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CARBON OUTLASTS THE LAW: STATES WALK THE CONSTITUTIONAL LINE

STEVEN FERREY*

Abstract: State carbon policies to control climate warming and our energy future are under legal attack. A successful barrage of litigation now invokes the dormant Commerce Clause and the Federal Power Act as interpreted through the Filed Rate Doctrine, as well as the Supremacy Clause of the U.S. Constitution, to challenge the legal validity and sustainability of these state carbon-based laws. California and other states have survived these legal challenges sparingly, and then often only by prevailing with procedural defenses that dismiss the case before a decision on the legal merits of their state energy regulation. This Article examines and analyzes the multiple legal dimensions of challenges on carbon control and sustainable energy in a constellation of states, comparing them to California's particular legal challenges. The Constitution is not changeable by simple legislation; its requirements and restrictions endure, and state action on energy can be ruled unconstitutional. The now-forming precedent will construct and limit the U.S. carbon-control future as states labor to achieve a legally sustainable economy. This Article navigates these recent challenges to state carbon control and sustainable energy statutory and regulatory law. How the judiciary is resolving each challenge, and the precedent created, will chart the future of U.S. sustainable energy policy.

You will die but the carbon will not; its career does not end with you.

—Jacob Bronowski

I. CARBON-BASED LIFE FORMS

Carbon will outlive us, but can current state climate change law and sustainable energy regulation survive? State carbon policies to control climate

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warming and our energy future are in legal jeopardy. In the void created by a lack of federal policy,¹ California and ten states on the East Coast implemented new laws to reduce carbon emissions and promote sustainable energy. Since implementation, a successful barrage of litigation has invoked the dormant Commerce Clause and the Supremacy Clause of the U.S. Constitution to challenge the legal viability of these laws.

Although California was not the first state to impose carbon control law,² it is now the epicenter of legal challenges. California is accused of taking *ultra vires* administrative actions not allowed under state law or the U.S. Constitution and illegally discriminating against interstate commerce.³ While carbon regulation proceeds in California and in nine East Coast states,⁴ California is the only state to have adopted all five primary legal mechanisms for sustainable energy and low-carbon development.⁵

- Net Metering: Also employed in 85% of states.
- Renewable Portfolio Standards (RPS): Also employed in 65% of states.
- Renewable System Benefit Charges: Also employed in 33% of states.
- Carbon and greenhouse gas (GHG) regulation: Also employed in 20% of states.
- Feed-In Tariffs: Also employed in less than 10% of states.

The states, particularly including California, are now legally challenged from multiple angles and have had some of their regulations declared unconstitutional.⁶ The writing was on the wall.⁷ This Article examines these California legal confrontations and compares them to what is transpiring in other states. Notably, it is not just the regulated community that has taken legal umbrage with the California sustainable energy program. California is also challenged by envi-

¹ In the past decade, the only significant federal energy legislation, other than tax incentives, was the Energy Policy Act of 2005 (EPAAct) and the Energy Independence and Security Act of 2007 (EISA). See 42 U.S.C. § 15801; *id.* § 17071. EPAAct is a relatively modest statute, though it did require net metering by the states, and has not been uniformly followed in every state. EISA largely dealt with fuels and appliance efficiency rather addressing electric industry operations.

² The Regional Greenhouse Gas Initiative (RGGI) program on the East Coast began in 2009. California's delayed Assembly Bill 32 began in 2013. See *infra* notes 72–77 and accompanying text.

³ See *infra* notes 25–163 and 243–300 and accompanying text.

⁴ See *infra* notes 72–200 and accompanying text.

⁵ See *infra* notes 396–397 and accompanying text.

⁶ See *infra* notes 112–200 and accompanying text.

⁷ See Steven Ferrey, Chad Laurent & Cameron Ferrey, *Fire and Ice: World Renewable Energy and Carbon Control Mechanisms Confront Constitutional Barriers*, 20 DUKE ENVTL. L. & POL'Y F. 125, 125 (2010); Steven Ferrey, Chad Laurent & Cameron Ferrey, *FiT in the U.S.A.*, PUB. UTILS. FORT. (June 2010), <http://www.fortnightly.com/fortnightly/2010/06/fit-usa>, available at <http://perma.cc/EEF7-BG2A>; Steven Ferrey, *Shaping American Power: Federal Preemption and Technological Change*, 11 VA. ENVTL. L.J. 47, 47 (1991); Steven Ferrey, *Follow the Money! Article I and Article VI Constitutional Barriers to Renewable Energy in the U.S. Future*, 17 VA. J.L. & TECH. 89, 89 (2012).

ronmental groups, low-income consumers, and businesses outside the state.⁸ And many of these challenges to state policies have been found valid:

- The California feed-in tariff was stricken as illegal/unconstitutional.⁹
- State RPS programs are being challenged in several states as implemented in an unconstitutional manner, and have been stricken when challenged on constitutional grounds.¹⁰
- A recent Federal Energy Regulatory Commission (FERC) adjudicatory order casts uncertainty on the scope of net metering mechanisms when states, like California, allow a substantial net export of power from the generator to the utility.¹¹
- California's carbon control law is under several serious, and in some cases already successful, legal challenges.¹²
- Other state regulation of power has been stricken as unconstitutional.¹³

California was challenged as to whether its regulatory actions regarding sustainable energy fuels violate the dormant Commerce Clause of the U.S. Constitution. California lost in the federal trial court,¹⁴ but the decision was recently reversed in a controversial split decision of the U.S. Court of Appeals for the Ninth Circuit.¹⁵ The Ninth Circuit decision seems to reconfigure the past three-quarters of a century of Supreme Court precedent applying the Commerce Clause, as analyzed below.¹⁶ The Ninth Circuit held that states can disregard the dormant Commerce Clause prohibition against interstate commerce discrimination when they make their statutory purpose the discouragement of CO₂ emissions resulting from transport of goods or commerce from outside the state. There is no prior Supreme Court sanction for such environmental purposes negating the Commerce Clause.

Comparing California's loss to other states undergoing a dozen dormant Commerce Clause challenges to their state sustainable energy regulation, eight of the twelve either were settled in favor of the challengers or the state lost, and the remaining four have been dismissed on procedural grounds without reaching the merits of the claim or are still pending or are on appeal.¹⁷ Part II of this Arti-

⁸ See *infra* notes 112–162 and 243–300 and accompanying text.

⁹ See *infra* notes 273–300 and accompanying text.

¹⁰ See *infra* notes 156 and 158 and accompanying text.

¹¹ See Steven Ferrey, *Virtual "Nets" and Law: Power Navigates the Supremacy Clause*, 24 GEO. INT'L ENVTL. L. REV. 267, 306–08 (2012).

¹² See *infra* notes 112–133, 243–300, 333–371 and accompanying text.

¹³ See *infra* notes 163–200 and accompanying text.

¹⁴ See *infra* notes 112–138 and accompanying text.

¹⁵ See *infra* notes 139–149 and accompanying text.

¹⁶ See *infra* notes 142–155 and accompanying text.

¹⁷ See *infra* notes 163–200 and accompanying text.

cle examines in detail these dormant Commerce Clause dimensions of state energy regulation.

Pursuant to the Supremacy Clause of the U.S. Constitution, California has been challenged six times regarding regulation of its electric power generation facilities and liquid fuels. California has either settled in favor of challengers or lost five of these six, and the sixth matter was dismissed on procedural grounds, without reaching the merits of the claim and with the plaintiffs receiving permission to re-file the complaint.¹⁸ In states undergoing four recent similar challenges to their energy regulation, three of the four either were settled in some manner favorable to challengers or the state lost the decision, while the fourth matter and one of the originally adjudicated matters on appeal are still pending.¹⁹ Part III of this Article analyzes the Supremacy Clause bifurcation of jurisdiction to regulate electricity and recent challenges pursuant to constitutional doctrine.²⁰

There is more than constitutional invalidity of certain state energy regulation. California carbon and sustainable energy policy has recently undergone seven significant legal challenges raised pursuant to *state* law. California has either settled in favor of challengers or lost three of the four of these that have proceeded to a final decision, while one challenge has been sidetracked on procedural grounds without reaching the merits of the claim, and others are still awaiting final decisions.²¹ New York, the state leading the East Coast Regional Greenhouse Gas Initiative (RGGI), has faced four challenges. One was settled in favor of the challengers, two were dismissed on procedural grounds without reaching the merits of the claim, and one has not reached a decision.²² Part IV of this Article analyzes the state law challenges to energy regulation.²³

California and other states have survived these legal challenges sparingly, and often only by procedural defenses that dismiss the case before a decision on the legal merits of their state energy regulation. This Article analyzes and charts the dimensions of legal challenges on carbon and sustainable energy in California compared to other states. There is more to this than a mere “box score.” These new legal precedents construct the legal carbon-control future as states labor to achieve a sustainable economy. Unconstitutional state energy law imposes a significant cost to state taxpayers, who bear several millions of dollars of costs to reimburse attorney fees incurred by the parties affected by the law.²⁴

¹⁸ See *infra* notes 243–300 and accompanying text.

¹⁹ See *infra* notes 301–332 and accompanying text.

²⁰ See *infra* notes 201–332 and accompanying text.

²¹ See *infra* notes 301–332 and accompanying text.

²² See *infra* notes 372–376 and accompanying text.

²³ See *infra* notes 333–376 and accompanying text.

²⁴ See Anne Galloway, *Shumlin Wants to “Bill Back” Legal Expenses in Entergy Suit to Entergy*, VTDIGGER (Apr. 30, 2011), <http://vtdigger.org/2011/04/30/shumlin-wants-to-%E2%80%9Cbill-back-%E2%80%9D-legal-expenses-in-entergy-suit-to-entergy>, available at <http://perma.cc/S8CS-78L7>; *Entergy Nuclear Vt. Yankee v. Shumlin*, 733 F.3d 393, 397–98 (2d Cir. 2013). Vermont has 324,389

Operating within this evolving law and precedent is critical to solidifying sustainable energy policy.

The next Part of this Article examines the legal requirements for energy regulation pursuant to key clauses of the U.S. Constitution and state law.

II. THE DORMANT COMMERCE CLAUSE TRANSPOSED TO A CARBON-BASED LIFE FORM

A major practical and policy problem identified by the Regional Greenhouse Gas Initiative (RGGI) states,²⁵ as well as California,²⁶ is so-called “leakage” into the state of less-costly power whose carbon content is not regulated or affected.²⁷ Because states do not want the carbon costs they impose on their in-state power generators to promote higher-carbon but lower-cost out-of-state power imports, the states consider securing their borders, or at least surcharges and dissuading intruding power flows.²⁸ Preventing RGGI carbon control “leakage” of power into a carbon-controlled state around the edges of particular state carbon emission regulation raises issues of state authority to regulate power through mechanisms that affect wholesale power prices.²⁹

The RGGI Staff Working Group found that a substantial proportion of CO₂ emissions avoided by RGGI could be offset by corresponding increases in non-RGGI states, with early modeling showing leakage as high as 90% depending on the programmatic assumptions, which was reduced to leakage of CO₂ between 57% and 40% over the life of the RGGI program.³⁰ The governors in affected

household units, with 626,011 persons. *See State & County QuickFacts*, U.S. CENSUS BUREAU, <http://quickfacts.census.gov/qfd/states/50000.html> (last updated Jan. 6, 2014), available at <http://perma.cc/A9GT-AFFD>. This amounts to a charge of approximately \$14 per average household just for this single unsuccessful action through the trial level, and potentially mounting as an appeal proceeds.

²⁵ REG[’]L GREENHOUSE GAS INITIATIVE, MEMORANDUM OF UNDERSTANDING 6 (2005), available at http://www.rggi.org/docs/mou_final_12_20_05.pdf and <http://perma.cc/XF9W-EYP7>.

²⁶ CAP AND TRADE SUBGROUP, CAP AND TRADE PROGRAM DESIGN OPTIONS 1–3 (2006), available at http://www.climatechange.ca.gov/climate_action_team/reports/2006report/2006-03-27_CAP_AND_TRADE.PDF and <http://perma.cc/5ECC-WKXE>.

²⁷ *See* RGGI EMISSIONS LEAKAGE MULTI-STATE STAFF WORKING GROUP, POTENTIAL EMISSIONS LEAKAGE AND REGIONAL GREENHOUSE GAS INITIATIVE (RGGI): EVALUATING MARKET DYNAMICS, MONITORING OPTIONS AND POSSIBLE MITIGATION MECHANISMS, at ES-1 (2007) available at http://www.rggi.org/docs/il_report_final_3_14_07.pdf and <http://perma.cc/E9HB-RDDM>. RGGI states such as New Jersey, New York, Maryland, and Delaware are bordered by states that are not signatories to RGGI and historically produce a large of volume of electricity from coal-fueled power plants. *Id.* Similarly, California imports power from eleven states, including a large amount of coal-fired power. *See 2006 Gross System Electricity Production*, CAL. ENERGY COMM’N, http://energy.almanac.ca.gov/electricity/system_power/2006_gross_system_power.html (last visited Feb. 24, 2014), available at <http://perma.cc/X2U5-TSMR> (showing that California imports approximately ten percent of its total electricity from out-of-state coal plants).

²⁸ *See* RGGI EMISSIONS LEAKAGE MULTI-STATE STAFF WORKING GROUP, *supra* note 27, at 56–59.

²⁹ STEVEN FERREY, UNLOCKING THE GLOBAL WARMING TOOLBOX 167–87 (2010).

³⁰ *See* RGGI EMISSIONS LEAKAGE MULTI-STATE STAFF WORKING GROUP, *supra* note 27, at 42.

states agreed to “pursue technically sound measures to prevent leakage from undermining the integrity of the program.”³¹ California imports power from eleven states, including a large amount of coal-fired power. California’s choice to regulate carbon at the point of generation is necessary for California to get at the problem of high-carbon power leakage into the state.³²

A. *The Constitutional Law*

Power is the by-product of understanding.

—Jacob Bronowski

1. Facial Discrimination

Even where a particular energy regulation is within state authority, it still must be applied within the constraints of the U.S. Constitution’s Article I dormant Commerce Clause, so as not to unduly burden interstate commerce within the United States.³³ Electric power can move instantaneously in interstate commerce within the lower forty-eight states,³⁴ and this electric commerce constitutes an immense quantity of ongoing commerce estimated recently at 3,882,600,217 Mwh annually,³⁵ with a delivered value of approximately \$375 billion annually.³⁶ This level of commerce exceeds the total amount of corporate income taxes collected during 2012 in the United States.³⁷ Wholesale electricity is moving constantly in interstate commerce at the speed of light.³⁸ Therefore, it becomes a legally questionable action where states burden the free flow of electricity by favoring which state(s) hosts the facility that generates the power.

³¹ *Id.* at 10.

³² See HARVARD ELECTRIC POLICY GROUP, FORTY-NINTH PLENARY SESSION, RAPPORTEUR’S SUMMARY 39 (2007), available at <http://www.hks.harvard.edu/hepg/RapporteurReport12-07.pdf> and <http://perma.cc/89YX-XDHB>.

³³ See U.S. CONST. art I, § 8, cl. 3.

³⁴ See *New York v. Fed. Energy Regulatory Comm’n*, 535 U.S. 1, 16 (2002) (transmissions on the interconnected national grids constitute transmissions in interstate commerce).

³⁵ Data is from 2011. See U.S. ENERGY INFO. ADMIN., TABLE 2.2. RETAIL SALES AND DIRECT USE OF ELECTRICITY TO ULTIMATE CUSTOMERS, available at <http://www.eia.gov/electricity/data.cfm#sales> and <http://perma.cc/R5V7-YA8Y> (click on first hyperlink for spreadsheet, under “Latest year” subsection).

³⁶ The average delivered price of all electricity nationwide in 2011 was \$0.0966/Kwh, and \$0.1109/Kwh for residential customers. See *Average Retail Price of Electricity to Ultimate Customers by End-Use Sector, by State, Year-to-Date through February 2011 and 2010*, PUBLIC POL’Y INST. OF N.Y. STATE, <http://ppinys.org/reports/jtf/2011/employ/average-retail-price-of-electricity2010-11.htm> (last visited Feb. 24, 2014), available at <http://perma.cc/KDY8-CDDB>.

³⁷ *Historical Amount of Revenue by Source*, TAX POL’Y CTR. (May 9, 2013), <http://www.taxpolicycenter.org/taxfacts/displayafact.cfm?Docid=203>, available at <http://perma.cc/G5UB-FD43>.

³⁸ See STEVEN FERREY, *THE LAW OF INDEPENDENT POWER VOL. I*, at 2:1 (30th ed. 2013); Steven Ferrey, *Inverting Choice of Law in the Wired Universe: Thermodynamics, Mass, and Energy*, 45 WM. & MARY L. REV. 1839, 1914 (2004).

Geographically-based restriction on interstate commerce, whether discriminating for or against local commerce, raises dormant Commerce Clause concerns.³⁹ The dormant Commerce Clause prohibits state regulations that are either facially discriminatory against, or unduly burden, interstate commerce.⁴⁰ Discriminatory statutes are reviewed subject to judicial “strict scrutiny,” and for such a statute or regulation to be valid, the state must establish that the statute serves a compelling state interest through the least restrictive means affecting commerce to achieve that interest.⁴¹ Dormant Commerce Clause precedent is “driven by concern about ‘economic protectionism—that is, regulatory measures designed to benefit in-state economic interests by burdening out-of-state competitors.’”⁴² The Supreme Court has held that statutes that establish regional barriers (not necessarily just one-state isolation) and discriminate only against some states rather than all states violate the Commerce Clause.⁴³ Even a small discriminatory impact can be stricken under strict scrutiny constitutional review.⁴⁴

A court first determines whether regulation or legislation is facially discriminatory against interstate commerce and will only uphold that law if a legitimate local purpose can be found.⁴⁵ Subsidy of in-state businesses, even if the taxes to raise the subsidies are imposed on all commerce, can be stricken under strict scrutiny.⁴⁶ The Supreme Court has held that an agency of government cannot discriminate against interstate commerce “if reasonable nondiscriminatory

³⁹ U.S. CONST. art. I, § 8; see *Dep’t of Revenue of Ky. v. Davis*, 553 U.S. 328, 338 (2008) (quoting *Or. Waste Sys., Inc. v. Dep’t of Env’tl. Quality of State of Or.*, 511 U.S. 93, 101 (1994)).

⁴⁰ See *Davis*, 553 U.S. at 338.

⁴¹ *Oregon Waste Systems*, 511 U.S. at 100–01. Rader and Hempling argued that courts will not apply strict scrutiny to a Renewable Portfolio Standard that bases eligibility on a generator’s ability to produce benefits for a state rather than the geographic origin of the electricity. See NANCY RADER & SCOTT HEMPLING, *THE RENEWABLES PORTFOLIO STANDARD: A PRACTICAL GUIDE*, at A-3 to A-4 (2001). Recent court decisions do not support such an argument: Stating a basis in the statute other than what a court determines to be the actual purpose or effect of a statute does not allow a state to avoid facial discrimination, strict scrutiny, or a finding of a violation of the dormant Commerce Clause. See *Entergy Nuclear Vt. Yankee v. Shumlin*, 733 F.3d 393, 415–16 (2d Cir. 2013); *Gade v. Nat’l Solid Wastes Mgmt. Ass’n*, 505 U.S. 88, 105 (1992) (“In assessing the impact of a state law on the federal scheme, we have refused to rely solely on the legislature’s professed purpose and have looked as well to the effects of the law.”); *Norris v. Lumbermen’s Mut. Cas. Co.*, 881 F.2d 1144, 1150 (1st Cir. 1989).

⁴² *Davis*, 553 U.S. at 328 (quoting *New Energy Co. of Ind. v. Limbach*, 486 U.S. 269, 273–74 (1988)).

⁴³ See *Hunt v. Wash. State Apple Adver. Comm’n*, 432 U.S. 333, 352–54 (1977).

⁴⁴ See *Bacchus Imports, Ltd. v. Dias*, 468 U.S. 263, 270 (1984) (“A finding that state legislation constitutes ‘economic protectionism’ may be made on the basis of either discriminatory purpose, or discriminatory effect.”) (citing *Hunt*, 432 U.S. at 352–53; *City of Philadelphia v. State of New Jersey*, 437 U.S. 617, 624 (1978)).

⁴⁵ See *Davis*, 553 U.S. at 338 (quoting *Oregon Waste Systems*, 511 U.S. at 100).

⁴⁶ *West Lynn Creamery, Inc. v. Healy*, 512 U.S. 186, 194–95 (1994); *Alliance for Clean Coal v. Miller*, 44 F.3d 591, 596 (7th Cir. 1995) (“[T]he Illinois Coal Act, like the . . . order in *West Lynn*, has the same effect as a ‘tariff or customs duty—neutralizing the advantage possessed by lower cost out of state producers.’”).

alternatives, adequate to conserve legitimate local interests, are available.”⁴⁷ For such a statute or regulation to be upheld, the state usually must establish that there is a compelling state interest for which the statute is the least intrusive means to achieve that interest.⁴⁸ The Supreme Court has held, however, that “even if environmental preservation were the central purpose of the pricing order, that would not be sufficient to uphold a discriminatory regulation.”⁴⁹

The scope of commerce among the states for purposes of a dormant Commerce Clause analysis is broadly defined,⁵⁰ and the Supreme Court has held that all objects of interstate trade merit Commerce Clause protection, which particularly includes the transmission of electric energy in interstate commerce.⁵¹ “[I]t is difficult to conceive of a more basic element of interstate commerce than electric energy, a product used in virtually every home and every commercial or manufacturing facility. No State relies solely on its own resources in this respect.”⁵²

A limited exception occurs when a state participates directly in the market as a purchaser, seller, or producer of articles of commerce.⁵³ This exception does not apply to state regulation of private power companies, however, as contrasted with a state going into the private power business. State statutes or regulation found to discriminate against out-of-state interests based on geography or favoring local interests are found to be *per se* invalid.⁵⁴ State and local laws are deemed unconstitutional under the dormant Commerce Clause when a law differentiates between in-state and out-of-state economic interests in a manner that

⁴⁷ *Dean Milk Co. v. City of Madison*, 340 U.S. 349, 354 (1951).

⁴⁸ Trevor D. Stiles, *Renewable Resources and the Dormant Commerce Clause*, 4 ENVTL. & ENERGY L. & POL’Y J. 33, 58–59 (2009) (outlining a history of the dormant Commerce Clause).

⁴⁹ *West Lynn Creamery*, 512 U.S. at 204.

⁵⁰ See *City of Philadelphia*, 437 U.S. at 617, 621–22 (state cannot discriminate against articles of commerce originating in other states unless there is a “reason, apart from their *origin*, to treat them differently”); *Chemical Waste Mgmt. v. Hunt*, 504 U.S. 334, 348–49 (1992) (invalidating Alabama’s imposition of an additional disposal fee on hazardous waste generated outside the state but disposed of within Alabama); *Fort Gratiot Sanitary Landfill, Inc. v. Mich. Dep’t of Natural Res.*, 504 U.S. 353, 367–68 (1992) (invalidating the provisions of Michigan’s Solid Waste Management Act that restricted a landfill’s ability to accept out-of-state waste); *Oregon Waste Systems*, 511 U.S. at 108 (invalidating Oregon’s increased per-ton surcharge on waste generated in other states).

⁵¹ *New York v. Fed. Energy Regulatory Comm’n*, 535 U.S. at 16 (transmissions on the interconnected national grids constitute transmissions in interstate commerce).

⁵² *Fed. Energy Regulatory Comm’n v. Mississippi*, 456 U.S. 742, 757 (1982).

⁵³ *Hughes v. Alexandria Scrap Corp.*, 426 U.S. 794, 810 (1976); *United Haulers Ass’n, Inc. v. Oneida-Herkimer Solid Waste Mgmt. Auth.*, 550 U.S. 330, 346 (2007) (citing *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142 (1970)).

⁵⁴ See *City of Philadelphia*, 437 U.S. at 624 (noting that if a statute is facially discriminatory, it is virtually *per se* invalid); *Gen. Motors Corp. v. Tracy*, 519 U.S. 278, 287 (1997); Stiles, *supra* note 48, at 60–61; Patrick Jacobi, Note, *Renewable Portfolio Standard Generator Applicability Requirements: How States Stop Worrying and Learn to Love the Dormant Commerce Clause*, 30 VT. L. REV. 1079, 1107–08 (2006) (proposing that a court will likely strike down as unconstitutional any regulation that discriminates geographically or through point-of-origin).

benefits the former and burdens the latter.⁵⁵ If the statute is geographically even-handed, the courts apply the balancing test from *Pike v. Bruce Church, Inc.* to determine whether the state's interest justifies the incidental discriminatory effect of the regulatory mechanism as applied.⁵⁶

2. Discriminatory Effect Without Express Language

A challenge is facial, as opposed to as-applied, when the “claim and the relief that would follow . . . reach beyond the particular circumstances” of the plaintiffs.⁵⁷ Even when there is no obvious or overt facial discrimination against out-of-state or other geographically-based commercial interests, where the effect or purpose is to discriminate, the ultimate impact is enough to make the regulation unconstitutional.⁵⁸ Even where a statute is drafted in a fashion that is facially neutral rather than expressly discriminatory, a court applies a strict scrutiny standard where the state law has a discriminatory effect.⁵⁹

States cannot regulate in ways where the practical effect is to control conduct in other states.⁶⁰ Indirect or direct burdens on commerce in other states are not allowed through state law and regulation. States are prohibited from attaching restrictions to any goods that they import from other states: “States and localities may not attach restrictions to . . . imports in order to control commerce in other States.”⁶¹ Where a state statute provided a tax exemption for sales of two types of wine, both produced from products produced in the state, even though

⁵⁵ See *Oregon Waste Systems*, 511 U.S. at 99.

⁵⁶ See *Pike*, 397 U.S. at 142 (explaining the balancing test for when a statute “regulates even-handedly to effectuate a legitimate local public interest, and its effects on interstate commerce are only incidental”). A facially-neutral statute that imposes an incidental “burden on interstate commerce incommensurate with the local benefits secured” would fail the *Pike* balancing test. See *Nat'l Elec. Mfrs. Ass'n v. Sorrell*, 272 F.3d 104, 108 (2d Cir. 2001).

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.

Entergy, 733 F.3d at 431 n.37 (quoting *Am. Booksellers Found. v. Dean*, 342 F.3d 96, 102 (2d Cir. 2003)) (internal quotation marks omitted). A court determined that even under the *Pike* balancing test, the burden caused by a moratorium on interstate transmission of electricity impermissibly exceeded the benefits claimed by the neighboring state. *Levy v. Rowland*, 359 F. Supp. 2d 267, 273 (E.D.N.Y. 2005).

⁵⁷ See *Doe v. Reed*, 130 S. Ct. 2811, 2813 (2010).

⁵⁸ *C&A Carbone, Inc. v. Clarkstown*, 511 U.S. 383, 390–92 (1994); *Hunt*, 432 U.S. at 352–53.

⁵⁹ *C&A Carbone*, 511 U.S. at 391 (stating that an “ordinance is no less discriminatory because in-state or in-town processors are also covered by the prohibition”); *Hunt*, 432 U.S. at 352–53; see also *Fort Gratiot*, 504 U.S. at 361.

⁶⁰ *Healy v. Beer Inst.*, 491 U.S. 324, 336 (1984); *C&A Carbone*, 511 U.S. at 393.

⁶¹ *C&A Carbone*, 511 U.S. at 393.

not needing to mention the state by name, the effect was practically state-specific discrimination, and was found to be discriminatory and a violation of the dormant Commerce Clause.⁶²

A state cannot regulate to favor, or require use of, its own in-state energy resources,⁶³ nor can it, by regulation, harbor energy-related resources originating in the state.⁶⁴ The Oklahoma statute overturned by the Supreme Court in *Wyoming v. Oklahoma* in 1992 involved only a 10% allocation of the market to in-state producers, similar to what occurs in some of the now-challenged in-state preferences in state carbon control and renewable energy statutes. As a result of the Oklahoma statute, the market changed in response from use of almost all out-of-state coal to utilities purchasing “[in-state] Oklahoma coal in amounts ranging from 3.4% to 7.4% of their annual needs, with a necessarily corresponding reduction in purchases of Wyoming coal.”⁶⁵

In-state fuels cannot be required to be used by a state even for the rationale of satisfying federal Clean Air Act requirements.⁶⁶ Income tax credits cannot be given by a state only to in-state producers of fuel additives.⁶⁷ The courts have determined that electrons in interstate commerce cannot be traced.⁶⁸ The Supreme Court consistently has required that the regulation of power by the states must not discriminate regarding the origin of power or the ultimate impact that may discourage its flow in interstate commerce.⁶⁹

[We] consistently have held that the Commerce Clause of the Constitution precludes a state from mandating that its residents be given a preferred right of access, over out-of-state consumers, to natural resources located within its borders or to the products derived therefrom. [A] State is without power to prevent privately owned articles of trade from being shipped and sold in interstate commerce on the

⁶² *Bacchus Imports*, 468 U.S. at 282; see also *C&A Carbone*, 511 U.S. at 393.

⁶³ *Wyoming v. Oklahoma*, 502 U.S. 437, 454–56 (1992); *Alliance for Clean Coal v. Craig*, 840 F. Supp. 554, 560 (N.D. Ill. 1993).

⁶⁴ *New England Power Co. v. New Hampshire*, 455 U.S. 331, 339 (1982).

⁶⁵ *Wyoming*, 502 U.S. at 455; see also *Miller*, 44 F.3d at 596 (even though the Act did not compel use of Illinois coal or forbid use of out-of-state coal, by the statute encouraging use of Illinois coal, it “discriminate[d] against western coal by making it a less viable compliance option for Illinois generating plants”).

⁶⁶ *Miller*, 44 F.3d at 596–97.

⁶⁷ *Limbach*, 486 U.S. at 271, 278–80.

⁶⁸ *New York v. Fed. Energy Regulatory Comm’n*, 535 U.S. at 7 n.5; *Fed. Power Comm’n v. Fla. Power & Light Co.*, 404 U.S. 453, 458 (1972).

⁶⁹ *New England Power Co.*, 455 U.S. at 344 (overturning as a violation of the dormant Commerce Clause an order of the state Public Utilities Commission that restrained within the state—for the financial advantage of in-state ratepayers—renewable power produced within the state).

ground that they are required to satisfy local demands or because they are needed by the people of the State.⁷⁰

Recent federal court opinions construing state electric regulation have scrupulously followed this doctrine.⁷¹

B. California Carbon Regulation Under the Constitutional Microscope

1. Assembly Bill 32

Assembly Bill 32 (“A.B. 32”), the California Global Warming Solutions Act of 2006 (GWSA), requires the California Air Resources Board (CARB) to develop a comprehensive plan to reduce greenhouse gas (GHG) emissions in the state to historic 1990 levels by the year 2020.⁷² This equates to an eventual estimated twenty-nine percent reduction from business-as-usual GHG emission levels.⁷³ The GWSA sets a target of reducing statewide emissions to 427 million metric tons of carbon dioxide equivalent (“MMTCO₂E”) of GHGs by the year 2020, and highlights reduction measures that were adopted in 2011 to meet this goal.⁷⁴ California’s goal was based on projections that it was on pace to emit 507 or more MMTCO₂E by 2020.⁷⁵

CARB is designated in the statute as the state agency charged with monitoring and regulating sources of emission of GHGs that cause global warming to reduce emissions.⁷⁶ Among the regulatory options available to CARB, the agency chose to implement a cap-and-trade system for GHGs, as opposed to a carbon fee or carbon tax to implement the statute. California’s comprehensive cap-and-trade program, prior to lawsuits that delayed it,⁷⁷ was to commence in 2012.

The scientific scope of GHG emissions regulated by California is broad and regulates multiple gases.⁷⁸ California regulates GHG emissions from all aspects

⁷⁰ *Id.* at 338.

⁷¹ Entergy Nuclear Vt. Yankee v. Shumlin, 838 F. Supp. 2d 183, 236 (D. Vt. 2012).

⁷² A.B. 32, 2006 Assemb. (Cal. 2006). A.B. 32, the Global Warming Solutions Act, was signed into law by Gov. Arnold Schwarzenegger on Sept. 27, 2006.

⁷³ CAL. ENERGY COMM’N & CAL. PUB. UTIL. COMM’N, PROPOSED FINAL OPINION SUMMARY ON GREENHOUSE GAS REGULATORY STRATEGIES 1 (2008), available at <http://www.energy.ca.gov/2008publications/CEC-100-2008-004/CEC-100-2008-004.PDF> and <http://perma.cc/N8WB-8S78>.

⁷⁴ *Id.*

⁷⁵ *Id.* Reduction measures for the GWSA are available online. CAL. AIR RES. BD., STATUS OF SCOPING PLAN RECOMMENDED MEASURES 1–8 (undated), available at http://www.arb.ca.gov/cc/scopingplan/status_of_scoping_plan_measures.pdf and <http://perma.cc/RU8-AT4L>.

⁷⁶ Global Warming Solutions Act, CAL. HEALTH & SAFETY CODE § 38550 (West 2014).

⁷⁷ See *infra* notes 357–365 and accompanying text.

⁷⁸ See CAL. CODE REGS. tit. 17, § 95802 (2012). “Emissions” means the release of GHGs into the atmosphere from sources and processes in a facility, including from the combustion of transportation fuels such as natural gas, petroleum products, and natural gas liquids. In the context of offsets, “emissions” means the release of GHGs into the atmosphere from sources and processes within an offset project boundary. *Id.*

of its economy, not just power generators.⁷⁹ The California carbon scheme covers all electric load-serving entities (LSEs), including municipal LSEs.⁸⁰ Electric generators are required to meet a CO₂ emissions level no greater than that achievable by a combined-cycle gas-fired generator.⁸¹ Any new contracts for a term of five years or more for the procurement of baseload generation must comply with a performance standard of emitting no more than 1100 pounds CO₂/Mwh emitted from power generation.⁸² “Baseload” generation is defined as generation that is designed and intended to operate at an annualized capacity factor of sixty percent or greater.⁸³

The program establishes a declining limit on approximately eighty-five percent of the state’s total GHG emissions and declines over time to reach its goal. “Covered sources” must surrender “compliance instruments” to CARB that are equal to their GHG emissions.⁸⁴ Covered entities can acquire allowances or purchase them. There are three compliance periods:⁸⁵

- The first compliance period, including 2013-14.
- The second compliance period, from 2015-2017.
- The third compliance period, from 2018-2020.

Regulatory coverage of industry varies by compliance periods. The program covers about 350 businesses with 600 facilities in the first phase. California obtains 30% of its power from outside the state.⁸⁶ During the first compliance period, covered sectors include stationary combustion for electricity.⁸⁷ The second⁸⁸ and third periods⁸⁹ regulate more industries where a covered emitter in

⁷⁹ *Assembly Bill 32: Global Warming Solutions Act*, CAL. AIR RES. BD., <http://www.arb.ca.gov/cc/ab32/ab32.htm> (last visited Feb. 24, 2014), available at <http://perma.cc/GA3V-SM3K>.

⁸⁰ California is home to one of the five largest municipal power plants by electricity generation. AM. PUB. POWER ASS’N, ANNUAL DIRECTORY & STATISTICAL REPORT 38 (2008–09), available at <http://www.publicpower.org/files/PDFs/100largestbygeneration.pdf> and <http://perma.cc/N9GE-P8VL>.

⁸¹ See CAL. PUB. UTIL. CODE §§ 8340, 8341(a)–(b), (d)(1) (West 2007).

⁸² *Id.*; see Seth Hilton, *The Impact of California’s Global Warming Legislation on the Electric Utility Industry*, 19 ELECTRICITY J. 10, 14 (Nov. 2006). This is a level that conventional coal-fired electric generation will not be able to meet, generating about 1770 lbs. CO₂/Mwh. Hilton, *supra*, at 14.

⁸³ CAL. PUB. UTIL. CODE § 8340(a) (West 2007).

⁸⁴ *Regulatory Guidance Document*, CAL. AIR RES. BD., <http://www.arb.ca.gov/cc/capandtrade/guidance/guidance.htm> (last visited Feb. 25, 2014), available at <http://perma.cc/G2PL-2STU>.

⁸⁵ CAL. CODE REGS. tit. 17, § 95840 (2011).

⁸⁶ MICHAEL N. MILLS, WILL CALIFORNIA’S 33% RENEWABLE PORTFOLIO STANDARD SURVIVE A COMMERCE CLAUSE CHALLENGE BY OTHER STATES? A RECENTLY FILED COLORADO CASE MAY PROVIDE THE ANSWER 6 (2011), available at http://www.stoel.com/files/TheOverride_CaseoftheMonth_may2011.pdf and <http://perma.cc/Q457-2ES6>.

⁸⁷ Also included are petroleum refineries, crude petroleum and natural gas extraction, cement manufacturing, iron and steel, mineral mining and lime manufacturing, pulp and paper manufacturing, food manufacturing, canning operations, and self-generation of electricity. See *Regulatory Guidance Document*, *supra* note 84.

⁸⁸ Distributors of transportation fuels and natural gas are added in the second period. *Id.*

⁸⁹ *Id.*

these sectors releases at least 25,000 metric tons of carbon dioxide equivalent (“MTCO₂e”) annually. The entity must retire compliance credits or instruments equal to 30% of its annual emissions by November 1 of the following year, with the balance of 70% “trued-up” for a multi-year compliance period.⁹⁰ The system creates two types of legal compliance instruments: allowances⁹¹ and offsets.⁹²

One can obtain allowance allocation from CARB, purchase allowances at auction, or purchase them from miscellaneous dealers legally on the secondary market.⁹³ In the first compliance period, approximately ninety percent of allowances are allocated free of charge to regulated entities.⁹⁴ There is an industry sector-specific assistance factor that declines over time for many sectors to determine allocation, and an adjustment factor that declines annually to reflect the overall declining emissions cap.⁹⁵ As years progress, there are downward adjustments to the industry-specific assistance factor and the cap adjustment factor. California thus administers an emissions allowance declining-sum exercise as the state moves through compliance periods.⁹⁶

As a secondary source to procure allowances, there are CARB allowance auctions⁹⁷ and secondary market trades. In the California system, for auctions

⁹⁰ CAL. CODE REGS. tit. 17, § 94812(b) (2012).

⁹¹ See *Regulatory Guidance Document*, *supra* note 84. Allowances issued by CARB deliver the right to emit one ton of carbon.

⁹² CLIMATE ACTION RESERVE, INTRODUCTION TO THE CLIMATE ACTION RESERVE AND CALIFORNIA OFFSETS 26 (undated), available at <http://www.climateactionreserve.org/wp-content/uploads/2009/05/CAR-Presentation.pdf> and <http://perma.cc/C7EQ-HC3Q> (offsets can be valid for up to eight years from the date of issuance).

⁹³ The first auction of allowances occurred November 14, 2012.

⁹⁴ See CAL. AIR RES. BD., APPENDIX J: ALLOWANCE ALLOCATION, at J-15 (undated), available at <http://www.arb.ca.gov/regact/2010/capandtrade10/capv4appj.pdf> and <http://perma.cc/3T3W-PXYF>.

⁹⁵ CAL. CODE REGS. tit. 17, § 95891.

⁹⁶ The assistance factor starts at 100% for all industries, but the amount by which it decreases varies by industry. CAL. CODE REGS. tit. 17, § 95870(e) (2012) (tbl.8-1). For example, sectors such as pharmaceutical and medicine manufacturing and aircraft manufacturing ratchet down to 30% in the third compliance period. *Id.* Other industries (for example, crude petroleum and natural gas extraction, mineral mining, and certain types of manufacturing) deemed particularly susceptible to “leakage” remain at 100% throughout the program. *Id.* In addition, the number of allocated allowances is adjusted downward annually based on an “adjustment factor.” *Id.* § 95891(d) (tbl.9-2). For most industries, the adjustment factor declines from 0.981 in 2013 to 0.851 in 2020. *See id.* Therefore, California supports extraction of fossil fuel resources of all kinds by supporting their extraction of resources with donated allocations of allowances. *See id.* This may seem somewhat counterintuitive. *See id.*

⁹⁷ Covered Entities may opt to trade allocated allowances by consigning allowances to CARB for sale through auction. The first two auctions were held on November 14, 2012, and February 19, 2013. Auctions are open to Covered Entities, as well as a wide variety of other stakeholders, including opt-in Covered Entities (entities in a covered sector but which emit less than 25,000 MTCO₂e) and so-called “voluntary associated entities,” such as brokers and derivatives clearing organizations. There were almost 13 million 2013 vintage allowances, which cleared at a price of \$13.62, and 9.6 million 2016 vintage allowances, about half of which sold at \$10.71 each. CAL. AIR RES. BD., CALIFORNIA AIR RESOURCES BOARD QUARTERLY AUCTION 2, at 1–10 (undated), available at http://www.arb.ca.gov/cc/capandtrade/auction/february_2013/auction2_feb2013_summary_results_report.pdf and

there are both floor prices⁹⁸ and mechanisms to restrain too high allowance prices.⁹⁹ Utilities are required to auction their allocated allowances, obtain revenues, and then rebate them to provide financial rate relief to their customers.¹⁰⁰

The California Low Carbon Fuel Standard (LCFS) rule, part of CARB implementation of A.B. 32, became a particular focus of constitutional challenge.¹⁰¹ The LCFS is a “set of regulations to govern the marketing of gasoline-ethanol blends sold in California.”¹⁰² LCFS is issued to reduce the carbon content of transportation fuels sold in California by 10% by the year 2020 from the year 2010 baseline.¹⁰³ The goal of LCFS is to reduce carbon intensity (CI) of fuels by 10% by 2020 through regulations requiring providers of gasoline and diesel fuels to calculate the CI of each fuel component, report such calculations to CARB, and make reductions to meet the CI standards.¹⁰⁴

CARB’s LCFS rule includes the lifecycle GHG emissions of fuel, including emissions produced during production and transportation of fuels to California. CI is not limited to how much carbon the fuel contains. CI also includes the amount of carbon released in the full fuel cycle. The LCFS refers to this inclusive concept as the “lifecycle greenhouse gas emissions,” which is defined as:

aggregate quantity of greenhouse gas emissions (including direct emissions and significant indirect emissions such as significant emis-

<http://perma.cc/8268-TURJ>. The price of allowances is managed by a limited price-collar mechanism that includes an escalating auction reserve price (“floor”) and a price containment procedure.

⁹⁸ *Id.*; CAL. AIR RES. BD., ADDITIONAL AUCTION 1 AND 2 SUMMARY STATISTICS 1–2 (undated), available at <http://www.arb.ca.gov/cc/capandtrade/auction/additionalauction1and2summarystatistics.pdf> and <http://perma.cc/XV6A-ZVD5>. To control the floor price, CARB sets a reserve price for each auction below which no allowances may be sold. *Id.* This reserve price was \$10 in the first auction in 2012, then \$10.71 in 2013, and will increase annually by five percent plus the rate of inflation. *Id.*

⁹⁹ See CAL. CODE REGS. tit. 17, § 95870(a) (2012). To contain prices on the upper end, CARB is setting aside a pool of allowances that will be offered if prices exceed certain thresholds. See *id.* Thus, of the total allowances available, CARB will reserve 1% of the allowances from budget years 2013–2014, 4% of the allowances from 2015–2017, and 7% of the allowances from 2018–2020 for purposes of relieving rising prices should they occur. *Id.* This reserve will total 121.8 million MTCO_{2e} over the length of the program. The price of reserve allowances will increase annually at 5% plus the cost of inflation. *Id.* § 95913(e)(3)–(4). Allowances from future budget years are not placed in the reserve until the relevant year begins, but all allowances currently in the reserve are available at each reserve sale. *Id.* § 95913(e)(2). A percentage of the reserve allowances are made available as allowance prices reach certain thresholds. *Id.* § 95913(e)(3). For example, in 2013 the containment reserve will offer one-third of the allowances in the reserve if allowance prices reach \$40, with another third to be released if the cost increases to \$45, and another third at \$50. *Id.*

¹⁰⁰ *Id.* § 95892 (d)(3). “Auction proceeds and allowance value obtained by an electrical distribution utility shall be used exclusively for the benefit of retail ratepayers of each electrical distribution utility, consistent with the goals of AB 32, and may not be used for the benefit of entities or persons other than such ratepayers.” *Id.*

¹⁰¹ See *infra* notes 112–149 and accompanying text.

¹⁰² *Rocky Mountain Farmers Union v. Goldstene*, 719 F. Supp. 2d 1170, 1177 (E.D. Cal. 2010).

¹⁰³ See generally CAL. AIR RES. BD., FINAL REGULATION ORDER (undated), available at <http://www.arb.ca.gov/fuels/lcfs/CleanFinalRegOrder112612.pdf> and <http://perma.cc/EWZ5-RQ5Q>.

¹⁰⁴ *Id.*

sions from land use changes), as determined by the Executive Officer, related to the full fuel lifecycle, including all stages of fuel and feedstock production and distribution, from feedstock generation or extraction through the distribution and delivery and use of the finished fuel to the ultimate consumer, where the mass values for all greenhouse gases are adjusted to account for their relative global warming potential.¹⁰⁵

To accomplish this CI reduction, the LCFS assigns CI scores to all covered fuels.¹⁰⁶ The lower the CARB-calculated carbon emission from the GHG emissions lifecycle, the lower the CI score. The LCFS includes the CARB-assigned default CI scores for gasoline and gasoline substitutes in a table titled “Carbon Intensity Lookup Table for Gasoline and Fuel that Substitute for Gasoline” found in Table 6 of LCFS § 85486(b) (“Table 6”).¹⁰⁷ To lower CI scores, providers may blend low-carbon ethanol into gasoline.¹⁰⁸ But even if a provider blends low-carbon ethanol into its fuel, the provider’s CI score also is affected by the other factors of the GHG emissions lifecycle, in particular the location of the commerce. For example, in Table 6 corn-derived ethanol produced in the Midwest is assigned a higher CI score than chemically similar corn-derived ethanol produced anywhere in California, regardless of its transportation within California.¹⁰⁹

Thus, a chemically identical ethanol imported from the Midwest is deemed to have a higher CI than ethanol produced anywhere in California, making the Midwest product more expensive for fuel providers seeking to meet the California fuel standard requirements. The CI calculation does not account for *intrastate* shipping within the state, notwithstanding that California is the third largest U.S. state geographically. California’s 770 miles in length is greater than the distance from ten other states to California. Thus, all fuel, wherever produced in California and wherever consumed, does not incur a higher carbon efficiency factor for purposes of this regulation. Oregon adopted its own Low Carbon Fuel Standard for Transportation fuel,¹¹⁰ similar to the LCFS in California, and supported Cali-

¹⁰⁵ CAL. CODE REGS. tit. 17, § 95481 (a)(38) (2012).

¹⁰⁶ *Rocky Mountain Farmers Union*, 719 F. Supp. 2d at 1177.

¹⁰⁷ *Rocky Mountain Farmers Union v. Goldstene*, 843 F. Supp. 2d 1071, 1082 (E.D. Cal. 2011). The LCFS allows for providers to apply for a customized total CI value rather than be subject to the assigned default score. Midwest providers have applied for a customized CI value. *Id.*

¹⁰⁸ *Rocky Mountain Farmers Union*, 719 F. Supp. 2d at 1177. Providers may also buy credits generated from another fuel provider that has credits in order to meet LFCS standards. *Id.*

¹⁰⁹ *Rocky Mountain Farmers Union*, 843 F. Supp. 2d at 1081.

¹¹⁰ GOVERNOR’S CLIMATE CHANGE INTEGRATION GROUP, FINAL REPORT TO THE GOVERNOR 44 (2008), available at <http://www.oregon.gov/ENERGY/GBLWRM/docs/CCIGReport08Web.pdf> and <http://perma.cc/42UV-9Y69>.

ifornia by filing an amicus brief in *Rocky Mountain Farmers Union v. Goldstene*.¹¹¹

2. The Successful Dormant Commerce Clause Challenge in California in the Federal Trial Court

The LCFS rule was challenged in two court cases where plaintiffs alleged that the rule violates federal and state law. One case was under California state law,¹¹² and the other under federal constitutional law. In *Rocky Mountain*, the plaintiffs challenged the LCFS rule as violating the dormant Commerce Clause of the Constitution.¹¹³ The plaintiffs alleged that CARB discriminated against interstate commerce and fuels produced out of state.¹¹⁴

Specifically, the LCFS regulation incorporates into its calculations the differences between indirectly associated carbon emissions from transportation, the farming methods used to raise the agricultural produce, and the fuel used to produce the electricity in the state where the ethanol is produced.¹¹⁵ To meet such standards, out-of-court competitors somehow would need to spend more on the production and transportation of the ethanol to California to reduce their CI scores equivalent to those of California's in-state producers.¹¹⁶

The plaintiffs in *Rocky Mountain* argued that their ethanol products are chemically identical to comparable ethanol products manufactured in California, yet CARB assigned the Midwestern low carbon fuel a higher CI value, which made it ultimately cost-disadvantaged and less desirable to California consumers.¹¹⁷ The plaintiffs contended that California fuel consumers seeking to meet emissions obligations will seek in-state fuels with lower CI values at a premium, which would inflate the cost of in-state fuels at the expense of out-of-state producers.¹¹⁸ CARB's defense focused on illustrating that the market for Midwestern low-carbon fuel was robust, rather than disproving the California regulation's differential burdens based on the geographic origin of the commerce.¹¹⁹

¹¹¹ See *infra* notes 112–138 and accompanying text.

¹¹² See *infra* notes 333–342 and accompanying text.

¹¹³ *Rocky Mountain Farmers Union*, 843 F. Supp. 2d at 1081.

¹¹⁴ *Id.*

¹¹⁵ *Id.* at 1087–88.

¹¹⁶ See *id.*

¹¹⁷ *Id.* at 1086–87. The plaintiffs argued that Midwestern ethanol fuels were assigned ten percent higher CI values than chemically identical California counterparts. *Id.*

¹¹⁸ See *id.* at 1087.

¹¹⁹ A memorandum from the state included a subsection entitled “Investment Activity in the Midwest Ethanol Industry is Robust.” Defendants and Defendant-Intervenors’ Supplemental Memorandum of Points and Authorities in Opposition to RMFU’s Motion for Summary Judgment at 8, *Rocky Mountain Farmers Union*, 843 F. Supp. 2d 1071 (Nos. 1:09-CV-02234-LJO-DLB, 1:10-CV00163-LJO-DLB), 2011 WL 1233984. The science used by CARB for the LCFS was found to rely too heavily on factors of origin to pass the court’s facial discrimination test. *Rocky Mountain Farmers Union*, 843 F. Supp. 2d at 1087. Although the same scientific methods are applied to all fuel sources in

State regulation of biofuels was before the Supreme Court twenty-five years earlier. In *New Energy Co. of Indiana v. Limbach*, the Supreme Court struck as unconstitutional a state law that gave favorable tax treatment to ethanol produced in-state, and held that health impacts were only incidental benefits, while the Commerce Clause violation was not permitted.¹²⁰

In December 2011, the U.S. District Court for the Eastern District of California agreed with the plaintiffs' argument, invalidated certain parts of the LCFS rule, and enjoined the rule's enforcement because it "discriminates against out-of-state corn ethanol and impermissibly regulates extraterritorially in violation of the dormant Commerce Clause and its jurisprudence."¹²¹ Regulating out-of-state conduct is not the only test applied under the dormant Commerce Clause. The broader definition of discrimination "simply means differential treatment of in-state and out of state economic interests that benefits the former and burdens the latter."¹²² The district court held that the LCFS and Table 6 differentiate based on place of origin of the commerce and concluded that the LCFS discriminates on its face against out-of-state corn-derived ethanol.¹²³

The court found that the LCFS serves a legitimate local purpose,¹²⁴ but the defendants had not met their burden to show that there was not a nondiscriminatory means to adequately serve their objective.¹²⁵ The court found that CARB had several other means to address the state's purpose without discriminating

Table 6, the court found that "the variables within the formula favor California ethanol producers by assigning lower CI scores based on location" and thus favor California over out-of-state producers. *Id.* at 1087–88. Some international fuels using different organic sources actually had lower CI scores than U.S. fuels using other feedstocks. *Id.* at 1089–90. Sugar cane-based ethanol, imported from South America, was awarded a lower CI value than in-state California corn-derived ethanol because of the fuel's chemical composition, production, and refinement, though this does not affect interstate commerce burdens. *Id.* Some international fuels using different organic sources actually had lower CI scores than U.S. fuels using other feedstocks. *Id.*

¹²⁰ *Limbach*, 486 U.S. at 271, 279–80.

¹²¹ *Rocky Mountain Farmers Union*, 843 F. Supp. 2d at 1078–79. CARB attributed the difference in CI values to multiple scientific factors in addition to geographic location factors (emissions related to shipping or transportation of fuel). The court relied upon a "table" of CI values generated by CARB.

¹²² *Oregon Waste Systems*, 511 U.S. at 99. Under the *Pike* test, courts will uphold a non-facially discriminatory statute "unless the burden imposed on . . . commerce is clearly excessive in relation to the putative local benefits." 397 U.S. at 142.

¹²³ *Rocky Mountain Farmers Union*, 843 F. Supp. 2d at 1087.

¹²⁴ *Id.* at 1093. The Rocky Mountain plaintiffs argued that the LCFS serves no local purpose and that California is attempting to solve the national and international problem of climate change. The defendant state cited *Massachusetts v. Environmental Protection Agency*, where the Supreme Court affirmed that "a state has a local and legitimate interest in reducing global warming." *Id.* (citing 549 U.S. 497, 498 (2007)).

¹²⁵ *Id.* at 1094. The court did recognize that lifecycle analysis is a widely accepted national and international approach to reduce carbon emissions, but this does not mean there is not a nondiscriminatory means to achieve this goal on a local level. *Id.* The Rocky Mountain plaintiffs offered many nondiscriminatory alternatives, including a tax on fossil fuels or solely regulating tailpipe emissions. *Id.*

against out-of-state fuel products.¹²⁶ The court incorporated the requirement from *Dean Milk Co. v. City of Madison* to choose the least discriminatory or intrusive on interstate commerce means to regulate, when balancing local purpose against a statute that either discriminates on its face or impermissibly controls conduct outside its borders.¹²⁷ As the Supreme Court held earlier: “While a State may seek lower prices for its consumers, it may not insist that producers or consumers in other States surrender whatever competitive advantages they may possess.”¹²⁸

The district court held that the LCFS “may not impose a barrier to interstate commerce based on the distance that the product must travel in interstate commerce.”¹²⁹ The court reached this conclusion by relying on *Dean Milk* and *West Lynn Creamery v. Healy*.¹³⁰ Although the LCFS had administrative procedures that allowed for out-of-state producers to amend their ranking on Table 6, the court saw these administrative procedures as amplifying the discriminatory impact of the regulations.¹³¹ Even though the LCFS did benefit some other out-of-state producers or burden some in-state producers, the court found that this does not absolve the LCFS from a finding that it discriminates on its face:¹³² “[L]egislation favoring in-state economic interests is facially invalid under the dormant Commerce Clause, even when such legislation also burdens some in-state interests or includes some out-of-state interests in the favored classification.”¹³³

3. Regulation Beyond State Borders as a Commerce Clause Violation

The *Rocky Mountain* plaintiffs alternatively asserted that strict scrutiny still applies because under the Commerce Clause, one state’s laws cannot “control

¹²⁶ See, e.g., *Dean Milk*, 340 U.S. at 349.

¹²⁷ *Rocky Mountain Farmers Union*, 843 F. Supp. 2d at 1093–94.

¹²⁸ *Brown-Forman Distillers Corp. v. N.Y. State Liquor Auth.*, 476 U.S. 573, 580 (1986); see also *Baldwin v. G.A.F. Seelig, Inc.*, 294 U.S. 511, 521 (1935) (holding that one state “has no power to project its legislation into [another state] by regulating the price to be paid in that state for [products] acquired there”).

¹²⁹ *Rocky Mountain Farmers Union*, 843 F. Supp. 2d at 1089.

¹³⁰ *Id.* *Dean Milk* struck a local ordinance that required milk sold in the city to be pasteurized within five miles of the city. 340 U.S. at 354. *West Lynn Creamery* held that a differential burden placed at any point in the stream of commerce on out-of-state producers is constitutionally invalid. 512 U.S. at 202.

¹³¹ *Rocky Mountain Farmers Union*, 843 F. Supp. 2d at 1090. CARB has the sole discretion to amend Table 6 and the CI rankings. CARB can further the discrimination by amending an in-state producer’s ranking while denying an out-of-state producer’s similar request without reason. *Id.*

¹³² *Id.* at 1089. For example, Brazilian sugarcane ethanol has a lower intensity score than some Californian corn ethanol, and in-state producers of corn ethanol are penalized when importing corn from out-of-state. *Id.*

¹³³ *Id.* (quoting *Daghlian v. DeVry Univ.*, 582 F. Supp. 2d 1231, 1243 (C.D. Cal. 2007)) (internal quotation marks omitted).

conduct beyond the boundary of the state.”¹³⁴ The defendants countered that the only effects the LCFS may have on out-of-state producers are indirect and therefore not directly regulating outside California’s boundaries.¹³⁵ The court found for the plaintiffs and identified the issue as “whether the practical effect of the regulation is to control conduct beyond the boundaries of the State.”¹³⁶

The district court pointed out that although the products ultimately may be sold in California, CARB and the LCFS are prevented by the Commerce Clause from regulating those portions of the lifecycle of these products outside of the state: Under the Commerce Clause, states cannot place restrictions on imports “in order to control commerce in other states.”¹³⁷ The LCFS requires all commercial providers, whether within the state or outside, to detail the entire geographic pathway of the fuel during its lifetime so that CARB may assign it a CI score. The trial court held that “this type of regulation ‘forc[es] a merchant to seek regulatory approval in one State before undertaking a transaction in another,’ causing the LCFS to ‘directly regulate[] interstate commerce.’”¹³⁸

4. The Ninth Circuit Decision and Dissent

In 2013, the Ninth Circuit reversed the district court on the unconstitutionality of the California LCFS.¹³⁹ The Ninth Circuit overturned the district court as to the standard of review to apply to the regulation, whether the regulation was facially discriminatory and violated the dormant Commerce Clause, and whether California’s action was impermissibly extraterritorial.¹⁴⁰ The majority did not apply strict scrutiny and instructed that the *Pike* balancing test be applied on remand.¹⁴¹

In contrast to precedent, the *Rocky Mountain* majority decision states that it is not unconstitutional for a state to impose a regulation whose effect is only for out-of-state commerce to purchase additional credits and pay additional fees: “California may regulate with reference to local harms, structuring its internal markets to set incentives for firms to produce less harmful products for sale in California.”¹⁴² Because goods are transported using fossil fuels, by definition a

¹³⁴ *Id.* at 1090. The *Rocky Mountain* plaintiffs cited examples such as the LCFS regulating land use in the Midwest and deforestation in South America rather than solely regulating ethanol carbon emissions within the borders of California. *Id.* at 1091.

¹³⁵ *Id.*

¹³⁶ *Id.*

¹³⁷ *Id.* at 1092.

¹³⁸ *Id.* If a provider changes its part of the fuel’s lifecycle, such as changing its transportation mechanism to California, this change must be submitted to CARB. *Id.*

¹³⁹ *Rocky Mountain Farmers Union v. Corey*, 730 F.3d 1070, 1107 (9th Cir. 2013), *petition for cert. filed*, 2014 WL 1154199 (U.S. Mar. 20, 2014) (No. 13-1148).

¹⁴⁰ *Id.*

¹⁴¹ *Id.*

¹⁴² *Id.* at 1104.

state can regulate to disfavor such goods originating and travelling from out-of-state. This discriminates by design on the distance that goods travel in interstate commerce, which is geographic discrimination based on the point of origin of the commerce.

The Ninth Circuit's decision reconfigures the past century of Supreme Court interpretation of the dormant Commerce Clause.¹⁴³ According to the Ninth Circuit, a state environmental purpose to reduce GHGs emitted in the state is sufficient to impose regulation and costs on interstate commerce entering the state.¹⁴⁴ The Supreme Court has not allowed environmental purposes to justify discrimination that otherwise infringes on interstate commerce.¹⁴⁵ The Ninth Circuit determined that carbon emission control and delivering commerce into the state is an exception, when based on science.¹⁴⁶ The Ninth Circuit's holding changes the entire calculus for state regulation of carbon-emitting interstate commerce. However:

- There was a dissenting opinion. Of four federal judges who have ruled on this case at the trial and appellate levels, two found California's regulation to be unconstitutional.
- The primary CO₂-creating activities are vehicle fuels, electricity production, and agriculture, to which similar state GHG limitations could also be applied to favor in-state agricultural products, electricity, gasoline and a tax on plane travel from or to the state.

First, the dissent in the Ninth Circuit found facial discrimination.¹⁴⁷ Any geographic discrimination by a state, whether along state or other geographic lines, is subject to strict scrutiny: "In making [the] geographic distinction, the

¹⁴³ See *West Lynn Creamery*, 512 U.S. at 186 (invalidating equal fee imposed on in-state and out-of-state commerce, the distribution of which favored in-state commerce); *C&A Carbone*, 511 U.S. at 391 ("The ordinance is no less discriminatory because in-state or in-town processors are also covered by the prohibition."); *Oregon Waste Systems*, 511 U.S. at 93 (invalidating Oregon's increased per-ton surcharge on waste generated in other states); *Fort Gratiot*, 504 U.S. at 355–56 (invalidating the provisions of Michigan's Solid Waste Management Act that restricted a landfill's ability to accept out-of-state waste); *Chem. Waste Mgmt.*, 504 U.S. at 334 (invalidating Alabama's imposition of an additional disposal fee on hazardous waste generated outside the state but disposed of within Alabama); *City of Philadelphia*, 437 U.S. at 627 (state cannot discriminate against articles of commerce originating in other states unless there is a "reason, apart from their *origin*, to treat them differently") (emphasis added); *Hunt*, 432 U.S. at 352–54; *Dean Milk*, 340 U.S. at 349 (requirement to choose the least discriminatory or intrusive on interstate commerce means to regulate, when it balances local purpose against a statute that either discriminates on its face or impermissibly controls conduct outside state borders).

¹⁴⁴ *Rocky Mountain Farmers Union*, 730 F.3d at 1106–08.

¹⁴⁵ *West Lynn Creamery*, 512 U.S. at 202; *C&A Carbone*, 511 U.S. at 392–93.

¹⁴⁶ *Rocky Mountain Farmers Union*, 730 F.3d at 1089.

¹⁴⁷ *Id.* at 1107–08 (Murguia, J., concurring in part and dissenting in part) (quoting *Chem. Waste Mgmt.*, 504 U.S. at 342) (an "additional fee [on imported commerce] facially discriminates").

[regulation] patently discriminates against interstate commerce.”¹⁴⁸ The burden is on California to demonstrate that no less-burdensome regulatory incentives were available to control GHGs. The dissent noted that at oral argument, California admitted that there were less-burdensome alternatives on interstate commerce than “to use lifecycle analysis to reduce GHG emissions.”¹⁴⁹

Second, even where a state statute is drafted in a manner that is facially neutral rather than expressly discriminatory, courts will apply strict scrutiny if the law has a discriminatory effect.¹⁵⁰ Justice Scalia, concurring with the majority in *West Lynn Creamery*, noted that “subsidies for in-state industry . . . would clearly be invalid under any formulation of the Court’s guiding principle” for dormant Commerce Clause cases.¹⁵¹ Fees imposed on out-of-state commerce have an identical effect to subsidies for in-state industry. Strict scrutiny almost always results in the state action being found unconstitutional.¹⁵² According to the Supreme Court, the scope of commerce for purposes of a dormant Commerce Clause analysis is broadly defined,¹⁵³ which expressly includes the transmission of electric energy in interstate commerce:¹⁵⁴

[I]t is difficult to conceive of a more basic element of interstate commerce than electric energy, a product used in virtually every home and every commercial or manufacturing facility. No State relies solely on its own resources in this respect.¹⁵⁵

The Ninth Circuit’s decision in *Rocky Mountain* regarding regulation of carbon and sustainable energy creates an intriguing split with two other circuit courts also rendering decisions in mid-2013 adjudicating state versus federal constitutional authority to regulate aspects of sustainable energy:

¹⁴⁸ *Id.* at 1108 (quoting *Oregon Waste Systems*, 511 U.S. at 100).

¹⁴⁹ *Id.* at 1109 (quoting hearing transcript).

¹⁵⁰ *C&A Carbone*, 511 U.S. at 391 (“[An] ordinance is no less discriminatory because in-state or in-town processors are also covered by the prohibition.”); *Hunt*, 432 U.S. at 352–53; *see also Fort Gratiot*, 504 U.S. at 361.

¹⁵¹ *West Lynn Creamery*, 512 U.S. at 208 (Scalia, J., concurring).

¹⁵² *See supra* note 134 and accompanying text.

¹⁵³ *See Oregon Waste Systems*, 511 U.S. at 108 (invalidating Oregon’s increased per-ton surcharge on waste generated in other states); *Chem. Waste Mgmt.*, 504 U.S. at 336–37 (invalidating Alabama’s imposition of an additional disposal fee on hazardous waste generated outside the state but disposed of within Alabama); *City of Philadelphia*, 437 U.S. at 617, 621–22, 627 (state cannot discriminate against articles of commerce originating in other states unless there is a “reason, apart from their origin, to treat them differently”) (emphasis added); *Fort Gratiot*, 504 U.S. at 355–56 (invalidating the provisions of Michigan’s Solid Waste Management Act that restricted a landfill’s ability to accept out-of-state waste).

¹⁵⁴ *See New York v. Fed. Energy Regulatory Comm’n*, 535 U.S. at 16 (transmissions on the inter-connected national grids constitute transmissions in interstate commerce).

¹⁵⁵ *Fed. Energy Regulatory Comm’n v. Mississippi*, 456 U.S. at 757.

- In 2013, the Seventh Circuit unanimously declared that it is a violation of the dormant Commerce Clause for a state (Michigan) to treat renewable power originating out-of-state differently than renewable power originating in-state.¹⁵⁶
- In 2013, the Second Circuit unanimously held that it is unconstitutional for a state (Vermont) to regulate low-carbon power when the federal government has authority over the same aspects of facilities that the state attempts to regulate, which affirmed, in part, a decision of the federal trial court.¹⁵⁷

These three contemporaneous 2013 circuit court decisions all hinge on the restrictions imposed by the constitution's dormant Commerce Clause and Supremacy Clause on state regulation of energy. Four states—Alabama, Texas, Nebraska, and North Dakota—indicated that they were planning subsequently to bring suit against California under the argument that California's separate Renewable Portfolio Standard (RPS) program interfered with interstate commerce.¹⁵⁸ There are additional elements of the California A.B. 32 statute that have not yet been challenged, but constitutional challenges might be forthcoming:

- Whether renewable energy programs that satisfy California Renewable Energy Credits (RECs) requirements should also satisfy GHG mandates.¹⁵⁹
- Whether California's Renewable Portfolio Requirement¹⁶⁰ discriminates against out-of-state power by requiring more classes of credits that can only be economically created through connection to in-state utilities.¹⁶¹

¹⁵⁶ *Ill. Commerce Comm'n v. Fed. Energy Regulatory Comm'n*, 721 F.3d 764, 776 (7th Cir. 2013). Judge Richard Posner, in a unanimous decision for the Seventh Circuit, relied on a 2013 law review article on constitutional energy jurisdiction issues authored by Professor Ferrey. *Id.* The court declared that state regulation limiting state renewable portfolio standards to in-state generation was a violation of the Commerce Clause: “[I]t trips over an insurmountable constitutional objection. Michigan cannot, without violating the commerce clause of Article I of the Constitution, discriminate against out-of-state renewable energy.” *Id.*

¹⁵⁷ *Entergy*, 733 F.3d at 393.

¹⁵⁸ See *MILLS*, *supra* note 86, at 6. An RPS program requires utilities to purchase renewable energy credits, state-created credits associated with generation of enumerated renewable power by eligible power generation units.

¹⁵⁹ *Dispute Emerges over GHG Benefits of Renewable Energy Credits*, ENERGY WASH. WEEK (June 25, 2008), <http://insideepa.com/pdf/Energy-Washington-Week/Energy-Washington-Week-06/25/2008/dispute-emerges-over-ghg-benefits-of-renewable-energy-credits/menu-id-93.pdf>, available at <http://perma.cc/LK3E-N248>.

¹⁶⁰ S.B. 2 (1X), 2011-2012 Sen. 1st Extraordinary Sess. (Cal. 2011); Decision Implementing Portfolio Content Categories for the Renewables Portfolio Standard Program, California Public Utilities Commission 11-12-052, at 14 (Dec. 15, 2011). Each load-serving entity must obtain a minimum of 75% by 2017 (increased from an original proposed requirement of 60%) of its overall 33% obligations (in 2020) from Category 1 RECs and can procure no more than 10% from Category 3 RECs. Distributed generation must connect to a distribution system serving end-users within a California Balancing Authority area. It is difficult to find in-state customers to schedule power sales and transmission capacity can be difficult to obtain. There are not that many dynamic transfers, and they are complex.

- CARB's prohibition on in-state power producers from "resource shuffling," evidenced by importing power produced out-of-state to "swap" high carbon emissions energy sources for lower carbon emissions energy for the purpose of satisfying California's GHG cap obligations.¹⁶²

C. Dormant Commerce Clause Challenges to Other State Carbon and Sustainable Energy Regulation

There has been recent litigation in New Jersey, Colorado, Vermont, Massachusetts, Missouri, the Midwest and elsewhere contesting alleged dormant Commerce Clause violations¹⁶³ related to state energy/electric power regulation:

- Suit on renewable power RPS RECs in Colorado.¹⁶⁴
- Suit on Missouri RPS RECs limited only to in-state projects.¹⁶⁵
- Judgment of the Seventh Circuit that states violate the dormant Commerce Clause if they discriminate against out-of-state power in awarding renewable energy credits.¹⁶⁶
- Vermont's attempt to discriminate against sale of cheaper interstate power that could be sold outside of its origin in Vermont.¹⁶⁷

Geoffrey Craig, *Debate Renewed over California Treatment of Out-of-State Generators for RPS Power*, ELECTRIC UTIL. WK., Feb. 20, 2012, at 18.

¹⁶¹ Craig, *supra* note 160, at 18.

¹⁶² *Id.*

¹⁶³ For an article concluding that the Maryland RPS program, and others like it that facially discriminate against interstate commerce, likely violate the dormant Commerce Clause, see Anne Havemann, Comment, *Surviving the Commerce Clause: How Maryland Can Square Its Renewable Energy Laws with the Federal Constitution*, 71 MD. L. REV. 848, 885 (2012).

¹⁶⁴ *Am. Tradition Inst. v. Colorado*, 876 F. Supp. 2d 1222, 1226 (D. Colo. 2012). American Tradition Institute's ("ATI") Environmental Law Center challenged the constitutionality of Colorado's renewable energy standard based on evidence that the state law violates the Commerce Clause. *See id.* ATI's complaint argued that because the state mandate provides economic benefits to Colorado's renewable electricity generators that are not available to out-of-state power generators, the program violates the dormant Commerce Clause. *Id.* at 1228.

¹⁶⁵ *Mo. Energy Dev. Ass'n v. Public Service Comm'n of the State of Mo.*, No. 10AC-CC00512 (Dist. Ct. Cole Cnty. June 29, 2011) (decision of Judge Daniel Green, holding that the RPS program "takes the cash property of utilities (and their ratepayers) and transfers it to certain customers" without due process). The court ruled that the Missouri RPS program was illegal because it required RECs to be generated by in-state projects or projects that delivered the power to in-state customers. The decision was reversed on appeal and was subject to further appeal. *Id.*

¹⁶⁶ *Ill. Commerce Comm'n*, 721 F.3d at 776.

¹⁶⁷ *Entergy*, 838 F. Supp. 2d at 236. The trial court found the state's actions unconstitutional and issued an injunction prohibiting the defendants "from conditioning Vermont Yankee's continued operation on the existence of a below-market PPA with Vermont utilities." *Entergy*, 733 F.3d at 407. The Second Circuit did not disagree with the substantive decision on the dormant Commerce Clause but procedurally held that this issue was not yet ripe for review until plaintiffs actually entered into such a forced power purchase agreement with the state. *Id.* at 430. The court required "a factual record concerning incidental effects of such an agreement on interstate commerce" and stated that "[t]his case therefore does not present a concrete dispute affecting cognizable current concerns of the parties within the meaning of Article III, and is therefore not ripe within the constitutional sense." *Id.* at 430–31

- Challenge by regional generators of power in the mid-Atlantic states against New Jersey's in-state energy facility location preferences for new power generation, resulting in change in Federal Energy Regulatory Commission (FERC)-approved regional PJM independent system operator procedures. The trial court did not apply "strict scrutiny" and did not find a commerce clause violation, and appeal is pending on the constitutional challenges in federal court.¹⁶⁸
- Successful suit alleging that Massachusetts renewable energy incentives violated the Constitution.¹⁶⁹

(internal quotation marks omitted). Although the Second Circuit held that the dispute was not yet ripe, the court noted that the Vermont statute could violate the dormant Commerce Clause: "An agreement requiring Vermont Yankee to allot a certain percentage of its output to satisfy local demand would also likely violate the dormant Commerce Clause." *Id.* at 431.

¹⁶⁸ PPL EnergyPlus, LLC v. Hanna, CIV.A. 11-745, 2013 WL 5603896, at *1 (D.N.J. Oct. 11, 2013); Order Accepting Proposed Tariff Revisions, Subject to Conditions, and Addressing Related Complaint, PJM Interconnection, L.L.C., 135 FERC 61,022 (Apr. 12, 2011) (Nos. ER11-2875-000 and EL11-20-000), 2011 WL 1383624. In 2011, New Jersey enacted legislation to encourage the acquisition by utilities of the output of 2,000 Mw of new in-state power projects. A.B. 3442, 2011 Assemb. (N.J. 2011). Power generators in the North Atlantic region filed a complaint at FERC alleging discrimination against New Jersey's statute ordering utilities to sign long-term contracts only with in-state generation facilities that bid to receive regional multi-state PJM ISO capacity payments. Mary Powers, *PJM Generators File Complaint with FERC Seeking Relief from NJ In-State Generation Law*, ELECTRIC UTIL. WK., Feb. 7, 2011, at 11, 13. In response, in 2011 FERC amended the PJM ISO rules to prevent New Jersey state law from attempting to encourage construction of in-state power generation by, in part, causing them to bid power into the PJM system at suppressed prices to win capacity auctions. Mary Powers, *Rebuffed by FERC Ruling, New Jersey BPU Plans to Look Again at How to Attract New Generation*, ELECTRIC UTIL. WK., May 23, 2011, at 4, 6, available at <http://www.electricdrive.org/sites/testing/index.php?ht=a/GetDocumentAction/i/22845> and <http://perma.cc/CA9C-N25W> (on April 12, 2011, FERC eliminated a PJM rule that allowed a prior exemption for projects to make minimum offer prices when tempered by state energy programs). Next, a lawsuit regarding New Jersey energy regulation by several existing independent power generators asserted that the New Jersey state law is in violation of the dormant Commerce Clause because it is predicated on in-state "favoritism," and that the New Jersey law is a "blatant and explicit effort to promote the construction of new generation facilities in New Jersey." Hannah Northey, *Utilities Challenge N.J. Law While Preparing to Reap Its Benefits*, GREENWIRE (Mar. 2, 2011), <http://www.eenews.net/greenwire/stories/1059945886>, available at <http://perma.cc/WY38-Z5AR>.

¹⁶⁹ TransCanada, an independent power company with a wind project in Maine, challenged the constitutionality of Massachusetts's RPS program, given that under previous Massachusetts law, out-of-state generators were allowed to bid to supply power. Complaint at 1, *TransCanada Power Marketing Ltd. v. Bowles* (D. Mass. Jun. 1, 2010) (No. 4-10-cv-40070-FDS), available at <http://www.ohiostrategies.com/documents/transcanada.pdf> and <http://perma.cc/8289-T6QQ>. TransCanada alleged dormant Commerce Clause violations in Massachusetts's requirement that state utilities enter long-term contracts with in-state new renewable energy projects, and that solar renewable energy credits be earned only by in-state solar photovoltaic power projects, regardless of where the power generation creating the RECs was sold. Erin Ailworth, *State Looking to Settle Suit over Law on Clean Energy*, BOS. GLOBE (May 27, 2010), http://www.boston.com/business/articles/2010/05/27/lawsuit_hits_mass_law_promoting_local_energy_providers/, available at <http://perma.cc/8ACD-9A27>. Massachusetts immediately settled rather than risk having its programs exposed to constitutional scrutiny by the federal courts. Massachusetts re-opened the request for bidding and allowed out-of-state as well as in-state competitors to bid and gave TransCanada renewable credits for contracts that

These challenges on dormant Commerce Clause claims were either quickly settled by the government in favor or the claimant,¹⁷⁰ were unsuccessfully defended by the state,¹⁷¹ have split-outcome decisions at the trial and appellate levels,¹⁷² were sidetracked by procedural issues that do not reach the merits of the constitutionality of the challenged provision, or are still pending on appeal.¹⁷³ As to procedural detours, in *American Tradition Institute v. Colorado*, plaintiffs claimed multiple constitutional violations because only in-state REC purchases would satisfy mandatory renewable purchase requirements, only allowing RECs to be traded within Colorado, providing solar rebates only for in-state generators, providing exemptions for compliance with competitive bidding requirements, and allowing for extra RECs only to be purchased at in-state providers.¹⁷⁴ The Colorado suit claimed seven distinct ways in which the state RPS discriminates against out-of-state-energy sources.¹⁷⁵ The Colorado RPS statute counts every kilowatt hour (Kwh) of renewable energy produced within the state at a 125% multiplier.¹⁷⁶ At least one-half of a regulated Colorado utility's distribution requirements must be met by retail distributed generation,¹⁷⁷ which under Colorado law must be located within the state.¹⁷⁸

The state of Colorado challenged both plaintiff standing and defendants as to being proper parties for suit: The state itself was held to have Eleventh Amendment immunity.¹⁷⁹ The court found that the plaintiffs had standing, though.¹⁸⁰

did not qualify under the statute. See TRANSCANADA & COMMONWEALTH OF MASS., PARTIAL SETTLEMENT AGREEMENT 1–9 (2010), available at <http://www.mass.gov/eea/docs/doer/renewables/solar/settlement-agreement.pdf> and <http://perma.cc/3DWH-GGG5>.

¹⁷⁰ See, e.g., TRANSCANADA & COMMONWEALTH OF MASS., *supra* note 169, at 1 (settlement agreement); Order Accepting Proposed Tariff Revisions, Subject to Conditions, and Addressing Related Complaint, *supra* note 168, at 61,022. The result of the TransCanada litigation was a partial change in the challenged regulations. See Order Adopting Emergency Regulations, Mass. Dep't of Pub. Util., D.P.U. 10-58, at 4–6 (June 9, 2010) (revising 220 MASS. CODE REGS. § 17.00 and subsequent related regulations).

¹⁷¹ *Ill. Commerce Comm'n*, 721 F.3d at 764; *Entergy*, 838 F. Supp. 2d at 183.

¹⁷² *Mo. Energy Dev. Ass'n*, No. 10AC-CC00512 (Dist. Ct. Cole Cnty. June 29, 2011) (decision of Judge Daniel Green).

¹⁷³ *Am. Tradition Inst.*, 876 F. Supp. 2d at 1236.

¹⁷⁴ *Id.* at 1222–40.

¹⁷⁵ Amended Complaint for Declaratory Relief at ¶ 2, *Am. Tradition Inst.*, 876 F. Supp. 2d at 1222 (No. 1:11-cv-00859-WJM-KLM).

¹⁷⁶ COLO. CODE REGS. § 723-3:3654(e) (2010) (“For purposes of compliance with the renewable energy standard, each kilowatt-hour of eligible energy generated in Colorado, other than retail renewable distributed generation, shall be counted as 1.25 kilowatt-hours of eligible energy.”).

¹⁷⁷ *Id.* § 40-2-124(1)(c)(II)(A).

¹⁷⁸ Wholesale distributed generation is defined by statute as “a renewable energy resource in Colorado with a nameplate rating of thirty megawatts or less and that does not qualify as retail generation.” *Id.* § 40-2-124(1)(a)(VI).

¹⁷⁹ *Am. Tradition Inst.*, 876 F. Supp. 2d at 1236. American Tradition Partnership and Rod Lueck sued the State of Colorado; the Governor; the Executive Director of the Colorado Department of Regulatory Agencies; and the Commissioner, Chair and Director of the Public Utility Commission of Colorado. The Governor and the Executive Director of the Colorado Department of Regulatory Agen-

National Grid, a large utility in Massachusetts, estimated the cost of \$3.95 per month per residential customer to pay for the Massachusetts RPS program, expected to rise by \$1 per month by 2015.¹⁸¹ National Grid estimated that net metering cost will more than double between summer 2013 and the end of the year, and then more than triple again by the end of 2014.¹⁸² This currently represents 5.4% of the typical residential customer bill, before all the projected increases.¹⁸³ Utilities in California estimate that net metering may mean as much as \$1.4 billion a year in lost revenue that will have to be added to the bills of non-net-metering customers.¹⁸⁴ The Wall Street Journal reported that half the RPS states considered legislation in 2013 to dilute or repeal their RPS programs.¹⁸⁵ New Hampshire, New Jersey, and New York picked the pocket of part of their RGGI funds earned from the auction of allowances and supposedly earmarked for energy-related purposes.¹⁸⁶

Judge Richard Posner, writing for the Seventh Circuit in a unanimous decision in *Illinois Commerce Commission v. Federal Regulatory Commission*, affirmed FERC's approval of the Midwest Independent Service Operator's (MISO)¹⁸⁷ proportionate customer utility allocation of costs pursuant to federal, rather than state, law.¹⁸⁸ For authority for its holding on the respective jurisdiction of state and federal government to regulate electricity, the opinion relied on a 2012 law review article authored by Professor Ferrey.¹⁸⁹ It declared unconstitu-

cies were dismissed, as well as the state, based on the fact that they did not directly control or administer the state RES program. *Id.* at 1236–37.

¹⁸⁰ *Id.* at 1236. One of the plaintiff's members was a coal production facility that was forced to acquire renewable energy at a higher cost and will lose sales and revenue purchasing the in-state renewable energy required. *Id.*

¹⁸¹ Bruce Mohl, *The Back Story: Green Energy Concerns*, COMMONWEALTH MAG. (Aug. 8, 2013), <http://hosted-p0.vresp.com/1365955/6c1214d71c/ARCHIVE>, available at <http://perma.cc/RS7C-L3H9>.

¹⁸² *See id.*

¹⁸³ *Id.*

¹⁸⁴ Diane Cardwell, *On Rooftops, a Rival for Utilities*, N.Y. TIMES, July 27, 2013, at B1.

¹⁸⁵ Mohl, *supra* note 181.

¹⁸⁶ Lisa Wood, *Green Advocates in Maine Fear RGGI Funds May Be Used to Close Budget Gap*, ELECTRIC UTIL. WK., Jan. 24, 2011, at 8–9; Lisa Wood & Rob Matyi, *New Leadership in Several States May Weaken "Green" Mandates, Citing Cost Considerations*, ELECTRIC UTIL. WK., Feb. 2011, at 34–35. New Jersey took \$90 million from its RGGI proceeds to reduce general state budget deficits, and New Jersey Governor Chris Christie in March 2010 indicated that he was planning to take \$65 million from the New Jersey RGGI Fund for a similar purpose.

¹⁸⁷ MISO, CORPORATE INFORMATION 1–2 (2014), available at <https://www.misoenergy.org/Library/Repository/Communication%20Material/Corporate/Corporate%20Fact%20Sheet.pdf> and <http://perma.cc/75L9-GV74>. MISO's service area extends from the Canadian border, east to Michigan and parts of Indiana, south to northern Missouri, and west to eastern areas of Montana. *Id.*

¹⁸⁸ *Ill. Commerce Comm'n*, 721 F.3d at 777. MISO allocated the costs of the transmission projects among all of the utilities that draw power from the MISO grid in proportion to each utility's overall volume of usage. FERC approved MISO's rate design, which led some states to initiate court appeal. *Id.*

¹⁸⁹ *Id.* at 776 (citing to article by Professor Ferrey).

tional any action by a state limiting state renewable portfolio standards to in-state generation as a violation of the Commerce Clause: It “trips over an insurmountable constitutional objection. Michigan cannot, without violating the commerce clause of Article I of the Constitution, discriminate against out-of-state renewable energy.”¹⁹⁰ Justice Scalia, concurring in *West Lynn Creamery*, submitted that “subsidies for in-state industry . . . would *clearly* be invalid under any formulation of the Court’s guiding principle” for dormant Commerce Clause cases.¹⁹¹

The legal repercussions from this mid-2013 ruling of the Seventh Circuit were immediate. Within a few days, petitions were filed in New York—not even within the MISO jurisdiction that includes part of twelve states not including New York—to reconsider decisions in light of this decision in another federal circuit and ISO.¹⁹² The complaint of the interstate merchant power provider cited this recent decision and noted:

In a recent, noteworthy case, the United States Court of Appeals for the Seventh Circuit had the opportunity to comment on an RPS program, that, like New York’s current RPS program, facially discriminates against out-of-state sources of renewable power The court noted that “Michigan cannot, without violating the commerce clause of Article I of the Constitution, discriminate against out-of-state renewable energy.”¹⁹³

In 2013, the U.S. District Court for the District of Maryland held that the Maryland Public Service Commission did not violate the dormant Commerce Clause by soliciting proposals to construct a generation facility within a particular geographic region, but otherwise found the Maryland state statute to violate the Constitution.¹⁹⁴ The case construes the effect of Maryland’s “contract for differences” requiring local utilities to enter into long-term power purchase agreements (PPAs) only with specifically chosen independent wholesale power facilities. As to the dormant Commerce Clause, the plaintiffs asserted that by

¹⁹⁰ *Id.* Michigan actually initiated the issue of in-state electric power discrimination in its RPS program as a demonstration that out-of-state power transmitted to it was not recognized as of the same value as in-state electricity, and therefore Michigan should not pay a share of power line tariffs transmitting power from out of state that did not have equal recognition and benefit. Instead of supporting the state’s position, this assertion caused Judge Posner to respond even though it was not the tariff issue before the court. *Id.*

¹⁹¹ *West Lynn Creamery*, 512 U.S. at 208 (Scalia, J., concurring).

¹⁹² *See, e.g.*, Petition for Rehearing of H.Q. Energy Services at 1, N.Y. Public Serv. Comm’n, Case 03E-0188 (June 21, 2013).

¹⁹³ *Id.* at 16–17.

¹⁹⁴ *PPL Energyplus, LLC v. Nazarian*, No. MJG-12-1286, 2013 WL 5432346, at *22–23, *51 (D. Md. Sept. 30, 2013) (“The mere fact that the PSC sought to procure a new generation facility located within [a particular geographic region] does not, standing alone, discriminate *against* the flow of interstate commerce.”).

requiring that the plant be constructed in Maryland or the District of Columbia, Maryland's program violated the Constitution.¹⁹⁵ The successful winning bidders who benefited from this in-Maryland situs energy regulation asserted that although the plant location was geographically limited, an out-of-state company could compete to build the plant within Maryland.¹⁹⁶ Even if not discriminating against out-of-state businesses, however, this is still discrimination based on the geographic location of the commerce, which the dormant Commerce Clause protects against.

In 2013, the U.S. District Court for the District of New Jersey held that a New Jersey law explicitly favoring in-state generation in solicitation of bids for new energy production did not violate the dormant Commerce Clause, though the law was still found unconstitutional on other grounds.¹⁹⁷ The plaintiffs had asserted that the law violated the dormant Commerce Clause because it was predicated on in-state "favoritism" and is a "blatant and explicit effort to promote the construction of new generation facilities in New Jersey."¹⁹⁸ The plaintiffs alleged that because the eligibility requirements, including deadlines, pre-qualification requirements, and other criteria, favored in-state generators, the selection process for LCAPP-sponsored generators favored in-state generators. All generators selected to participate in the New Jersey LCAPP program were from New Jersey.¹⁹⁹ The plaintiffs highlighted the legislative record as further support that the New Jersey legislature intended to discriminate in favor of in-state power projects by passing LCAPP.²⁰⁰

III. LIMITS ON STATE ENERGY GOVERNANCE: FEDERAL CONSTITUTIONAL CHALLENGES

A. *The Federal Power Act's "Bright Line"*

The Federal Power Act directs the Federal Energy Regulatory Commission (FERC) to regulate all interstate electricity transmission and to ensure the reliability of the national electricity grid.²⁰¹ Section 202(c) of the Federal Power Act provides the U.S. Department of Energy (DOE) authority to order the operation of electricity generation facilities for reliability reasons whenever there is an "emergency" that creates "a shortage of electric energy or of facilities for the

¹⁹⁵ *Id.* at *1–2.

¹⁹⁶ *Id.* at *49–50.

¹⁹⁷ *Hanna*, 2013 WL 5603896, at *37 ("[I]t appears reasonable that the Board would incentivize construction in areas where reliability concerns are in flux. As such, the Board has the authority to incentivize construction within New Jersey.").

¹⁹⁸ Northey, *supra* note 168.

¹⁹⁹ *Hanna*, 2013 WL 5603896, at *22. LCAPP awarded contracts to Hess Corp., Competitive Power Ventures, and NRG Energy. *Id.*

²⁰⁰ *Id.* at *37.

²⁰¹ Federal Power Act §§ 202, 209 (codified at 16 U.S.C. §§ 797, 824a, 824a-2 (2012)).

generation or transmission of electric energy.”²⁰² The Federal Power Act §§ 205 and 206²⁰³ empower FERC exclusively to regulate rates for the interstate and wholesale sale and transmission of electricity.²⁰⁴ FERC case law exerts exclusive jurisdiction over the “transmission of electric energy in interstate commerce,” over the “sale of electric energy at wholesale in interstate commerce,” and over “all facilities for such transmission or sale of electric energy.”²⁰⁵ The U.S. Supreme Court held that Congress meant to draw a “bright line,” easily ascertained and not requiring case-by-case analysis, between state and federal jurisdiction.²⁰⁶ When a transaction is subject to exclusive federal FERC jurisdiction and regulation, state regulation is preempted as a matter of federal law and the U.S. Consti-

²⁰² Federal Power Act § 202(c) (codified at 16 U.S.C. § 824a(c)). The Act states:

During the continuance of any war in which the United States is engaged, or *whenever the Commission determines that an emergency exists* by reason of a sudden increase in the demand for electric energy, or a shortage of electric energy or of facilities for the generation or transmission of electric energy, or of fuel or water for generating facilities, or other causes, *the Commission shall have authority*, either upon its own motion or upon complaint, with or without notice, hearing, or report, *to require by order* such temporary connections of facilities and *such generation, delivery, interchange, or transmission of electric energy as in its judgment will best meet the emergency and serve the public interest*. If the parties affected by such order fail to agree upon the terms of any arrangement between them in carrying out such order, the Commission, after hearing held either before or after such order takes effect, may prescribe by supplemental order such terms as it finds to be just and reasonable, including the compensation or reimbursement which should be paid to or by any such party.

Id. (emphasis added). DOE regulations provide that an “emergency” under Federal Power Act § 202(c) can result from, among other things, “a regulatory action which prohibits the use of certain electric power supply facilities” or “[e]xtended periods of insufficient power supply as a result of inadequate planning or the failure to construct necessary facilities.” 10 C.F.R. § 205.371 (2013).

²⁰³ 16 U.S.C. §§ 824d, 824e.

²⁰⁴ Pub. Util. Dist. No. 1 of Snohomish Cnty. Wash. v. Fed. Energy Regulatory Comm’n, 471 F.3d 1053, 1058 (9th Cir. 2006), *aff’d in part, rev’d in part sub nom.* Morgan Stanley Capital Grp. Inc. v. Pub. Util. Dist. No. 1 of Snohomish Cnty. Wash., 554 U.S. 527 (2008).

²⁰⁵ 16 U.S.C. § 824(b)(1); e.g., Aquila Merchant Serv., Inc., 125 FERC ¶ 61,175 at ¶ 17 (2008); Entergy Services, Inc., 120 FERC ¶ 61,020 at ¶ 28 (2007); Midwest Indep. Transmission Sys. Operator, Inc., 106 FERC ¶ 61,337 at ¶ 14 & n.17 (2004); S. Cal. Edison Co., 106 FERC ¶ 61,183 at ¶ 14, 19 (2004); Va. Electric and Power Co., 103 FERC ¶ 61,109 at ¶ 6 (2003); Barton Village, Inc. v. Citizens Util. Co., 100 FERC ¶ 61,244, 61,864 (2002); Niagara Mohawk Power Corp., 100 FERC ¶ 61,019, 61,039–40 (2002); Armstrong Energy Ltd. P’ship, 99 FERC ¶ 61,024, 61,104 (2002); Progress Energy, Inc., 97 FERC ¶ 61,141, 61,628 (2001); Cent. Vt. Pub. Serv. Corp., 84 FERC ¶ 61,194, 61,973–75 (1998); Conn. Light and Power Co., 70 FERC ¶ 61,012, 61,030, *reconsideration denied*, 71 FERC ¶ 61,035 (1995); N. Ind. Pub. Serv. Co., 66 FERC ¶ 61,213, 61,488 (1994); Houlton Water Co. v. Maine Pub. Serv. Co., 60 FERC ¶ 61,141, 61,515 (1992); Fla. Power & Light Co., 40 FERC ¶ 61,045, 61,120–21, *reh’g denied*, 41 FERC ¶ 61,153, 61,382 (1987); S. Co. Serv., Inc., 37 FERC ¶ 61,256, 61,652 (1986); Pa. Power & Light Co., 23 FERC ¶ 61,006, 61,018 (1983), *reh’g denied*, 23 FERC ¶ 61,325 (1983).

²⁰⁶ Fed. Power Comm’n v. S. Cal. Edison Co., 376 U.S. 205, 215–16 (1964).

tution's Supremacy Clause, according to a long-standing and consistent line of rulings by the Supreme Court.²⁰⁷

The rates, terms, and provisions of any wholesale sale or transmission of electricity in interstate commerce are exclusively within federal jurisdiction and control, not state authority, under the Federal Power Act, according to Supreme Court:²⁰⁸ "FERC has exclusive authority to determine the reasonableness of wholesale rates."²⁰⁹ The Federal Power Act defines "sale at wholesale" as any sale to any person for resale.²¹⁰ "The transmission of electric current from one state to another . . . is interstate commerce" subject to the Commerce Clause.²¹¹

States, however, retain authority over retail electric sales because ". . . FERC's jurisdiction over the sale of power has been specifically confined to the wholesale market."²¹² As the Court has explained, Congress enacted the Federal Power Act based on testimony that *Public Utilities Commission of Rhode Island v. Attleboro Steam & Electric Co.* "has been accepted by everybody as establishing . . . the fact that the State cannot regulate wholesale transactions, although it can regulate retail service and rate."²¹³

Congress in the Federal Power Act "adopt[ed] the test developed in the *Attleboro* line [of cases] which denied state power to regulate a sale 'at wholesale to local distributing companies' and allowed state regulation of a sale at 'local retail rates to ultimate consumers.'"²¹⁴ As the has Court explained, Congress enacted the Federal Power Act based on testimony that *Attleboro* ". . . has been accepted by everyone as establishing . . . the fact that the State cannot regulate wholesale transactions, although it can regulate retail service and rate."²¹⁵

²⁰⁷ *New England Power Co. v. New Hampshire*, 455 U.S. 331, 338 (1982). The Supreme Court overturned an order of the New Hampshire Public Utilities Commission that restrained within the state, for the financial advantage of in-state ratepayers, low-cost hydroelectric energy produced within the state. *Id.* The Court held this to be an impermissible violation of the dormant Commerce Clause and the Federal Power Act: "Our cases consistently have held that the Commerce Clause of the Constitution . . . precludes a state from mandating that its residents be given a preferred right of access, over out-of-state consumers, to natural resources located within its borders or to the products derived therefrom." *Id.*; see also *Entergy La., Inc. v. La. Pub. Serv. Comm'n*, 539 U.S. 39, 39 (2003); *Miss. Power & Light Co. v. Miss. ex rel. Moore*, 487 U.S. 354, 354 (1988); *Nantahala Power & Light Co. v. Thornburg*, 476 U.S. 953, 953 (1986); *Montana-Dakota Co. v. Pub. Serv. Comm'n*, 341 U.S. 246, 251 (1951).

²⁰⁸ *New England Power Co.*, 455 U.S. at 340.

²⁰⁹ *Miss. Power & Light Co.*, 487 U.S. at 371 ("FERC has exclusive authority to determine the reasonableness of wholesale rates."); accord *Pub. Util. Dist. No. 1 of Snohomish Cnty.*, 471 F.3d at 1066.

²¹⁰ Federal Power Act, §201(d) (codified at 16 U.S.C. § 824(d) (2012)).

²¹¹ *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. N.D. ex rel. Heitkamp*, 504 U.S. 298, 298 (1992).

²¹² *New York v. Fed. Energy Regulatory Comm'n*, 535 U.S. 1, 20 (2002) (italics omitted).

²¹³ *Southern California Edison*, 376 U.S. at 213 n.8.

²¹⁴ *Id.* at 214–15.

²¹⁵ *Id.* at 213 n.8.

Wholesale rates for sales in interstate commerce are wholly beyond any state authority.²¹⁶

If states impose a rate in excess of avoided cost by either “law or policy,” with avoided cost being the only wholesale power sale rate that states can set as delegates of federal authority, the “contracts will be considered to be void *ab initio*.”²¹⁷ The rates, terms, and provisions of any wholesale sale, or transmission of electricity in interstate commerce, are exclusively within federal jurisdiction and control, not state authority, pursuant to the Federal Power Act:²¹⁸ “FERC has exclusive authority to determine the reasonableness of wholesale rates.”²¹⁹

This creates a well-established legal dividing line in United States law between federal and state government authority to regulate transactions of the private electric power industry. The Supreme Court held that Congress meant to draw a “bright line,” easily ascertained and not requiring case-by-case analysis, between state and federal jurisdiction.²²⁰ It does not make any difference whether a state acts through its legislature or its energy regulatory agency:²²¹ A state must stay on the demarcated “state” side of this legal “bright line.”²²²

State regulation is not allowed to stand as an obstacle to congressional objectives.²²³ State law is not allowed to overrule or supplant federal determinations by adding requirements not consistent with those in federal law.²²⁴ And power moves interstate constantly pursuant to federal law: The Supreme Court held that “it is difficult to conceive of a more basic element of interstate commerce than electric energy, a product used in virtually every home and every commercial or manufacturing facility. No State relies solely on its own resources in this respect.”²²⁵ Moreover, the courts have determined that electrons in interstate commerce cannot be traced, although we know that they move effortlessly interstate through the very design of the interconnected interstate transmission system.²²⁶

²¹⁶ S. Cal. Edison Co., 70 FERC ¶ 61,215 (1995).

²¹⁷ Conn. Light & Power Co, 70 FERC at ¶ 61,029–30.

²¹⁸ *New England Power Co.*, 455 U.S. at 340.

²¹⁹ *Miss. Power & Light Co.*, 487 U.S. at 371; *accord Pub. Util. Dist. No. 1 of Snohomish Cnty.*, 471 F.3d at 1066.

²²⁰ *Southern California Edison*, 376 U.S. at 215–16.

²²¹ *Pac. Gas & Elec. Co. v. State Energy Res. Conservation and Dev. Comm’n*, 461 U.S. 190, 204, 215 (1983); *Southern California Edison*, 376 U.S. at 215–16.

²²² *Southern California Edison*, 376 U.S. at 215–16.

²²³ *Pac. Gas & Elec. Co.*, 461 U.S. at 204; *Hines v. Davidowitz*, 312 U.S. 52, 67 (1941).

²²⁴ *See Nat’l Meat Ass’n v. Harris*, 132 S. Ct. 965, 969 (2012) (in a unanimous decision, the Court held that federal law prohibits states from enforcing requirements regarding “premises, facilities and operations” that are “in addition to, or different [from]” those in federal law); *Granite Rock Co. v. Cal. Coastal Comm’n*, 768 F.2d 1077, 1083 (9th Cir. 1985).

²²⁵ *Fed. Energy Regulatory Comm’n v. Mississippi*, 456 U.S. at 757.

²²⁶ *See, e.g., New York v. Fed. Energy Regulatory Comm’n*, 535 U.S. at 7 n.5; *Fed. Power Comm’n v. Fla. Power & Light Co.*, 404 U.S. 453, 460–61 (1972).

An increasingly larger majority of U.S. power now proceeds through a wholesale power sale prior to its ultimate retail sale and disposition,²²⁷ thereby fundamentally altering the legal analysis of what is and is not now jurisdictional for a state and the federal government to regulate.²²⁸ As the Supreme Court has noted, it is now possible for a “customer in Vermont [to] purchase electricity from an environmentally friendly power producer in California or a cogeneration facility in Oklahoma.”²²⁹ A significant number of independent renewable power generators now sell their power wholesale to redistributing utilities or other retail competitors that thereafter resell that power to retail customers.²³⁰

When combined with federal preemption law, one crucial result of these energy market regulatory reforms has been “a massive shift in regulatory jurisdiction from the states to the FERC.” . . . The upshot of these federal and state innovations in electricity regulation is that state regulators, despite their continued authority over rates charged directly to consumers, have much less actual authority over those rates than they did [earlier]. Local utilities now obtain power largely through wholesale contracts subject to FERC’s exclusive regulation, rather than through self-generated and self-transmitted power . . . Although state regulators formerly took an extremely active role so as to ensure the just and reasonable retail power rates, FERC has exclusive jurisdiction over the wholesale rates that now drive the electric power market and, as a practical matter, largely determine the rates ultimately charged to the public.²³¹

Some states ignored such limits, and litigation resulted both in losses and in requirements to pay challengers’ multiple millions of dollars of legal costs of the successful challenges.²³² The Supreme Court in 1986,²³³ and again in 1988,²³⁴ 2003,²³⁵ and 2008,²³⁶ reaffirmed and enforced the Filed Rate Doctrine as applied

²²⁷ ELECTRIC ENERGY MARKET COMPETITION TASK FORCE, REPORT TO CONGRESS ON WHOLESALE AND RETAIL COMPETITION MARKETS FOR ELECTRIC ENERGY 10 (2006). “In the 1970s, vertically integrated utility companies (investor-owned, municipal, or cooperative) controlled over 95 percent of the electric generation in the United States . . . [B]y 2004 electric utilities owned less than 60 percent of electric generating capacity. Increasingly, decisions affecting retail customers and electricity rates are split among federal, state, and new private, regional entities.” *Id.*

²²⁸ FERREY, THE LAW OF INDEPENDENT POWER, *supra* note 38, at 5:26–28; STEVEN FERREY, EXAMPLES & EXPLANATIONS: ENVIRONMENTAL LAW 560–61 (6th ed. 2013).

²²⁹ *New York v. Fed. Energy Regulatory Comm’n*, 535 U.S. at 8 (internal quotation marks omitted).

²³⁰ *Pac. Gas & Elec. Co.*, 461 U.S. at 217, 221.

²³¹ *Pub. Util. Dist. No. 1 of Snohomish Cnty.*, 471 F.3d at 1066–67.

²³² *Entergy Nuclear Vt. Yankee v. Shumlin*, 838 F. Supp. 2d 183, 183 (D. Vt. 2012).

²³³ *Nantahala*, 476 U.S. at 963.

²³⁴ *Miss. Power & Light Co.*, 487 U.S. at 371–73.

²³⁵ *Entergy La.*, 539 U.S. at 50–51.

²³⁶ *Morgan Stanley*, 554 U.S. at 527.

through the Supremacy Clause, when states attempted to assert jurisdiction in areas subject to FERC's exclusive authority. The 1986 Supreme Court decision concluded that the Filed Rate Doctrine limitations also apply "... to decisions of state courts."²³⁷ The filed-rate doctrine applies with equal force to federal and state courts,²³⁸ and also applies to efforts by state regulators to modify the terms of a FERC-mandated rate determination or cost allocation.²³⁹

The Filed Rate Doctrine is an absolute prohibition of state regulation of wholesale power rates, contracts, and terms, which are reserved exclusively to federal authority: "The filed rate doctrine is not limited to 'rates' *per se*: 'our inquiry is not at an end because the orders do not deal in terms of prices or volumes of purchases.'"²⁴⁰ The Supreme Court in 2008 reiterated that the Federal Power Act creates a "'bright line' between state and federal jurisdiction with wholesale power sales . . . falling on the federal side of the line."²⁴¹ This most recent decision articulated an unbroken line of Supremacy Clause application barring state regulation:

Congress has drawn a bright line between state and federal authority in the setting of wholesale rates and in the regulation of agreements that affect wholesale rates. States may not regulate in areas where FERC has properly exercised its jurisdiction to determine just and reasonable wholesale rates or to insure that agreement affecting wholesale rates are reasonable.²⁴²

B. California Carbon Regulation

1. Preemption of California Regulation and Standing

In the challenge to the California Low Carbon Fuel Standard (LCFS) discussed above in *Rocky Mountain Farmers Union v. Goldstene*,²⁴³ the plaintiffs alternatively argued that the California Air Resources Board's (CARB) LCFS regulations were preempted by federal environmental law,²⁴⁴ when the LCFS

²³⁷ *Nantahala*, 476 U.S. at 963.

²³⁸ *See* *Ark. La. Gas Co. v. Hall*, 453 U.S. 571, 581–82 (1981).

²³⁹ *See* *Entergy La.*, 539 U.S. at 47–49.

²⁴⁰ *Nantahala*, 476 U.S. at 966–67; *see also* *N. Natural Gas Co. v. State Corp. Comm'n*, 372 U.S. 84, 90–91 (1963).

²⁴¹ *Pub. Util. Dist. No. 1 of Snohomish Cnty.*, 471 F.3d at 1066 (citing the Supreme Court opinions in *Nantahala*, *Southern California Edison*, and *Miss. Power & Light Co.*).

²⁴² *Miss. Power & Light Co.*, 487 U.S. at 374.

²⁴³ *Rocky Mountain Farmers Union v. Goldstene*, 843 F. Supp. 2d 1071, 1099 (E.D. Cal. 2011); *see supra* notes 113–146 and accompanying text.

²⁴⁴ *Rocky Mountain Farmers Union*, 843 F. Supp. 2d at 1078. The petitioners asserted that the 2007 amendment to the Clean Air Act, the Energy Independence and Security Act (EISA), precluded CARB from its state-level LCFS program. *Id.* California retorted that regulating emissions is within traditional state police power to protect the health, safety, and welfare of citizens, and "[a]ir pollution prevention falls under the broad police powers of the states Environmental regulation traditional-

closed off California to federally grandfathered biorefineries that would need either to not participate in the California ethanol fuel market or reduce their carbon emissions, though not so required by federal law.²⁴⁵ The defendants opposed the plaintiffs' preemption motion not on the merits, but on procedural defenses based on lack of standing and lack of causation.²⁴⁶ The U.S. District Court for the Eastern District of California held that although individual plaintiffs had not provided evidence of individual standing, at least one of the industry plaintiff's members suffered an actual injury that establishes associational standing.²⁴⁷

The doctrine of conflict preemption is triggered when a state law actually conflicts with a federal law, and therefore a party cannot comply with both the state and federal law.²⁴⁸ Having already found the LCFS illegal, the district court did not resolve the claim and held that the plaintiffs lacked standing to raise it.²⁴⁹ Neither party addressed whether the LCFS regulation was severable.²⁵⁰ Because the state opposed an as-applied preemption challenge while the plaintiffs opposed a facial challenge, the court required future briefing on these different issues and the standards of review that should be used,²⁵¹ and denied "without prejudice the Rocky Mountain Plaintiffs' summary judgment motion related to its preemption claim."²⁵²

A challenge is facial, as opposed to as-applied, when the claim and the relief that would follow reach beyond the particular circumstances of the plaintiffs.²⁵³ The U.S. Court of Appeals for the Ninth Circuit stayed the district

ly has been a matter of state authority." *Oxygenated Fuels Ass'n v. Davis*, 331 F.3d 665, 668 (9th Cir. 2003). There is a "savings clause" for states in the Clean Air Act: "[N]othing in this chapter shall preclude or deny the right of any State or political subdivision thereof to adopt or enforce [any pollution standard] . . . except that . . . such State . . . may not adopt or enforce any emission standard or limitation which is less stringent than the [federal] standard . . ." 42 U.S.C. § 7416 (2006).

²⁴⁵ *Rocky Mountain Farmers Union*, 843 F. Supp. 2d at 1095. These federal objectives were asserted by the plaintiffs to include reducing the United States's GHG emissions, enhancing energy independence, and protecting pre-existing investment in renewable energy. *Id.* The plaintiffs argued that Congress struck a balance by not mandating pre-existing biorefineries to reduce their lifecycle carbon emissions as outlined in the statute. *Id.* at 1094–95.

²⁴⁶ *Id.* at 1095. The Rocky Mountain plaintiffs were comprised of "groups that have an interest in protecting the corn ethanol industry," including corn growers, users, merchants and marketers of distillers grain, producers of corn ethanol, and importers of ethanol into California from other states. *Id.* at 1096.

²⁴⁷ *Id.* at 1099–1100. The court pointed to two specific affidavits that named specific plants that will be harmed by the LCFS and alleged injuries that have been suffered, and therefore the court found the first prong satisfied. *Id.* Growth Energy previously submitted evidence that satisfied this prong. *Id.* at 1100.

²⁴⁸ *Id.* at 1101.

²⁴⁹ *Id.* at 1101–02.

²⁵⁰ *Id.* at 1102. "Neither party explains sufficiently their position of whether the LCFS is a series of severable restrictions on dissimilar entities or single, integrated market-based compliance mechanism that applies to all fuel providers in the California market." *Id.*

²⁵¹ *Id.* at 1102–03.

²⁵² *Id.* at 1103.

²⁵³ *Id.* at 1102.

court's injunction in April 2012, pending appeal.²⁵⁴ On appeal to the Ninth Circuit, CARB²⁵⁵ cited *Rice v. Santa Fe Elevator Corp.* for the proposition that all preemption analyses must start with the assumption that the historic police powers of the state are not superseded by a federal act unless that was clearly the intent of Congress,²⁵⁶ particularly in areas of traditional state regulation, such as pollution control.²⁵⁷ CARB relied on the Ninth Circuit's decision in another preemption challenge to CARB regulations, *Pacific Merchant Shipping Ass'n v. Goldstene*.²⁵⁸ CARB argued that the Energy Independence and Security Act's (EISA) savings clauses clearly limit its preemptive reach²⁵⁹ and cited two separate savings clauses in the statute.²⁶⁰

If the Ninth Circuit should reverse as to the violation of the dormant Commerce Clause holding, the Rocky Mountain plaintiffs requested that the court simply vacate the preliminary injunction and remand because the district court record is complete.²⁶¹ The plaintiffs noted that the U.S. Supreme Court in *Engine Manufacturers Ass'n v. South Coast Air Quality Management District* invoked Clean Air Act preemption "against rules enacted by a political subdivision of California that prohibited the purchase or leasing of vehicles which failed to meet certain emissions requirements."²⁶² The Court found that "a state law need not actually interfere with federal law to be considered 'related to' the federal law for the purposes of preemption."²⁶³

²⁵⁴ *Id.*

²⁵⁵ Appellants' Opening Brief at 3, *Rocky Mountain Farmers Union v. Corey*, 730 F.3d 1070 (9th Cir. 2013) (Nos. 12-15131, 12-15135), 2012 WL 2338857.

²⁵⁶ *Id.* at 111.

²⁵⁷ *Id.* at 112.

²⁵⁸ *Pac. Merchant Shipping Ass'n v. Goldstene*, 639 F.3d 1154, 1167 (2011) (air pollution prevention falls under the broad police powers of the states).

²⁵⁹ Appellants' Opening Brief, *supra* note 255, at 112.

²⁶⁰ *Id.* at 112–13. The first cited savings clause states, "[e]xcept to the extent expressly provided in this Act or an amendment made by this Act, nothing in this Act or an amendment made by this Act supersedes, limits the authority provided or responsibility conferred by, or authorizes any violation of any provision of law (including a regulation), including any energy or environmental law or regulation." *Id.* at 112. The second cited clause repeats what the first states: "Except as provided in section 211(o)(12) of the Clean Air Act, nothing in the amendments made by this title to section 211(o) of the Clean Air Act shall be construed as superseding, or limiting, any more environmentally protective requirement under the Clean Air Act, or under any other provision of State or Federal law or regulation, including any environmental law or regulation." *Id.* at 112–13.

²⁶¹ Brief of Rocky Mountain Farmers Union Appellees at 128, *Rocky Mountain Farmers Union*, 730 F.3d 1070 (Nos. 12-15131, 12-15135) (the district court "should be given the opportunity in the first instance to reweigh the factors relevant to a preliminary injunction analysis in light of a decision on the Commerce Clause issues or to potentially resolve the preemption issue on the merits").

²⁶² *Id.*

²⁶³ *Id.*

2. Planes, Trains, and Automobiles—Trucks and Buses

The California Dump Truck Owners Association (CDTOA) filed suit in the U.S. District Court of the Eastern District of California in February 2011 to challenge CARB's Truck and Bus Regulation, which provides for stricter emissions standards for dump trucks and other diesel-fuel vehicles.²⁶⁴ The plaintiffs alleged that the regulation is unconstitutional because it is preempted by the Federal Aviation Administration Authorization Act (FAAAA).²⁶⁵

In December 2012, the district court concluded that it lacked subject matter jurisdiction and dismissed the case on procedural grounds rather than reaching the merits of the claims.²⁶⁶ The district court determined that the EPA was a necessary and indispensable party to the litigation due to the EPA's interests in the State Implementation Plan of California, which requires federal approval, and at which point the plan becomes a matter not only of state law but also federal law.²⁶⁷ Because the district court could not grant any practical relief without joining the EPA, but claims challenging EPA final decisions must be brought in the federal circuit courts, the district court concluded that the action could not proceed without the necessary parties and should be dismissed.²⁶⁸ The procedural hiatus in this case prevented the court from reaching the constitutional merits of the challenge.²⁶⁹

Additionally, the CDTOA indicated that it would file a petition for review with the Ninth Circuit that challenged the EPA's approval of the California State Implementation Plan (SIP) under the theory that the SIP impermissibly conflicts with federal laws, specifically the FAAAA and the Constitution's Commerce Clause. While its language may preempt state regulation in the form of controls on who can enter the trucking industry within a state, it does not appear to limit a state's ability to regulate emission standards.²⁷⁰ CDTOA was also seeking an injunction to prevent CARB's ability to enforce the regulation, as the

²⁶⁴ Cal. Dump Truck Owners Ass'n v. Cal. Air Res. Bd., 924 F. Supp. 2d 1126, 1132 (E.D. Cal. 2012). The regulation required particulate matter retrofits beginning in 2012, and will require replacement of older engines beginning in 2015. *Id.* at 1133. The plaintiffs complained that the \$18,000 needed for a new CARB-compliant truck and the dramatically decreased value of old trucks unfairly burdened small business owners, influenced who could enter the industry, and thus conflicted with express terms of the FAAAA. *Id.* at 1133–34.

²⁶⁵ *Id.* at 1134.

²⁶⁶ *Id.* at 1144. According to the court, a decision favoring CDTOA would undermine the validity of EPA's approval of California's State Implementation Plan (SIP) under the Clean Air Act because the Truck and Bus Regulation is part of California's SIP. *Id.* Because exclusive jurisdiction of final EPA decisions, such as SIP approval, lies with the court of appeals, the district court concluded that it lacked jurisdiction. *Id.*

²⁶⁷ *Id.*

²⁶⁸ *Id.*

²⁶⁹ *See id.*

²⁷⁰ *See* Federal Aviation Administration Authorization Act of 1994, § 601, H.R. 2739, 103rd Cong. (1994).

newly imposed regulations would impair an already struggling regional industry and economy and have further alleged devastating effects.²⁷¹ This was because the regulations essentially require all diesel powered vehicles utilized in the industry to be replaced with new CARB-compliant vehicles.²⁷² To this date, there is no record of the suit actually filed in the California trial court system.

3. California's Feed-In Tariff

After enacting a state feed-in tariff requiring California state utilities to make wholesale power purchases from combined heat and power ("CHP" or cogeneration) units of less than 20 Mw at prices well in excess of wholesale rates for power and in excess of avoided costs established pursuant to federal law, there was a challenge before FERC as to whether this violated the Federal Power Act and the Supremacy Clause of the U.S. Constitution. California argued that its environmental purpose for regulation should make it exempt from any preemption in setting above-market wholesale feed-in renewable tariff rates for cogeneration facilities and that a generic "adder" for environmental costs could be used to inflate avoided costs.²⁷³ The affected utilities and others countered that federal law does not allow state regulation of wholesale sales to achieve state environmental goals, that constitutional preemption cannot be avoided based on an environmental purpose of the otherwise preempted state regulation, and states may not under the guise of environmental regulation adopt an economic regulation that requires purchases of electricity at a wholesale price outside the framework of the Federal Power Act, or if acting under the Public Utility Regulatory Policies Act (PURPA), at a price that exceeds avoided cost.²⁷⁴

FERC rejected all of California's arguments regarding generic environmental rationales for wholesale rates in excess of limits under federal law or as set by FERC.²⁷⁵ FERC did not agree with the legality of state-established feed-in tariffs and held that wholesale generators can receive no more than system-wide avoided cost for power sales: "[E]ven if a QF [Qualifying Facility] has been exempted pursuant to the Commission's regulations from the ratemaking provisions of the Federal Power Act, a state still cannot impose a ratemaking regime inconsistent with the requirements of PURPA and this Commission's regulations—i.e., a state cannot impose rates in excess of avoided cost."²⁷⁶

²⁷¹ Tina Grady Barbaccia, *CA Dump Truck Owners Association Sues CARB*, BETTER ROADS (Feb. 17, 2011), <http://www.betterroads.com/ca-dump-truck-owners-association-sues-carb/>, available at <http://perma.cc/ML5U-WTYV>.

²⁷² *Id.*

²⁷³ Cal. Pub. Util. Comm'n, *S. Cal. Edison Co., Pac. Gas and Elec. Co., San Diego Gas & Elec. Co.*, 132 FERC ¶ 61,047 at ¶¶ 3–4, 10 (2010) (order on petitions for declaratory order).

²⁷⁴ *Id.* at ¶¶ 7–11.

²⁷⁵ *Id.* at ¶¶ 25–29.

²⁷⁶ *Id.* at ¶¶ 26–27.

After losing before FERC, California moved for FERC rehearing, or in the alternative a clarification, of this FERC order.²⁷⁷ While FERC dismissed a rehearing of whether California had authority over preempted wholesale power sale rates,²⁷⁸ FERC did issue a clarification that the avoided costs determined for a Qualifying Facility selling power to the utility could be determined with respect to *actual* costs incurred by the purchasing electric utility, and reflecting requirements or restrictions imposed under state law on the renewable technologies eligible to supply power, thus yielding different tariffs for different technologies subject to state law power supply mix requirements.²⁷⁹ This clarified that a state can utilize its long-standing authority to specify what mix of power generation technologies a regulated utility should procure going forward.²⁸⁰

FERC rejected California's argument that avoided cost did not have to be the lowest cost for procurement of a particular type or technology of power resource.²⁸¹ The avoided cost that a utility could be ordered by a state to pay for wholesale power, subject to state technology supply requirements imposed on regulated utilities and retail suppliers, would be the cost at which the *particular* purchasing utility could either itself construct *or* purchase such type of power.²⁸² California had added an arbitrary ten percent bonus or "adder" for all combined heat and power facilities as a generic transmission system benefit proxy "for every kilowatt hour delivered to the electrical grid . . . at a price determined by the Commission,"²⁸³ regardless of where the cogeneration or CHP generation facility was located on the system or the utility system node into which it interconnected.²⁸⁴ FERC reaffirmed its prohibition of environmental additions to avoided cost calculations that reflect general environmental externality bonuses or "adders," unless they "are real costs that would be incurred by utilities."²⁸⁵

FERC reaffirmed that it has "exclusive jurisdiction" over all wholesale power purchase rates.²⁸⁶ California was not successful in arguing that it was regulating only the buyers (utilities) of power and not the sellers of power in the transaction.²⁸⁷ California unsuccessfully argued that its environmentally beneficial purposes should make it exempt from preemption in setting non-market-

²⁷⁷ S. Cal. Edison Co. et al., 133 FERC ¶ 61,059 (2010) (order granting clarification and dismissing rehearing).

²⁷⁸ *Id.* at ¶¶ 15, 19.

²⁷⁹ *Id.* at ¶ 20.

²⁸⁰ *Id.*

²⁸¹ *Id.* at ¶¶ 13, 29.

²⁸² 18 C.F.R. § 292.304(e) (2013).

²⁸³ S. Cal. Edison Co. et al., 133 FERC ¶ 61,059 at ¶ 13 (citing and upholding S. Cal. Edison Co., 71 FERC ¶ 61,269).

²⁸⁴ *Id.* at ¶ 9.

²⁸⁵ *Id.* at ¶ 31.

²⁸⁶ *Id.* at ¶ 72 n.99 (citing *Southern California Edison*, 376 U.S. at 205).

²⁸⁷ Teresa Morton & Jeffrey Peabody, *Feed-In Tariffs: Misfits in the Federal and State Regulatory Regime?*, 23 ELECTRICITY J. 17, 20–21 (2010).

conforming wholesale rates for a state feed-in tariff.²⁸⁸ FERC reiterated that only the federal government can regulate commerce between the states, and California cannot attempt to regulate commerce outside its borders.²⁸⁹

There was precedent regarding California energy sale prices fifteen years earlier that preempted certain California clean energy regulation altering wholesale renewable energy prices as impermissible.²⁹⁰ The Ninth Circuit held that wholesale power sale rates could not be altered by California legislation or regulatory action.²⁹¹ In addition, fifteen years before the 2010 matter, in *Southern California Edison Co., San Diego Gas & Electric*,²⁹² FERC refused to sanction a California order for utilities and their ratepayers to pay a higher price for renewable wholesale power. Under the filed-rate doctrine, any dispute about these matters may not be arbitrated by the state but is reserved exclusively to federal authority.²⁹³ The Ninth Circuit agreed in deciding a California case in 2006, just four years before the 2010 dispute over the California feed-in tariff.²⁹⁴ Although this 2006 decision proceeded on appeal to the U.S. Supreme Court²⁹⁵ and thereafter was remanded to FERC for more clarification,²⁹⁶ this element of its holding was not overturned when before the Supreme Court.

In 2013, the Supreme Court held that a city in California was preempted by the Federal Aviation Administration Authorization Act of 1994 from imposing additional regulation on diesel truck emissions for those trucks that accessed its port.²⁹⁷ While addressing state and local environmental regulation, the Supreme Court held that federal law is preemptive of state and local law.²⁹⁸ In the six California matters above, addressing the borders of federal and state authority over energy and environmental matters, federal authority preempted state authority in five of these case decisions at either the trial or appellate levels, but not always both,²⁹⁹ and the sixth was procedurally dismissed without reaching the

²⁸⁸ Cal. Pub. Utils. Comm'n et al., 132 FERC ¶ 61,047 (2010) (order on petitions for declaratory order).

²⁸⁹ S. Cal. Edison Co. et al., 133 FERC ¶ 61,059 (order granting clarification and dismissing rehearing).

²⁹⁰ *Indep. Energy Producers Ass'n v. Cal. Pub. Utils. Comm'n*, 36 F.3d 848, 859 (9th Cir. 1994).

²⁹¹ *Id.* at 858.

²⁹² S. Cal. Edison Co., 70 FERC ¶ 61,215 (1995). Edison, one of the affected utilities, had wholesale electricity supply options available for \$0.04 per Kwh or less, while the PUC required purchase of renewable prices as high as \$0.066 per Kwh. *Id.* at ¶ 61,667.

²⁹³ *Miss. Power & Light Co.*, 487 U.S. at 371.

²⁹⁴ *Pub. Util. Dist. No. 1 of Snohomish Cnty.*, 471 F.3d at 1066.

²⁹⁵ *Morgan Stanley*, 554 U.S. at 527.

²⁹⁶ *See id.* at 554–55; *Pub. Util. Dist. No. 1 of Snohomish Cnty.*, 471 F.3d at 1090.

²⁹⁷ *Am. Trucking Ass'ns, Inc. v. City of Los Angeles*, 133 S. Ct. 2096, 2105 (2013).

²⁹⁸ *Id.*

²⁹⁹ *American Trucking*, 133 S. Ct. at 2105; *Morgan Stanley*, 554 U.S. at 527; *Indep. Energy Producers*, 36 F.3d at 853; *Cal. Dump Truck Owners Ass'n*, 924 F. Supp. 2d at 1131; S. Cal. Edison Co. et al., 133 FERC ¶ 61,059 (2010) (order granting clarification and dismissing rehearing); S. Cal. Edison Co., 70 FERC ¶ 61,215 (1995).

merits because of a lack of subject matter jurisdiction. Two of the three decisions were rendered by the U.S. Supreme Court.³⁰⁰

C. Energy Preemption Outside California

Other recent federal court decisions are consistent on preempted state authority over certain energy regulation:

- A federal court ruling that Vermont regulation of its wholesale power preferences and sales violated the U.S. Constitution and was preempted.³⁰¹
- A decision in 2013 by the Seventh Circuit that federal authority over transmission of low-carbon sustainable energy is binding on states that have contrary policies.³⁰²
- A FERC decision adjudicating a Connecticut-mandated above-market feed-in tariff ordered to be paid by regulated utilities to government-owned renewable energy projects. The decision held not only that such a feed-in tariff was not consistent with federal law and FERC authority over such matters, but if states impose a rate in excess of avoided cost by either “law or policy,” the “contracts will be considered to be void ab initio.”³⁰³
- After a Rhode Island consumer instituted suit, rather than risk a court determination on the merits, the state amended its net metering program to put a cap of 125% of host site consumption on the amount of net metering permitted, reduced the payment to the avoided cost rate allowed under PURPA, and allowed municipal net metering customers to reallocate credits among all the municipality’s accounts.³⁰⁴ In the *Riggs* case, FERC refused the plaintiff’s request to launch an enforcement action.³⁰⁵
- There is a pending dispute in federal district court in Maryland finding unconstitutional in the trial court Maryland’s contract for differences (CfD) requiring local utilities to enter into long term power purchase agreements (PPAs) with certain power generators located only in-state. Maryland ratepayers supply the CfD price between a successful generator’s winning bid to the PJM ISO, which manages wholesale power sales, and the PPA rates. Plaintiffs successfully asserted that Maryland’s program sets a state-

³⁰⁰ *American Trucking*, 133 S. Ct. at 2105; *Morgan Stanley*, 554 U.S. at 527.

³⁰¹ *Entergy*, 838 F. Supp. 2d at 233–34.

³⁰² *Ill. Commerce Comm’n v. Fed. Energy Regulatory Comm’n*, 721 F.3d 764, 780–81 (7th Cir. 2013).

³⁰³ *Conn. Light and Power Co.*, 70 FERC ¶ 61,012, 61,029–30 (1995).

³⁰⁴ R.I. GEN LAWS § 39-26.2-2(2)–(3) (2013).

³⁰⁵ *Riggs v. R.I. Pub. Util. Comm’n*, 138 FERC ¶ 61,172 (2012). This required complainant Riggs to initiate action in court rather than have a forum at FERC. Riggs had argued that the credit price mandated by Rhode Island violated the PURPA avoided cost ceiling and was in excess of the price of otherwise available wind generation power from out-of-state. Esther Whieldon, *FERC Declines Enforcement Action on Rhode Island Ratepayers PURPA Complaint*, INSIDE FERC, Mar. 19, 2012, at 4.

sponsored wholesale rate disguised as a contract with specific in-state generators, disrupting the otherwise competitive FERC- approved wholesale power markets and artificially suppressing the value of electric capacity payments cleared in the market for all other regional wholesale generators.³⁰⁶

- A pending lawsuit, now on appeal, by several existing independent power generators successfully alleged preemption as well as without success a violation of the Constitution's dormant Commerce Clause with in-state "favoritism" regarding New Jersey's "blatant and explicit effort to promote the construction of new generation facilities in New Jersey."³⁰⁷ In response, in 2011, FERC amended the PJM ISO rules to prevent New Jersey state law from attempting to encourage construction of in-state power generation by, in part, causing them to bid power into the PJM system at suppressed prices to win capacity auctions.³⁰⁸ The utilities pay a cost equal to the difference between the FERC-approved PJM market clearing price and a contractually established New Jersey regulatory benchmark price, not dissimilar to the contested Maryland dispute, above. Both state statutes were stricken as unconstitutional.³⁰⁹

Many of these state energy regulatory efforts are contested as violations of both the Supremacy Clause and the dormant Commerce Clause. As noted in the first bullet above, in 2012 a federal trial court in a much-watched case in Vermont found preemption of state power to regulate and dormant Commerce Clause violations, resulting from state attempts to regulate wholesale power pricing and to discriminate in the preference for in-state power moving in interstate commerce.³¹⁰ The federal trial court held that the Federal Power Act invests the Federal Energy Regulatory Commission with "exclusive authority to regulate the transmission and sale at wholesale of electric energy in interstate commerce," and struck the state regulation as unconstitutional.³¹¹ The Vermont federal trial court decision held:

Under the Federal Power Act, 16 U.S.C. § 791a et seq.:

³⁰⁶ PPL Energyplus, LLC v. Nazarian, No. MJG-12-1286, 2013 WL 5432346, at *22–23, *51 (D. Md. Sept. 30, 2013).

³⁰⁷ PPL EnergyPlus, LLC v. Hanna, CIV.A. 11-745, 2013 WL 5603896, at *37 (D.N.J. Oct. 11, 2013); Northey, *supra* note 168.

³⁰⁸ Mary Powers, *Rebuffed by FERC Ruling, New Jersey BPU Plans to Look Again at How to Attract New Generation*, ELEC. UTIL. WK., May 23, 2011, at 4, 6, available at <http://www.electricdrive.org/sites/testing/index.php?ht=a/GetDocumentAction/i/22845> (on April 12, 2011, FERC eliminated a PJM rule that allowed a prior exemption for projects to make minimum offer prices when tempered by state energy programs).

³⁰⁹ *Hanna*, 2013 WL 5603896, at *37; *Nazarian*, 2013 WL 5432346, at *22–23, *51.

³¹⁰ *Energy*, 838 F. Supp. 2d at 230–31, 239.

³¹¹ *Id.* at 233; see also *New England Power Co.*, 455 U.S. at 340; 16 U.S.C. § 824(b)(1) (2012).

Congress has drawn a bright line between state and federal authority in the setting of wholesale rates and in the regulation of agreements that affect wholesale rates. States may not regulate in areas where FERC has properly exercised its jurisdiction to determine just and reasonable wholesale rates or to insure that agreements affecting wholesale rates are reasonable. *Miss. Power & Light Co. v. Miss. ex rel. Moore*, 487 U.S. 354, 374 (1988) . . . [A] state “must . . . give effect to Congress’ desire to give FERC plenary authority over interstate wholesale rates, and to ensure that the States do not interfere with this authority.” *Nantahala Power & Light Co. v. Thornburg*, 476 U.S. 953, 966 (1986) . . . Under the “filed-rate doctrine,” state courts and regulatory agencies are preempted by federal law from requiring the payment of rates other than the federal filed rate. See *Entergy La., Inc. v. La. Pub. Serv. Comm’n*, 539 U.S. 39, 47 (2003) (“The filed rate doctrine requires ‘that interstate power rates filed with FERC or fixed by FERC must be given binding effect by state utility commissions determining intrastate rates.’” (quoting *Nantahala*, 476 U.S. at 962)).³¹²

In the second bulleted matter above, Judge Richard Posner, writing for a unanimous Seventh Circuit, affirmed FERC’s approval of the Midwest Independent Service Operator’s (MISO’s)³¹³ proportionate customer utility allocation of transmission costs for high-voltage transmission lines to move renewable power to populated areas.³¹⁴ For authority for its holding on the respective jurisdiction of state versus federal government to regulate electricity, the opinion relied on a 2012 law review article authored by Professor Ferrey.³¹⁵ The petitioning states had raised six challenges to the original ISO opinion,³¹⁶ each of which was rejected by the Seventh Circuit. The court dismissed the Tenth Amendment challenge as “frivolous,” noting that it was “. . . a far cry from the federal government’s conscripting a state government into federal service.”³¹⁷ The petition-

³¹² *Entergy*, 838 F. Supp. 2d at 233–34.

³¹³ MISO, *supra* note 187, at 1–2. MISO’s service area extends from the Canadian border, east to Michigan and parts of Indiana, south to northern Missouri, and west to eastern areas of Montana. *Id.*

³¹⁴ *Ill. Commerce Comm’n*, 721 F.3d at 777.

³¹⁵ *Id.* at 776 (citing to an article by Professor Ferrey).

³¹⁶ *Id.* at 772–73. The six challenges were: (1) Does FERC’s approval of the MISO transmission tariff violate the Tenth Amendment to the Constitution by coercing states into approving all MVPs proposed within their borders?; (2) Are the benefits associated with the transmission projects proportional to the costs imposed?; (3) Did FERC have to conduct an administrative evidentiary hearing during its consideration of MISO’s proposed financing mechanism?; (4) May MISO allocate the total costs of new transmission among the load of member utilities on the basis of their overall power consumption while allocating no costs to generation?; (5) Can MISO allocate costs associated with the transmission to non-member utilities that are members of PJM ISO?; and (6) Can MISO allocate costs to utilities that are leaving MISO? *Id.*

³¹⁷ *Id.* at 773.

ers unsuccessfully argued that the cost allocation would violate the Federal Power Act by unjustly requiring utilities to bear costs disproportionate to the benefits that they would receive.³¹⁸ The court deferred to the ISO's determination of cost allocation.³¹⁹

The case highlighted in the final bullet above also raised field preemption and conflict preemption of the New Jersey Long-Term Capacity Agreement pilot program (LCAPP) proposal, a subsidy program effected through "contracts for differences."³²⁰ In its defense, New Jersey asserted that LCAPP is a mere planning measure, with any effect on FERC authority as only incidental.³²¹ The trial court ruled in favor of the plaintiffs on both preemption challenges and held that the Federal Power Act preempted LCAPP under the doctrines of field preemption and conflict preemption.³²²

Even in the absence of field preemption, state law can still be superseded based on conflict preemption if the state law interferes with a federal goal.³²³ The plaintiffs contended that LCAPP was conflict preempted because by New Jersey guaranteeing a fixed price for select New Jersey generators, this allows such generation effectively to bid below the true cost of new entry for the regional multi-state FERC-approved capacity auction, and thereby obstructs the federal goal of a competitive auction without any approved selective subsidies for capacity resources.³²⁴ The plaintiffs alleged that, because LCAPP-selected New Jersey generators bidding lower amounts to PJM ISO will win the PJM auction and be guaranteed a substantial capacity payment passed on to all PJM ratepayers in the PJM region (comprised of all or parts of thirteen states and Washington, D.C.),³²⁵ this state-manipulated behavior, compared to what would occur absent such state influence, drives down the winning clearing price at the PJM forward-capacity auction, resulting in lower clearing prices and capacity

³¹⁸ *Id.* at 775–77.

³¹⁹ *Id.* at 774. Judge Posner noted that the petitioners failed to provide any estimates of costs and benefits associated with the new facilities to contradict MISO's estimated \$297 million cost savings. *Id.*

³²⁰ *PPL EnergyPlus, LLC v. Hanna*, 2013 WL 5603896, at *29, *33–36. After conducting a competitive bid process with public utilities, the BPU is directed to enter into standard offer capacity agreements ("SOCAs"), which are long-term fifteen-year contracts that guarantee the state-selected generating companies a fixed price for their capacity. *Id.* at *19.

³²¹ See *N.E. Hub Partners, L.P. v. CNG Transmission Corp.*, CIV.A. 1:CV-99-0082, 2000 WL 33912020, at *1 (M.D. Pa. Apr. 10, 2000), *rev'd*, 239 F.3d 333 (3d Cir. 2001) (a state regulatory process was field preempted where the result of such process was within federal authority).

³²² *Hanna*, 2013 WL 5603896, at *33–36.

³²³ *Hines*, 312 U.S. at 67–68 (state law will be preempted if it stands as an obstacle to the accomplishment and execution of the full purposes or objectives of Congress).

³²⁴ *Hanna*, 2013 WL 5603896, at *36. After the New Jersey BPU selects a generator program, it enters into SOCAs with the BPU, which obligates the generator to produce a fixed amount of electricity that is sold to New Jersey retail utilities in return for a fixed price for the power. *Id.*

³²⁵ *About PJM*, PJM, <http://www.pjm.com/about-pjm.aspx> (last visited Feb. 26, 2014), <http://perma.cc/DN85-C6RK>.

revenues for all power generators than if such state-subsidized entrants had not been allowed to bid under these circumstances.³²⁶

There is a federal district court decision in Maryland invoking two prongs of the Constitution.³²⁷ It construes Maryland's "contract for differences" requiring local utilities to enter into long term PPAs. The utilities pay a cost equal to the difference between the FERC-approved PJM market clearing price and a contractually established Maryland regulatory benchmark price. As to the Supremacy Clause compliance, the plaintiffs assert that Maryland's program is a state-sponsored wholesale rate disguised as a contract with specific in-state generators. Maryland's "contract for differences" (CfD) program shifts power from the federal government to the state, disrupting FERC-approved wholesale power markets. Maryland ratepayers supply the wedge price between the winning PJM bid and the PPA rates. This wedge will artificially suppress the capacity payments cleared for all generators. In 2013, the court found "that Congress intended to use the FPA to give FERC exclusive jurisdiction over setting wholesale electric energy and capacity rates" and therefore held the state action invalid under the doctrine of field preemption.³²⁸

Several other state programs have not been challenged yet. Although never challenged, and where no projects ever were successfully constructed thereunder, Connecticut's "150 program," requiring regulated utilities to purchase approximately 150 Mw of renewable power under long-term PPAs with state-mandated above-market prices having a cumulative value of \$689 million, were ordered by state law.³²⁹

Other states have proceeded with feed-in tariffs. Vermont, one of a few U.S. states implementing feed-in tariffs despite the clear legal prohibitions on such state actions, was challenged in 2013 at FERC as to the level of the tariffs it ordered the utilities to pay. Oregon, which has a feed-in tariff, was criticized in hearings because the subsidy was deemed not transparent or disclosed, alleged to be inequitable, and too high in price.³³⁰ A business professor who profited from the Oregon feed-in tariff confessed that it was much too profitable.³³¹ The Oregon Public Utility Commission (PUC) continued the feed-in tariff unchanged at a rate of 55 to 65 cents/Kwh for solar generation of less than 100 Kw capacity per unit, or about 600% times the value of the wholesale power to the system.³³²

³²⁶ *Id.*

³²⁷ *Nazarian*, 2013 WL 5432346, at *28–31.

³²⁸ *Id.*

³²⁹ Lisa Wood, *Connecticut Renewable Projects Struggling Despite Power Purchase Contracts*, *Report Says*, ELEC. UTIL. WK., Sept. 19, 2011, at 20–21.

³³⁰ Pam Russell, *Oregon Parties Tell PUC Changes Are Needed in Six-Month Old Solar Feed-In Tariff Program*, ELEC. UTIL. WK., Dec. 20, 2020, at 21.

³³¹ *Id.*

³³² *Id.*

IV. STATE ADMINISTRATIVE LAW CHALLENGES

A. California State-Law-Based Carbon Challenges

Assembly Bill 32 (“A.B. 32”) has been challenged multiple times on state law claims by greenhouse gas (GHG) emission-emitting parties, by parties outside the state engaging in interstate commerce, and by environmental and citizen groups.

1. Low Carbon Fuel Standard

The Low Carbon Fuel Standard (LCFS) program was successfully challenged on federal constitutional grounds at trial, with the U.S. Court of Appeals for the Ninth Circuit reversing on appeal, as examined above.³³³ The LCFS regulates transportation fuels that are “sold, supplied, or offered for sale in California” and focuses on the “carbon intensity” of fuels, a metric designed to assess “the amount of lifecycle greenhouse gas emissions, per unit of energy of fuel delivered, expressed in grams of carbon dioxide per megajoule.”³³⁴ California’s LCFS requires that fuel suppliers reduce the carbon intensity of gasoline and diesel by 10 percent compared to a 2010 baseline by 2020, and is designed as a model rule for other states and regions to follow.³³⁵

Distinct from the successful federal constitutional challenge in federal trial court,³³⁶ in *Poet, LLC v. California Air Resources Board* the largest ethanol producer in the United States in 2013 challenged the LCFS rule in California state court by alleging a failure to comply with the California Environmental Quality Act (CEQA).³³⁷ The plaintiffs also contended that the California Air Resources Board (CARB) violated the Administrative Procedure Act by excluding certain emails from consultants in the rulemaking file made available to the public.³³⁸ The trial court found against the challengers but was reversed on appeal.³³⁹ The appellate court held that California had, in fact, violated CEQA and the California Administrative Procedure Act by approving the regulation before the re-

³³³ See *supra* notes 112–165 and accompanying text.

³³⁴ *Rocky Mountain Farmers Union v. Goldstene*, 843 F. Supp. 2d 1071, 1080–81 (E.D. Cal. 2011).

³³⁵ See *supra* notes 101–111 and accompanying text.

³³⁶ See *supra* notes 112–133 and accompanying text.

³³⁷ *Poet, LLC v. Cal. Air Res. Bd.*, 218 Cal. App. 4th 681, 698 (2013). *Poet* argued that CARB failed to respond to numerous public comments, that it omitted documents from the rulemaking file, and that the LCFS will lead to increased GHG emissions, not the reductions it promises. *Id.* *Poet* alleged that CARB’s LCFS rule exceeds the scope of authority delegated to it by the legislature. *Id.* at 727.

³³⁸ *Id.* at 698. The emails discussed the computer model that CARB used to calculate the indirect carbon emissions attributable to ethanol due to land-use changes caused by the increased demand for the crops used to produce ethanol. *Id.*

³³⁹ *Id.* at 766–68.

quired review under CEQA.³⁴⁰ After ruling against the state, however, the court refrained from enjoining the regulation under state law.³⁴¹ The California appeals court denied the state's request for rehearing. The parties were directed to submit comments about remedies for these violations.³⁴²

2. CEQA Compliance and Process for New Projects

There was a challenge by a respected environmental organization to a California statute attempting to limit the scope of review of environmental approvals for carbon-neutral development projects that would spend at least \$100 million on construction in the state.³⁴³ The California statute would truncate review of a challenge to compliance with CEQA.³⁴⁴ Assembly Bill 900 ("A.B. 900") allowed legal challenges filed pursuant to alleged failures under CEQA to bypass the trial court and go directly to a state court of appeal on a fast-track. When A.B. 900 was challenged, the court held that such limitations were unconstitutional under state law given constitutional mandates allowing writs of mandamus to be brought in trial courts.³⁴⁵ Separately, in mid-2013, two environmental groups sued California for giving only the state supreme courts exclusive jurisdiction over decisions involving the siting and permitting of natural gas-fired power plants.³⁴⁶

3. Cap-and-Trade Auction Litigation

The California decision to implement an auction process for allowance distribution, raising money from the auction of allowances to covered entities to emit carbon, was challenged by the California Chamber of Commerce at the end of 2012 in *California Chamber of Commerce v. California Air Resources Board*.³⁴⁷ The complaint asserted that Assembly Bill 32 ("A.B. 32") does not

³⁴⁰ *Id.*

³⁴¹ *Id.*

³⁴² *Id.*

³⁴³ A new headquarters in Cupertino for Apple and a new 750-megawatt solar project in Riverside County had qualified for this limitation, prior to challenge.

³⁴⁴ *Planning and Conservation League v. California*, No. RG 12626904, Cal. Super. Ct. (Mar. 29, 2013), available at <http://apps.alameda.courts.ca.gov/domainweb/service?Servicename=DomainWebService&PageName=Image&ID=2&Parent=20429158&Action=28915510>; see also *California Court Says New Judicial Review Process for Green Projects Unconstitutional*, BLOOMBERG BNA (Apr. 4, 2013), http://info.bna.com/climate/summary_news.aspx?ID=235237, available at <http://perma.cc/CS4R-NXVB>.

³⁴⁵ *Planning and Conservation League v. California*, No. RG 12626904, Cal. Super. Ct. (Mar. 29, 2013).

³⁴⁶ *Communities for a Better Env't v. Energy Res. Conservation and Development Comm'n*, No. RG13-681262, Cal. Super. Ct. (May 29, 2013).

³⁴⁷ *Verified Petition for Writ of Mandate and Complaint for Declaratory Relief at ¶¶ 9–14*, Cal. Chamber of Commerce v. Cal. Air Res. Bd., Cal. Super. Ct. (2012) (No. 34-2012-80001313), 2012

authorize CARB to impose fees other than those needed to cover the ordinary administrative costs of implementing a state emissions regulatory program.³⁴⁸ The California Chamber of Commerce claimed that CARB itself projected to raise a total of \$70 billion, which is well in excess of that necessary to regulate the conduct of the entities paying the fees.³⁴⁹ The Sacramento Superior Court heard oral arguments in May 2013 and decided that the auction was not a tax in disguise. At the end of 2013, judgment was entered against the plaintiffs and petitioners on all causes of action, including that the high revenues to be generated through auctions constitute an impermissible tax.³⁵⁰

A separate, subsequent 2013 suit brought by different plaintiffs challenged the California GHG allowance auctions under its emissions cap-and-trade program as an unconstitutional tax or fee,³⁵¹ and raised similar concerns to those in the *Chamber of Commerce* litigation.³⁵² In *Morning Star Packing Co. v. CARB*, Morning Star argued that the auction revenues cannot be characterized as valid regulatory fees because the revenues are not limited to the reasonable costs of any regulatory program.³⁵³ Morning Star further asserted that CARB has not established any reasonable relationship between the revenues generated by bids made at auction and either the regulatory burdens posed by auction bidders or the benefits auction bidders receive from the regulatory program, and that the cap-and-trade-regulation does not prohibit the revenue from being used for purposes that are unrelated to the regulatory program.³⁵⁴ Morning Star also argued that the cap-and-trade regulation is *ultra vires* because A.B. 32 neither explicitly nor implicitly authorizes CARB to generate billions of dollars of revenues for

WL 5520864. The issuance and oversight of offsets has been performed by private parties, including the Climate Action Reserve.

³⁴⁸ *Id.*

³⁴⁹ *Id.*

³⁵⁰ *Cal. Chamber of Commerce v. Cal. Air Res. Bd.*, No. 34-2012-80001313, Cal. Super. Ct. (2013).

³⁵¹ *Morning Star Packing Co. v. Cal. Air Res. Bd.*, No. 34-2013-80001464, Cal. Super. Ct. (April 16, 2013). The suit asked the court to declare that “the auction and revenue generating provisions” of the cap-and-trade regulation are unconstitutional under Proposition 13, the ballot initiative that requires a two-thirds vote on taxes, or under Proposition 26, a ballot initiative requiring a super-majority vote on some fees and levies. A.B. 32 did not pass on a two-thirds vote, nor did S.B. 1018, A.B. 1532, S.B. 535, and A.B. 1463, which stipulate how the auction revenues must be spent. The plaintiff, Morning Star Packing, participated in CARB’s two prior auctions, spending \$379,860 on allowances.

³⁵² *Cal. Chamber of Commerce v. Cal. Air Res. Bd.*, No. 34-2012-80001313, Cal. Super. Ct. (Nov. 13, 2012).

³⁵³ Petitioners’ and Plaintiff’s Memorandum of Points and Authorities in Support of Motion for Issuance of Writ of Mandate at 2–3, *Morning Star*, Cal. Super. Ct. (June 10, 2013) (No. 34-2013-80001464).

³⁵⁴ *Id.*

California by selling emission allowances at auction.³⁵⁵ The court rejected the plaintiff's arguments in late 2013.³⁵⁶

4. Cap-and Trade Scoping Plan Challenge

CARB's scoping plan for selecting the mechanism for implementation of carbon control in California was challenged by a group representing lower-income state citizens in *Association of Irrigated Residents v. California Air Resources Board*.³⁵⁷ California in 2011 lost this suit against its carbon control cap-and-trade regulation,³⁵⁸ resulting in an additional year of delay in the start of the entire regulatory program until CARB made any revisions to comply and "comes into complete compliance with its obligations" in 2013.³⁵⁹ The petitioners claimed that CARB violated CEQA in the preparation of its Functional Equivalent Document ("FED").³⁶⁰

The court did find that CARB improperly approved its Scoping Plan prior to completing the legally required environmental review.³⁶¹ The court held that the scoping plan was selected by CARB prior to the public hearing on it, rather than after, and that the CEQA review was "approved" prior to the requirement to take public comment prior to a decision.³⁶² The court issued a writ of mandate

³⁵⁵ *Id.*

³⁵⁶ *Morning Star*, No. 34-2013-80001464, Cal. Super. Ct.; MORRISON & FOERSTER, CALIFORNIA'S CAP-AND-TRADE AUCTION IS NOT A TAX: COURT DECIDES "CLOSE QUESTION" 1-2 (2013), available at <http://www.mofo.com/files/Uploads/Images/131115-Cap-and-Trade-Not-a-Tax.pdf> and <http://perma.cc/YB65-ZKWK> (discussing the decision by Sacramento Superior Court Judge Timothy Frawley).

³⁵⁷ *Ass'n of Irrigated Residents v. Cal. Air Res. Bd.*, 206 Cal. App. 4th 1487, 1487 (2012).

³⁵⁸ *Id.* The petition alleged specifically that the scoping plan "(a) fails to achieve the maximum technologically feasible and cost-effective reductions; (b) fails to require emissions reduction measures for significant sources of emissions, namely industrial and agricultural sources; (c) does not develop any policies to avoid the pitfalls of other greenhouse gas emission trading programs and fails to address how ARB will monitor and enforce reductions in a regional market; (d) fails to assess the likely impacts of proposed policy choices and regulatory programs and fails to propose policies to ensure that compliance with chosen measures will not disproportionately impact already overburdened communities; and (e) fails to prevent increases in criteria and toxic co-pollutant emissions." *Id.* at 1493.

³⁵⁹ *Id.* at 1487; Lisa Weinzimer & Geoffrey Craig, *Delaying California CHG Cap-and-Trade Regime a Year Draws Support From Stakeholders*, ELEC. UTIL. WK., July 4, 2011, at 11-12. The court issued a writ of mandate enjoining CARB from any further cap-and-trade rulemaking until it has complied with CEQA by analyzing alternatives to cap-and-trade and public comments. This delayed the plan until 2013. Tentative Statement of Decision, *Ass'n of Irrigated Residents*, Cal. Super. Ct. (2011) (CGC-09-509562).

³⁶⁰ This alleged that CEQA was violated by "(1) failing to adequately analyze the impacts of the measures described in the Scoping Plan, (2) failing to adequately analyze alternatives to the Scoping Plan; and (3) impermissibly approving and implementing the Scoping Plan prior to completing its environmental review." Tentative Statement of Decision, *Ass'n of Irrigated Residents*, Cal. Super. Ct. (2011) (CGC-09-509562).

³⁶¹ *Id.*

³⁶² *Id.*

enjoining CARB from any further cap-and-trade rulemaking until it complied with CEQA by analyzing alternatives to cap-and-trade and considered relevant public comments.³⁶³ This delayed the program implementation for approximately a year until 2013.³⁶⁴ When re-promulgated a year later in 2012 with a more robust consideration of alternatives, CARB's Climate Change Scoping Plan and choice of the previous cap-and-trade option was upheld by a state court.³⁶⁵

5. Additionality in California

In 2012, advocates for low-income interests in *Citizens Climate Lobby v. California Air Resources Board* attacked the California climate control legislation on the basis that its requirements would be met principally by offsets from exterior state or international locations, without any assurance that the offsets would be "additional" to business-as-usual locally.³⁶⁶ First, it was argued by the challengers to be *ultra vires* to the power of CARB.³⁶⁷ Second, the challengers argued that the standards implementing the offset program were arbitrary and capricious, or not based on a solid administrative record.³⁶⁸ The California trial court in 2013 rejected both arguments,³⁶⁹ deferring to CARB's expertise and experience to uphold California's carbon offset sub-program.³⁷⁰ The court referred to the limited history and the lack of practical experience that these cap-and-trade systems have, and reasoned that the legislature's expertise was sufficient and the court could not choose one methodology over another.³⁷¹

B. New York and Other State Energy Regulation

There are other decisions in other states contesting clean energy or carbon regulations as a violation of state jurisdiction or authority:

- A successful suit in 2010 against New York's Regional Greenhouse Gas Initiative (RGGI) carbon regulation.³⁷²

³⁶³ *Id.*

³⁶⁴ *Ass'n of Irrigated Residents*, 206 Cal. App. 4th at 1487.

³⁶⁵ *Id.*

³⁶⁶ *Citizens Climate Lobby v. Cal. Air Res. Bd.*, No. CGC-12-519554, 2013 WL 861396, at *2 (Cal. Super. Ct. Jan. 25, 2013).

³⁶⁷ *Id.* at *12.

³⁶⁸ *See id.* at *20.

³⁶⁹ *Id.* The court concluded that the plaintiffs had "failed to demonstrate that the legislature foreclosed the use of standardized additionality mechanisms or demonstrate that [CARB] acted arbitrarily or capriciously in promulgating additionality standards." *Id.*

³⁷⁰ *Id.* at *18.

³⁷¹ *Id.* at *6.

³⁷² In a suit against the state of New York's RGGI program in 2009, New York's quick settlement had Consolidated Edison Company agreeing to pay the cogeneration project for the cost of its additional carbon allowances through the end of their pre-existing long-term contracts. In addition to the

- Another suit against New York's authorization to participate in RGGI.³⁷³
- Another suit against New York's RGGI program as an unauthorized tax that shifted costs to ratepayers.³⁷⁴
- In 2012, New York utilities challenged New York's alleged misuse of electric system benefit charge funds for non-energy-related economic development programs.³⁷⁵
- Regarding fees passed through to electric utility ratepayers, the state of Connecticut was challenged for extending a charge and diverting for general state budget purposes money assessed electric ratepayers in rates to pay the utility for stranded costs (the amount of below-market loss in the sale of utility generating assets).³⁷⁶

V. DOMESTIC AND INTERNATIONAL ENERGY IMPLICATIONS

Every animal leaves traces of what it was; man alone leaves traces of what he created.

—Jacob Bronowski

Legal concepts embodied in the U.S. Constitution shaping energy and commerce have found expression in current international law. In the European Union (EU), EU law includes prohibitions against discrimination by any one country against commerce or services originating in another EU member country.³⁷⁷ The dormant Commerce Clause protects nondiscriminatory access and flow of private U.S. commerce among the states, in ways similar to international trade agreement rules to prevent international trade discrimination. Regarding renewable energy, there are recent disputes regarding analogous in-state discrim-

Indeck project, the Brooklyn Navy Yard Co-Generation Project and Selkirk Cogen Partners also received these complete settlements of all economic impact shifted to the utility and/or its ratepayers.

³⁷³ *Thrun v. Cuomo*, 112 A.D.3d 1038, 1038 (N.Y. App. Div. 2013); G. Craig & G. Roberts, *Law-suit Disputes Legality of New York Participation in RGGI, Citing State's Lack of Legislative Approval*, ELEC. UTIL. WK., July 4, 2011, at 10. New York ratepayers argued that the program, never passed by legislature, was improper if only implemented by regulation. *Id.* This was denied procedurally on lack of standing of New York ratepayers to challenge their injury as not distinct, without reaching the merits.

³⁷⁴ The suit, *Americans for Prosperity v. Cuomo et al.* (April 2013), was dismissed in mid-2013 not on substantive grounds but on a procedural challenge to the standing of the plaintiffs to bring an action. The court held that plaintiffs had waited too long to bring the complaint and lacked an injury distinct for all consumers. *Id.*

³⁷⁵ Lisa Wood, *New York Utilities Challenge Proposal to Use Clean Energy Funds for Economic Development*, ELEC. UTIL. WK., Aug. 1, 2012, at 17. The utilities charged that the funds must be devoted to utility-based programs, rather than start-up companies and under-used technologies. *Id.*

³⁷⁶ Lisa Wood, *Connecticut High Court to Hear Dispute on Use of Utility Surcharge to Pay 2010 Budget Deficit*, ELEC. UTIL. WK., Mar. 7, 2011, at 20.

³⁷⁷ See E.U. Council Directive 2004/18/EC, art. 3, art. 53, 2004 O.J. (L134) 129.

ination similar to those involving the dormant Commerce Clause, and claims of illegal subsidy of in-country products.³⁷⁸

- The EU and Japan in 2012 successfully brought a World Trade Organization (WTO) complaint against Ontario, Canada, for requirements of domestic content of solar photovoltaic (PV) facilities eligible for a domestic feed-in tariff, as violating the General Agreement on Tariffs and Trade (GATT) and Agreement on Trade-Related Investment Measures (TRIMs).³⁷⁹
- China in late 2012 initiated a WTO challenge against a domestic content requirement of the EU regarding feed-in tariffs of Greece and Italy as violating GATT and TRIMs.³⁸⁰
- The United States in 2013 initiated a complaint against India's national solar program local requirements to use India solar cells and panels as violating GATT and TRIMs.³⁸¹
- In 2012, after determining that "an industry in the United States is materially injured as a result of subsidized imports from the PRC," the Department Of Commerce issued a final order imposing tariffs and countervailing duties on crystalline silicon PV modules and cells from China,³⁸² requiring additional duties of 18% to 250% to be deposited regarding such transactions. The matter is now proceeding to appeal in the U.S. courts.³⁸³ China retaliated by imposing tariffs of up to 57% on U.S. polysilicon exports.³⁸⁴
- In 2013, the European Commission imposed provisional tariffs on Chinese solar panels, citing Chinese subsidies.³⁸⁵ In response, China imposed tariffs

³⁷⁸ David Levine & Pamela Walther, *International Trade Actions Complicate Global Market for Renewable Energy Businesses, Particularly Solar Sector*, 44 BNA ENV'T REP. 605 (March 1, 2013).

³⁷⁹ WT/DS412, WT/DS426 at 606–07 (Dec. 19, 2012).

³⁸⁰ WT/DS452.

³⁸¹ Doug Palmer, *U.S. Challenges India's Solar Programme Restrictions at WTO*, WALL ST. J. (Feb. 7, 2013), <http://www.livemint.com/Politics/xTYjK9S5KDgDXEzivg9A3L/US-challenges-Indias-solar-programme-restrictions-at-WTO.html?ref=ms>.

³⁸² Todd Woody, *So Much for the Solar Trade War: China Panel Makers Set New Sales Records*, QUARTZ (Aug. 12, 2013), <http://qz.com/114465/so-much-for-the-solar-trade-war-china-panel-makers-set-new-sales-records/>, available at <http://perma.cc/W6VF-ENRF>. Chinese manufacturers simply avoid them by using solar cells from Taiwan for U.S.-bound panels. *Id.*

³⁸³ Brian Wingfield, *U.S. Set Anti-Dumping Duties on China Solar Imports*, BLOOMBERG (Oct. 10, 2010), <http://www.bloomberg.com/news/2012-10-10/u-s-sets-anti-dumping-duties-on-china-solar-imports.html>.

³⁸⁴ See Steven Mufson, *Chinese Tariffs May Hurt U.S. Makers of Solar Cells' Raw Material*, WASH. POST (July 23, 2013), http://www.washingtonpost.com/business/economy/chinese-tariffs-may-hurt-us-makers-of-solar-cells-raw-material/2013/07/23/01ac60a4-f3d9-11e2-aa2e-4088616498b4_story.html, available at <http://perma.cc/6WVN-T9YG>.

³⁸⁵ See Ethan Bilby & Robin Emmott, *EU-China Solar Deal Hinges on Price as Deadline Nears*, REUTERS (July 24, 2013), <http://www.reuters.com/article/2013/07/24/us-eu-china-solar-idUSBRE96N0WA20130724>, available at <http://perma.cc/4H9U-W6CP>.

on European polysilicon³⁸⁶ and wine.³⁸⁷ The EU thereafter withdrew imposition of the Chinese import tariffs.³⁸⁸

Between member states internationally, there is prohibition of law or regulations that discriminate against trade in electricity and other goods.³⁸⁹ In the United States, the Federal Power Act,³⁹⁰ which has been part of U.S. law since relatively early in the history of the creation of interstate electric grids,³⁹¹ as interpreted through the Filed Rate Doctrine³⁹² and the Supremacy Clause of the Constitution, create clear legal demarcations of what the federal government and the state governments shall regulate regarding electric energy.³⁹³ The dormant Commerce Clause prohibits even those regulations that the states have power to enact from discriminating against or burdening interstate commerce.³⁹⁴

What does this mean in terms of recent state energy policy? Assessing significant legal challenges to state sustainable energy policy and state carbon control regulation, California has been the target of an approximately comparable number of legal challenges as other states combined.³⁹⁵ This is, in part, due to California having one of the most assertive renewable energy³⁹⁶ and carbon control programs among the states.³⁹⁷ California's is the only one of the fifty states

³⁸⁶ See Li Jiabao, *China Continues Polysilicon, Wine Trade Probes*, CHINA DAILY (Aug. 8, 2013), http://www.chinadaily.com.cn/beijing/2013-08/08/content_16880440.htm, available at <http://perma.cc/55PH-TE24>.

³⁸⁷ Terril Yue Jones, *China Hits Back at EU Wine over Solar Panel Duties*, REUTERS (June 5, 2013), <http://www.reuters.com/article/2013/06/05/us-china-eu-solar-idUSBRE95403020130605>, available at <http://perma.cc/X3Q9-2YV7>.

³⁸⁸ James Kanter & Keith Bradsher, *Europe and China Agree to Settle Solar Panel Fight*, N.Y. TIMES (July 27, 2013), http://www.nytimes.com/2013/07/28/business/global/european-union-and-china-settle-solar-panel-fight.html?_r=0, available at <http://perma.cc/H5XN-E65Y>.

³⁸⁹ In 2007, Europe embarked on regional integrated electric power operation. The Central Western European (CWE) market and the European Market Coupling Company (EMCC) now create the world's largest multi-country power market, including more than half of European power flows. The EMCC's "tight volume coupling" project initiated the Nordic-German market coupling in 2009. It represents the world's largest single power market of 1816 terawatt-hours, including about sixty percent of European power consumption. *The European Market*, EMCC, <http://www.marketcoupling.com/market-coupling/european-market> (last visited Mar. 27, 2014), available at <http://perma.cc/JQY4-W6ZW>; Gillian Carr, *European Power Market: CWE's Next Challenges*, RISK.NET (Aug. 3, 2012), <http://www.risk.net/energy-risk/feature/2196426/european-power-market-series-cwe>.

³⁹⁰ 16 U.S.C. § 824a (2012).

³⁹¹ For treatment of the history of regulation of electricity in the United States, see STEVEN FERREY, *THE NEW RULES*, at app. A (2000).

³⁹² See *supra* notes 204–245 and accompanying text.

³⁹³ See *supra* notes 204–245 and accompanying text.

³⁹⁴ See *supra* notes 33–71 and accompanying text.

³⁹⁵ See *supra* notes 112–200 and 243–376 and accompanying text.

³⁹⁶ The California RPS of thirty-three percent renewable power by 2020 is one of the most assertive in the United States.

³⁹⁷ A.B. 32, 2006 Assemb. (Cal. 2006). California is one of only ten states in the United States that regulates carbon emissions. While not the first to do this, California regulates all significant car-

that adopted all five primary state regulatory mechanisms for promoting sustainable electric energy supply, each of which if not designed and implemented with legal care, can trigger legal disputes:

- Net Metering: Also employed in 85% of states.
- Renewable Portfolio Standards: Also employed in 65% of states.
- Renewable System Benefit Charges: Also employed in 33% of states.
- Carbon and GHG regulation: Also employed in 20% of the states.
- Feed-In Tariffs: Also employed in less than 10% of states.

Pursuant to the dormant Commerce Clause under Article 1 of the Constitution, California's Low Carbon Fuel Standard was challenged successfully and later reversed on appeal by a divided federal circuit court.³⁹⁸ Assessing a dozen other state challenges to energy regulation under the dormant Commerce Clause, eight of the twelve either were settled in favor of challengers or the state lost on the merits of the claim. Two ruled against the dormant Commerce Clause claims but found the state statutes unconstitutional on Supremacy Clause constitutional claims, while the remaining two have been dismissed on procedural grounds without reaching the merits of the claim or are still pending a final decision.³⁹⁹

Challenges to California's sustainable energy policy pivoting on the U.S. Constitution's Supremacy Clause have occurred in six significant suits, and California settled in favor of challengers or lost five of these six. The sixth matter was dismissed on procedural grounds without reaching the merits of the claim, leaving plaintiffs to re-file the complaint.⁴⁰⁰ Comparing this record to four similar recent challenges in other states to sustainable energy regulation pursuant to the Supremacy Clause, three of the four either were settled in some manner favorable to challengers, or the state lost the decision. The fourth matter as well as one of the originally adjudicated matters on appeal are still pending.⁴⁰¹

When litigation was initiated under *state* law claims in seven significant recent legal challenges, California either settled in favor of challengers or lost three of the five of these matters that have proceeded to a decision. On two California prevailed, while two were sidetracked on procedural grounds without reaching the merits of the claim or are still pending a final decision.⁴⁰² Compared to four New York carbon control challenges based on *state-law*-based claims, one of the four was settled in favor of challengers, while three of the four

bon emissions from all sectors of its economy, whereas the other nine states regulate only a single emission, CO₂, only from larger power generation facilities.

³⁹⁸ See *supra* notes 112–149 and accompanying text.

³⁹⁹ See *supra* notes 170–200 and accompanying text.

⁴⁰⁰ See *supra* notes 267–272 and accompanying text.

⁴⁰¹ See *supra* notes 166–203 and accompanying text.

⁴⁰² See *supra* notes 336–373 and accompanying text.

were dismissed on procedural grounds without reaching the merits of the claims or are still awaiting resolution.⁴⁰³

Employing regulation to change the pricing of commerce in electricity to encourage combined heat and power development, California went further than most states: California adopted a feed-in tariff for wholesale transactions in power, after having already been told by the courts and the Federal Energy Regulatory Commission (FERC) years before that it could not dictate above-market prices that utilities must pay for wholesale power transactions⁴⁰⁴ and another state was told by FERC that any such entered “contracts will be considered to be void *ab initio*.”⁴⁰⁵ When it did so again, in 2010, California was told again that the Constitution had not morphed into new form and it could not do so.⁴⁰⁶ Vermont also imposed a feed-in tariff, and a challenge ensued.⁴⁰⁷

The Constitution does not accommodate many exceptions where a state crosses the line to enact law beyond its own state jurisdiction over energy matters or discriminates against interstate commerce in other than the least burdensome manner. The volume and record of challenges under federal law and the Constitution to state energy regulation is demonstrative of an emergence of legal issues to the forefront of our energy policy. The success of the challenges under both federal and state law, to date, is significant and ongoing.

As a palliative measure if challenged, a state can unilaterally amend or alter its own statutes, as some states have done.⁴⁰⁸ The Constitution and federal law are not within state power to alter when a state is challenged on a violation regarding its energy policy. The irony is that every state could accomplish its objectives in ways that do not risk constitutional challenge.⁴⁰⁹ Not taking sound

⁴⁰³ See *supra* notes 374–378 and accompanying text.

⁴⁰⁴ *Indep. Energy Producers Ass’n v. Cal. Pub. Utils. Comm’n*, 36 F.3d 848, 855 (9th Cir. 1994); *S. Cal. Edison Co.*, 70 FERC ¶ 61,215, 61,678 (1995); see also Steven Ferrey, *Carbon and the Constitution: State GHG Policies Confront Federal Roadblocks*, PUB. UTILS. FORT., April 2009; Steven Ferrey, *Constitutional Barriers*, 3 AM. BAR ASS’N ENERGY COMM. NEWSLETTER (June 2006); Steven Ferrey, *Renewable Orphans: Adopting Legal Renewable Standards at the State Level*, 19 ELEC. J. 52 (2006); Steven Ferrey, *Net Zero: Distributed Generation and FERC’s MidAmerican Decision*, 17 ELEC. J. 33, 33 (2004); Steven Ferrey, *Renewable Subsidies in the Age of Deregulation*, PUB. UTILS. FORT., Dec. 1997, at 22.

⁴⁰⁵ *Conn. Light and Power Co.*, 70 FERC ¶ 61,012, 61,029–30 (1995).

⁴⁰⁶ *S. Cal. Edison Co. et al.*, 133 FERC ¶ 61,059 (2010) (order granting clarification and dismissing rehearing).

⁴⁰⁷ Paul Gipe, *Vermont FITs Become Law: The Mouse That Roared*, RENEWABLE ENERGY WORLD (June 1, 2009), <http://www.renewableenergyworld.com/rea/news/article/2009/06/Vermont-fits-become-law-the-mouse-that-roared>, available at <http://perma.cc/6XSP-VD5N>.

⁴⁰⁸ The challenges in the *Indeck* (New York), *TransCanada* (Massachusetts), California, *Riggs* (Rhode Island), and *Nazarian* (New Jersey) cases, *supra*, resulted in amendments to the state law or policy as a means to settle or moot the challenge.

⁴⁰⁹ For a discussion of how to legally administer Renewable Portfolio Standards and System Benefit Charge programs, see Ferrey, Laurent & Ferrey, *supra* note 7 (Articles in DUKE ENVTL. L. & POL’Y F. and PUB. UTILS. FORT.); Ferrey, *supra* note 7 (Article in VA. ENVTL. L.J.); Ferrey, *supra* note 7 (Article in VA. J.L. & TECH.). For a discussion of how to legally administer net metering programs,

legal advice on these issues can be costly to state citizens in both time and money. Vermont regulation of energy resulted in that regulation being constitutionally stricken and the plaintiff's costs of suit ordered to be paid by the state of Vermont and its citizens.⁴¹⁰ It can also be costly in time to advancing sustainable energy development and climate control, as evidenced by the one-year delay in implementation of California's entire Assembly Bill 32 program caused by a single lawsuit.⁴¹¹

When a state repeatedly makes program choices and employs administrative techniques that are successfully challenged as unconstitutional or in violation of law, it also alienates stakeholders in the community whose support and participation are necessary for a successful program addressing climate control and sustainable growth. For any discretionary program that expends resources, especially when other states are not making similar choices, making legally sound choices is important to maintain progress. Here, attention to basic constitutional principles of governance matter.

see Ferrey, *supra* note 11, at 267 (Article in GEO. INT'L ENVTL. L. REV.). For a discussion of how to legally administer carbon control programs, see Steven Ferrey, *Goblets of Fire: Potential Constitutional Impediments to the Regulation of Global Warming*, 35 ECOLOGY L.Q. 835, 835 (2008). For a discussion of a bullet-proof legal technique that no state has yet implemented, see Steven Ferrey, *Solving the Multimillion Dollar Constitutional Puzzle Surrounding State "Sustainable" Energy Policy*, WAKE FOREST L. REV. (forthcoming 2014).

⁴¹⁰ *Entergy Nuclear Vt. Yankee v. Shumlin*, 733 F.3d 393, 393 (2d Cir. 2013).

⁴¹¹ See *Ass'n of Irrigated Residents v. Cal. Air. Res. Bd.*, 206 Cal. App. 4th 1487, 1487 (2012).

