Act 160 are facially preempted by the Atomic Energy Act. We
5 REVERSE the district court’s determination that Vermont’s efforts to condition a new
6 Certificate of Public Good for Vermont Yankee on the execution of a favorable power purchase
7 agreement violate the dormant Commerce Clause. We AFFIRM the district court’s determination
8 that Entergy’s challenge under the Federal Power Act is unripe. We AFFIRM the district court’s
9 grant of a permanent injunction enjoining the defendants from enforcing sections 6522(c)(2) or
10 6522(c)(4) in title 10 of the Vermont Statutes, as enacted by Act 74, or sections 248(e)(2),
11 248(m), or 254 in title 30 of the Vermont Statutes, as enacted by Act 160. Finally, we VACATE
12 the district court’s permanent injunction enjoining the defendants from conditioning the issuance
13 of a Certificate of Public Good on the execution of a below-wholesale-market power purchase
14 agreement between Entergy and Vermont utilities or otherwise requiring Vermont Yankee to sell
15 power to Vermont utilities at preferential rates.

SUSAN L. CARNEY, *Circuit Judge*, concurring:

I concur, reluctantly, in the majority's detailed and carefully reasoned opinion striking down Vermont Acts 74 and 160. My reluctance stems not from any flaw in the majority's analysis, but rather from my concern that Congress, in enacting the Atomic Energy Act ("AEA"), did not intend the result we reach. Rather, we are led to our conclusion principally by an expansive gloss on the preemptive scope of the AEA first set forth in Pacific Gas & Electric Co. v. State Energy Resources Conservation & Development Commission, 461 U.S. 190 (1983) ("Pacific Gas"). There, the Supreme Court instructed that "[a] state moratorium on nuclear construction *grounded in safety concerns* falls squarely within the prohibited field" and would therefore be preempted. Id. at 213 (emphasis added).

As Judge Droney persuasively demonstrates, the State legislative record before us is "replete with references to radiological safety." Maj. Op. at 37. No reader of this record can fairly claim that the statutes at issue were not "grounded in safety concerns." Pacific Gas, 461 U.S. at 213. Acts 74 and 160 therefore run afoul of the dictate of Pacific Gas.

And yet, in Pacific Gas, the Court *upheld* a State moratorium on the construction of nuclear power plants, declining to look too closely at the State's motivation. Cognizant of that setting, we might feel free to discount the "grounded in safety concerns" phrase as merely a stray comment. But it undeniably captures the full thrust of the Court's opinion: in Pacific Gas, the Court stressed that "[a] state prohibition on nuclear construction for safety reasons would . . . be *in the teeth*

of the Atomic Energy Act's objective to insure that nuclear technology be safe enough for widespread development and use—and would be preempted for that reason.” Id. at 213 (emphasis added). And the Pacific Gas majority pointedly declined to accept the more tailored view of the preempted field offered by Justice Blackmun in concurrence, when he suggested instead that “Congress has occupied not 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.” Id. at 224. Furthermore, not long after, in both Silkwood v. Kerr-McGee Corp., 464 U.S. 238 (1984), and English v. General Electric Co., 496 U.S. 72 (1990), the Court reiterated its allegiance to the preemption contours it drew in Pacific Gas.

I write separately to emphasize that it is principally the judicial phrase “grounded in safety concerns,” and not the Court’s holdings or the text of the Atomic Energy Act, that compels us to strike down Vermont’s statutes. Particularly in the context of a Congressional enactment that contains protection for State and local interests, 42 U.S.C. § 2018, and indeed invites State-Federal cooperation, id. § 2021, it seems anomalous to conclude that nothing more than the Vermont legislature’s expression of concern about nuclear safety is needed to invalidate these largely procedural statutes.

As the Court recently observed, “Federalism, central to the constitutional design, adopts the principle that both the National and State Governments have elements of sovereignty the other is bound to respect.” Arizona v. United States, 132 S.Ct. 2492, 2500 (2012). The “[n]eed for new power facilities, their economic

feasibility, and rates and services, are areas that have been characteristically governed by the States.” Pacific Gas, 461 U.S. 205; see also Frost v. Corp. Comm’n, 278 U.S. 515, 534 (1929) (“[A] franchise to operate a public utility is not like the general right to engage in a lawful business. . . [but] is of the essence of a special privilege that . . . may be granted or withheld at the pleasure of the state”) (Brandeis, J., dissenting). Repeatedly, we have held that we will not find a federal statute to supersede a State’s exercise of its the historic police powers “unless it was ‘the clear and manifest purpose of Congress’ to do so.” N.Y. SMSA Ltd. P’ship v. Town of Clarkstown, 612 F.3d 97, 104 (2d Cir. 2010) (per curiam) (quoting Wyeth v. Levine, 555 U.S. 555, 565 (2009)). But the outcome we reach today does not, to my mind, reflect a “clear and manifest purpose of Congress.” Based primarily on Vermont’s general concern for safety and public health rather than on any finding that its statutes actually intrude on the field of radiological safety, our 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.

In thinking about preemption in the AEA context, it is important to distinguish between two categories of State laws. The first consists of State laws that impose concrete safety requirements other than those imposed by the Nuclear Regulatory Commission (“NRC”). A State requirement that nuclear power plants use a particular type of backup generator or a particular method of protecting against leaks falls within this category. The second category consists of State laws that do not in their language or operation intrude upon the field of radiological

safety. A legislative decision to permit plant construction or to deny continued operation of a plant at the expiration of a license period, for example, would fall into this category.

I have no doubt that Congress intended to preempt State laws that fall within the first category. See Pacific Gas, 461 U.S. at 211-12. But I am less convinced that Congress intended to foreclose States from enacting laws that fall within the second category. After all, the AEA—while expressing a federal intent to support the introduction of nuclear power—*does not require any State to host nuclear power plants*. Id. at 205 (“Even a brief perusal of the [AEA] reveals that, despite its comprehensiveness, it does not at any point expressly require the States to construct or authorize nuclear powerplants or prohibit the States from deciding, as an absolute or conditional matter, not to permit the construction of any further reactors.”). Indeed, in Pacific Gas the Court seemed to recognize the possibility that, consistent with the AEA, a State that once agreed to the construction of a nuclear plant within its borders might, at an appropriate inflection point, change course. Id. at 223 (“[T]he legal reality remains that Congress has left sufficient authority in the States to allow the development of nuclear power to be slowed or even stopped for economic reasons.”).

Acts 74 and 160 fall within the second category of State laws. They alter the State’s decision-making process with respect to the plant. To be sure, in requiring that Vermont Yankee obtain State legislative approval before it may continue operations, they place the State legislature in a position to foil judicial review of its

decision. Maj. Op. at 44. They may thereby enable the State to reject the plant's bid for a new operating license based on an amalgam of concerns, including general safety concerns, or general safety concerns alone. They do not, however, impose any safety requirements at all on the plant. To the extent Act 74 incorporates a memorandum of understanding that imposes safety-related requirements on Vermont Yankee relating to cask storage, it is clearly preempted. The presence of these few requirements, however, serves to highlight the limited scope of the remaining provisions of the Acts.

The AEA does not commit every decision related to the generation of nuclear power to the federal government; rather, it provides for “the dual regulation of nuclear-powered electricity.” Pacific Gas, 461 U.S. at 211-212. Under the AEA's approach, the federal government “maintains complete control of the safety and ‘nuclear’ aspects of energy generation” while the States “exercise their traditional authority over the need for additional generating capacity, *the type of generating facilities to be licensed*, land use, ratemaking, and the like.” Id. at 212 (emphasis added). Indeed, the AEA expressly provides that “[n]othing in this chapter shall be construed to affect the authority or regulations of any Federal, State or local agency with respect to the generation, sale, or transmission of electric power produced through the use of nuclear facilities licensed by the [NRC].” 42 U.S.C. § 2018; see also 42 U.S.C. § 2021(k) (“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.”). This text strongly suggests Congress's

intent that the States retain authority to determine whether nuclear power, or energy from alternative sources, should be generated within their borders.

This conclusion is buttressed by what Congress *omitted* from the AEA. As mentioned, the AEA does not, either in its text or as the Supreme Court has construed it, force a State to approve the construction of a nuclear power plant. Pacific Gas, 461 U.S. at 205. Nor does the AEA, either in its text or as construed, force a State to permit the continued operation of a nuclear power plant whose State-issued operating license has expired. Id. This is so even where the NRC has renewed the plant's federally-issued operating license. See, e.g., Nuclear Regulatory Commission Report Regarding Vermont Yankee Nuclear Power Station, NUREG-1437, Supp. 30, Vol. 1 at § 1.4 (Aug. 2007) (“Once an OL [Operating License] is renewed [by the NRC], State regulatory agencies and the owners of the plant will ultimately decide whether the plant will continue to operate based on factors such as the need for power or other matters within the State’s jurisdiction or the purview of the owners. . . . [T]he NRC does not have a role in the energy-planning decisions of State regulators and utility officials as to whether a particular nuclear power plant should continue to operate.”).

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. In Pacific Gas, 461 U.S. at 222-23, the Court upheld California’s moratorium on nuclear construction, accepting, in the face of competing explanations, California’s avowed financial concerns as the rationale for the legislation. In Silkwood v. Kerr-

McGee Corp., 464 U.S. 238, 249 (1984), the Court found that a “state-authorized award of punitive damages” against the operator of a nuclear power plant for contamination-related injuries did not “fall[] within the prohibited field.” And in English v. General Electric Co., 496 U.S. 72, 86 (1990), the Court concluded that the AEA did not preempt a state-law claim for intentional infliction of emotional distress brought against the operator of a nuclear power plant and arising out of perceived violations of nuclear-safety standards.

Further, as a practical matter, it seems impossible to divorce safety concerns from any State legislature’s consideration of whether to allow, or continue to allow, the generation of nuclear power within its borders. Even legislation that is ostensibly oriented solely to economic concerns—and therefore within the AEA’s savings clause as interpreted in Pacific Gas—can be expected to have some bearing on plant safety. But this should not doom the statute. As Justice Blackmun wrote in his Pacific Gas concurrence, “There is no evidence that Congress had a ‘clear and manifest purpose’ to force States to be blind to whatever special dangers are posed by nuclear plants.” 461 U.S. at 225 (citation omitted). To conclude that State legislative history reflecting concern—even a primary concern, *Maj. Op.* at 35—about nuclear safety is enough to invalidate a statute, even absent an actual conflict with federal regulatory requirements or meaningful intrusion into the field, could effectively disable the States from enacting legislation in the realm of nuclear energy production. I am aware of no basis for concluding that Congress made such a choice.

Placing decisive emphasis on motivation to the exclusion of impact, as we do here, also creates an irresistible incentive for States to do their best to mask their concerns about safety. Further, the prominence of safety concerns in the record before us regrettably overshadows the legislature’s attempt to address economic issues, ones that the AEA’s savings clause protects. The original rationale supporting the savings clause’s protection for State economic legislation, see Pacific Gas, 461 U.S. at 207, may have been undermined by the advent of the “merchant generator,” see Maj. Op. at 25-26. But, while Vermont Yankee provides energy across State lines, only the citizens of Vermont are faced with the fiscal consequences of the adequacy or inadequacy of Entergy’s provisions to address potential financial dissolution. 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.

Thus, like the construction moratorium upheld in Pacific Gas, the statutes before us “do[] not seek to regulate the construction or operation of a nuclear power plant.” 461 U.S. at 212. Unfortunately for Vermont, our analysis cannot end there. As discussed above, under Pacific Gas, “[a] state moratorium on nuclear construction grounded in safety concerns falls squarely within the prohibited field.” Id. at 213. Were I writing on a blank slate, I would be inclined to conclude that a State’s concerns for safety do not preempt its efforts to change its decision-making process or its ultimate decision, at a natural inflection point in the life of a nuclear power plant, that it no longer wishes the plant to operate within its borders.

But there is no avoiding the Supreme Court's teachings in Pacific Gas. The statutes before us are preempted, and I therefore must concur.