The Essential Role of State Enforcement in the Brave New World of Greenhouse Gas Emission Limits

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I. INTRODUCTION

In June 2005, Governor Schwarzenegger addressed the United Nations on the topic of global warming and famously declared, "I say the debate is over. We know the science. We see the threat, and we know that the time for action is now."[1] Convinced by overwhelming scientific evidence, the California Legislature passed, and the Governor signed, a landmark law, referred to as

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1. Kevin Hechtkopf, *Arnold Targets Global Warming*, CBS News, June 2, 2005, http://www.cbsnews.com/stories/2005/06/02/tech/main699281.shtml.

"AB 32," which requires the State to reduce greenhouse gas emissions to 1990 levels by 2020.[2] AB 32 poses significant, even daunting, requirements. By 2012, the California Air Resources Board will have issued extensive regulations for virtually every sector of the State's economy across all geographic regions that set forth specific actions for the reduction of greenhouse gas emissions.[3] The new regulations will use multiple mechanisms to achieve the reduction requirements, including the traditional command and control approach, market mechanisms, and regional targeting.[4] While the potential regulations and mechanisms have received a great deal of attention, much less attention has been given to an essential element of achieving the reductions: enforcement. We know from extensive experience that enforcement must be integrated into the process of creating regulations. Further, we must have enough regulators and prosecutors to ensure that enforcement is viable, appropriate and effective.

The Air Resources Board's Scoping Plan for AB 32 identifies as a key mechanism for reduction of greenhouse gases the creation and implementation of a cap-and-trade market, in which electricity generators and other significant sources of greenhouse gas emissions will be allowed to buy and sell emission units to meet an ever-diminishing "cap" on overall emissions.[5] This market may involve hundreds of millions of dollars worth of trades, which will create significant incentives for fraud, manipulation and other misconduct. We know from California's energy crisis and the recent national mortgage meltdown that market abuse combined with insufficient market oversight is a recipe for disaster.[6] Thus, when creating the rules for a cap-and-trade market, we must apply the lessons learned from these experiences and integrate market monitoring and enforcement into the market itself. By requiring market participants to sufficiently fund moni-

2. California Global Warming Solutions Act of 2006, CAL. HEALTH & SAFETY CODE §§ 38500-38599 (2006) [hereinafter AB 32].

3. *Id.* §§ 38510, 38560-62.

4. CAL. AIR RES. BD., CLIMATE CHANGE PROPOSED SCOPING PLAN ES-3-ES-4 (Oct. 2008), http://www.arb.ca.gov/cc/scopingplan/document/psp.pdf [hereinafter SCOPING PLAN].

5. *Id.* at ES-3, 30-38.

6. *See* Peter Behr, *Papers Show that Enron Manipulated California Crisis*, WASH. POST, May 7, 2002, at A01, *available at* http://www.commondreams.org/headlines02/0507-02.htm; Stephen Labaton, *SEC Concedes Oversight Flaws Fueled Collapse*, N.Y. TIMES, Sept. 26, 2008, at A1, *available at* http://www.nytimes.com/2008/09/27/business/27sec.html.

toring and enforcement efforts, the few participants tempted to try to manipulate the market will understand from the outset that market misconduct will not be tolerated. While ensuring market fairness in a market of this expected size and complexity is a tall task, it will be far more manageable if we heed the painful lesson from the California energy crisis and the recent mortgage meltdown: relying exclusively on federal market enforcement can lead to disaster.

Significant reduction of greenhouse gas emissions is a massive undertaking and a tremendous challenge. California's multi-layered and often decentralized enforcement network needs to be allowed to continue its historic enforcement role if we are to meet the challenge. In the new world of carbon constraint, California's experience with environmental enforcement provides a useful road map for effective measures, while malfunctioning energy markets and the difficulties posed by federal preemption are significant roadblocks to avoid. For our greenhouse gas reduction efforts to be successful, we must intelligently apply the lessons California has learned to ensure effective monitoring and enforcement approaches. Our experience convinces us of the essential need to integrate enforcement into all market regulations from the outset. Without such effective enforcement mechanisms, our efforts to address global warming will fail, a result that no one can accept.

II.
THE NATURE AND EXTENT OF THE GREENHOUSE GAS EMISSION REDUCTION EFFORT REQUIRES THE FULL PANOPLY OF ENFORCEMENT TOOLS

Under AB 32, California requires a greenhouse gas emission reduction to 1990 levels by 2012, which is roughly a 28 percent reduction from business-as-usual levels. From 2020 to 2050, the Governor's Executive Order directs an additional 80 percent reduction.[7] Not surprisingly, to reach the 2020 reduction mandates, the Air Resources Board's Scoping Plan identifies many possible reduction mandates across all industries and activities throughout the State, such as traditional command-and-control regulations as well as cap-and-trade market mechanisms.

7. Exec. Order No. S-3-05 (June 1, 2005), *available at* http://gov.ca.gov/executive-order/1861/.

Because greenhouse gases are emitted from a wide variety of sources, the regulatory challenge they pose is significant and will require use of all existing enforcement resources. Many of the new greenhouse gas emission reduction controls are command-and-control regulations that will fit squarely in the regulatory scheme with which California regulators and enforcers are familiar. These regulations direct emission reductions or set emission limits. Failure to meet the specific requirements is a violation of the rule, subjecting the violator to injunction and penalty. In this system, enforcement promotes deterrence because the rational economic actor seeks to avoid penalties and costs for noncompliance. In California, a network of state and local regulators and prosecutors has been enforcing such environmental regulations and programs for decades.

AB 32 and other laws requiring greenhouse gas emission reductions will cover an unprecedented number of sources and will require significant monitoring and data review to ensure compliance. As such, no single governmental agency, federal or state, has the resources to ensure compliance alone; we must use a team approach. California's multilayered system provides a potential road map for addressing this challenge. The California model divides responsibility for enforcement among multiple agencies and governments, often with overlapping mandates that are usually complementary. While the system includes some inefficiency and can result in some frustration for regulated entities, overlapping jurisdiction tends to increase the likelihood of enforcement and compliance by increasing the number of eyes and ears evaluating compliance. Done correctly, efficient enforcement results in greater adherence from the regulated community, greater protection of human health and the environment, and greater fairness for the vast majority of businesses that follow the regulatory requirements.

Federal environmental laws, typically, provide a floor for environmental protection, but state and local jurisdictions may be empowered to enact laws that are broader in scope or set higher standards.[8] California has exercised its authority to enact greater environmental protection in many instances, often influencing the environmental standards for the rest of the nation.[9] Under

8. *See, e.g.*, Clean Air Act, 42 U.S.C. § 7543 (1990); Resources Conservation and Recovery Act, 42 U.S.C. § 6901 (1976); Clean Water Act, 33 U.S.C. § 1370 (1972).

9. *See, e.g.*, Patrick Parenteau, *Lead, Follow, or Get Out of the Way: The States Tackle Climate Change with Little Help from Washington*, 40 CONN. L. REV. 1453,

this overlapping enforcement system, in most instances, state and local prosecutors and regulatory agencies can enforce both federal and state laws. State and local authority is essential because federal agencies, most notably the US Environmental Protection Agency (US EPA), simply do not have the resources necessary to adequately enforce the federal statutes. As a result, many states, including California, receive funding for state implementation of certain aspects of environmental programs mandated by federal law, including state-led enforcement efforts. This system of overlapping authorities and responsibilities among different governmental agencies and levels of government is not without challenges, as some in the regulated community may struggle to comply with competing—and at times conflicting—federal, state, and local requirements. Nonetheless, the benefits of significantly increased enforcement of environmental laws through the inclusion of state and local authority far outweigh the difficulties caused by different regulatory requirements. California's experience underscores the need for a strong state and local role in enforcing both command-and-control and cap-and-trade regulations for an effective greenhouse gas emission reduction program.

Across the United States, state and local authorities account for at least 80% of all environmental enforcement activities.[10] To illustrate the point, US EPA Region IX, which has inspection and enforcement responsibility for California, Nevada, Arizona, Hawaii and the Pacific Territories, employs approximately 850 personnel throughout that entire region. By comparison, the California EPA and its six state boards, departments and office employ about 4,500 employees and partners with approximately 2,000 full-time local California environmental regulators and thousands more in support of their activities. The thirty-five air pollution control districts regulate air emissions at a regional and local level, the fifty-eight county agriculture commissioners regulate pesticide use at the county level, the nine Regional Water Quality Control Boards regulate discharges to water at a regional level, the fifty-five local enforcement agencies regulate solid

1454, 1467 (2008) (noting that California has set its own stricter vehicle emissions standards under § 209(b) of the Clean Air Act and that 16 states have adopted California's standards).

10. ENVTL. COUNCIL OF STS., ON ENVTL. FEDERALISM 1 (2008), http://www.ecos.org/files/3329_file_Resolution_00_1_2008_version.pdf; ENVTL. COUNCIL OF STS., STATE ENVTL. AGENCY CONTRIBUTIONS TO ENFORCEMENT AND COMPLIANCE 11, 13 (2001), http://www.ecos.org/files/687_file_ECOS_20RTC_20f.pdf.

waste, and the eighty-four Certified Unified Programs Agencies regulate hazardous waste and hazardous materials locally and regionally.[11] Further, most of the state and local agencies have administrative enforcement authority, and state, county and large city prosecutors have authority to enforce federal and state environmental laws.

While California's experience in enforcing environmental laws is substantial, the global warming challenge is unique. Most environmental laws focus on a particular medium (air, water, land), type of threat (hazardous waste, air pollution, water pollution) or distinct aspect of threats to human health.[12] Others provide procedural review[13] or a scientific response to a particular threat.[14] By contrast, the nature and extent of greenhouse gas emission reduction pose problems of significantly greater scale.[15] As a result, our actions to reduce emissions must likewise proceed on a significantly greater scale, along with a concomitant enforcement structure to ensure a consistent, effective and coordinated enforcement of the law.

Reporting requirements will be the backbone of much of the compliance effort. Accurate emissions data is a core requirement for an effective cap-and-trade emission reduction market. While existing California and federal environmental laws include various reporting requirements (some involving self-reporting, and others requiring on-going maintenance of records), the size of this market and financial incentives to game the system will require us to develop monitoring techniques which leave little if any doubt as to their reliability. Consistent and rigorous enforcement of these reporting requirements will be essential.

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11. CALIFORNIA ENVTL. PROT. AGENCY, 2007 CONSOLIDATED ENVTL. ENFORCEMENT REPORT (2007), http://www.calepa.ca.gov/Enforcement/Publications/2007/EnvLawReport.pdf.

12. Examples include the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. §§ 9601-9675 (2006); Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6901-6992 (2006); Clean Air Act (CAA), 42 U.S.C. § 7543 (2006); and Clean Water Act (CWA), 33 U.S.C. §§ 1251-1387 (2006).

13. *See, e.g.*, National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321-4347 (2006); and California Environmental Quality Act (CEQA), CAL. PUB. RES. CODE § 21002 (2008).

14. *See, e.g.*, Endangered Species Act (ESA), 16 U.S.C. §§ 1531-1544 (2006).

15. DANIEL BODANSKY, PEW CTR. ON GLOBAL CLIMATE CHANGE, INT'L CLIMATE EFFORTS BEYOND 2012: A SURVEY OF APPROACHES (2004), *available at* http://www.pewclimate.org/docUploads/2012%20new.pdf.

From the outset, state and federal governments must work on an integrated strategy for compliance and enforcement. California will need to use its multilayered, often decentralized, command-and-control enforcement structure to enforce emission reduction regulations. The challenge posed by global warming cannot be met if federal and state schemes are at odds with each other or if there is the threat of federal preemption (discussed in Part V, infra) of state enforcement. California has been an essential part of environmental enforcement over the past decades. As we move forward with greenhouse gas emission reduction efforts, the states' contribution and role will need to be substantial and likely increase if the effort is to succeed.

III.
THE CAP-AND-TRADE MARKET POSES SIGNIFICANT ENFORCEMENT CHALLENGES

AB 32 authorizes, but does not require, the creation of a cap-and-trade market for reduction of greenhouse gas emissions. Pursuant to the Air Resources Board's Scoping Plan, California is proceeding with a cap-and-trade market, focusing initially on emissions from the large industrial facilities and electricity generation sectors.[16] Creation of such a market is a substantial undertaking, and while the European greenhouse gas emissions trading market, the Regional Greenhouse Gas Initiative (RGGI) market,[17] certain voluntary greenhouse gas emission credit markets, and cap-and-trade markets for other air pollutants currently exist and provide important models, the history of those entities is short and the learning curve steep. The challenges posed by the new cap-and-trade market are magnified by the potential sums of money at issue. Billions of dollars of credits are likely to be traded if the market functions fully, with even more at stake if the California market is part of a Western United States market, a national market or even an international market. The size of greenhouse gas allowance (emission reduction credit) trading in the secondary market could dwarf most other commodity markets with which we are familiar. Not surprisingly, then, the challenges posed for market monitoring and enforcement are substantial, and to a certain extent, new.

16. SCOPING PLAN, *supra* note 4, at 31.

17. Regional Greenhouse Gas Initiative, http://www.rggi.org/home (last visited Mar. 23, 2009).

The concept of a greenhouse gas emissions allowance cap-and-trade market for the electricity and industrial facilities sectors is reasonably straightforward. Generators of electricity and industrial facilities that emit certain amounts of CO_2 will be subject to a cap on their emissions. Each emitter must acquire allowances, by free allocation, auction or otherwise, to match its initial level of emissions. Then, over a specified period of time, the emissions cap declines (meaning that the number of new allowances made available by the State decline), and the generators and industrial facilities must reduce their emissions because there will be fewer allowances available to them. If the emitter can reduce emissions to a greater extent than required by the cap, the emitter may sell any "excess" allowances to other emitters that are unable to reduce their own emissions consistent with the cap. In theory, companies will take actions to reduce emissions as long as the price of an allowance reduction credit exceeds the price of taking the action to reduce emissions. As the cap declines, the number of new allowances decline and the value of these allowances likely increases.

Creating market rules and ensuring fair play in the market is a more difficult task. The command and control regulations that will govern the emission reporting and allowance surrender by an initially limited number of large emitters should be fairly easy to implement. But the primary market system that is now being created must be carefully defined and monitored and emissions caps must be carefully set and market manipulation and gaming must constantly be assessed. Moreover, a cap-and-trade market of this type will give rise to secondary markets involving derivatives, such as options trading, and credit-backed securities. An unchecked secondary market could adversely impact the price of allowances to a point that could frustrate the goals of the entire system. As the financial scale of the primary market and secondary markets increases, the incentives for potential manipulation and fraud increase as well.

California witnessed firsthand the impacts of bad market design and an abject failure of sufficient market monitoring, oversight, and enforcement in the energy crisis of 2000-01.[18] More recently, the nation has suffered the consequences of a market operating without sufficient oversight and enforcement through the meltdown of the mortgage market and mortgage-backed se-

18. *See* Labaton, *supra* note 6.

curities.[19] We cannot afford to repeat these experiences in our greenhouse gas cap-and-trade market. The stakes, both in dollars and in climate change impacts, are simply too high.

In conjunction with AB 32 and the Scoping Plan, California is participating in the creation of a cap-and-trade system in partnership with other American states and Canadian provinces.[20] The Western Climate Initiative (WCI) seeks to link the respective state and province market systems, as they are adopted in each jurisdiction, with the same set of market rules. By doing so, the WCI cap-and-trade market will enjoy greater market efficiencies and greater greenhouse gas reductions than a California only cap-and-trade market through larger scale. Of course, the larger scale, and the cross-jurisdictional nature of the endeavor will create additional challenges, not the least of which is enforcement. How, for example, will violations of market rules in California be prosecuted if the fraud occurs as a result of sales in other states? Who has authority to prosecute? Because enforcement is essential to fair and viable market operation, these issues must be resolved from the outset. Planning the enforcement regime must be part of forming the market.

Some elements of market enforcement are well established. Market transactions and market rules should be as clear as possible. Market monitoring—evaluation of gaming, fraud and misrepresentation—must be robust. Every market participant must agree to the rules of the market and to the jurisdiction of regulators and prosecutors, and market fees must be sufficient to fund market monitoring and market enforcement so that there is no question whether violations will be punished. Sanctions must be sufficient to deter misconduct. Even a million-dollar penalty may be woefully insufficient in a market where a billion-dollar fraud is possible. For serious violations, criminal sanctions should be available and the recovery of ill-gotten gains needs to be efficient. Federal, state, and local regulators and prosecutors must be able to cooperate on investigations and prosecutions. Preemption of state remedies should be avoided, because federal remedies are often incomplete and federal resources are often

19. *See* Behr, *supra* note 6.

20. The Western Climate Initiative presently includes 11 "partner" and numerous "observer" jurisdictions. The partner jurisdictions are California, Oregon, Washington, Arizona, New Mexico, Utah, Montana, British Columbia, Manitoba, Ontario and Quebec. W. Climate Initiative, http://www.westernclimateinitiative.org/ (last visited Mar. 23, 2009).

insufficient. Clear rules and clear consequences for violations are key to a well-functioning market.

We provide below some of the specific lessons of California's energy crisis relevant to the cap-and-trade markets in the hope of avoiding a similar result.

IV.
CALIFORNIA'S EXPERIENCE WITH ENERGY MARKETS PROVIDES IMPORTANT LESSONS

California's 2000-2001 energy crisis provides multiple lessons for market pitfalls and a strong cautionary tale for those who would ignore the essential nature of market monitoring and enforcement. In 1996, following a study by the California Public Utilities Commission and extensive negotiations in the Legislature, California enacted legislation to transition its electricity system from regulated monopolies to a competitive wholesale electricity market. The governor at the time said the legislation was "a major step in our efforts to guarantee lower rates, provide consumer choice and offer reliable service, so no one literally is left in the dark."[21] The new law made dominant the role of wholesale electricity markets and market-based pricing.

California's electricity market experiment failed. In 1999, the first full year of deregulation, Californians paid $7.4 billion for wholesale electricity. In 2000, the cost was $27.1 billion, and a year later, another $26.7 billion. The state's second largest utility filed for bankruptcy protection, and all three major utilities ceased purchasing power for their customers, forcing the state to enter the electricity business. As the Ninth Circuit found in one of dozens of court proceedings resulting from the crisis, "[d]espite the promise of truly competitive market-based rates, the California energy market was subjected to artificial manipulation on a massive scale. With [the Federal Energy Regulatory Commission] abdicating its regulatory responsibility, California consumers were subjected to a variety of market machinations, such as 'round trip trades' and 'hockey-stick bidding,' coupled with manipulative corporate strategies, such as those nicknamed 'FatBoy,' 'Get Shorty,' and 'Death Star.'"[22]

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21. Dan Morain, *Deregulation Bill Signed by Wilson; Utilities: Law Will Make Electricity Providers Competitive by 2000. Firms Will Cut Residential Rates but Can Add Charges to Recoup Bad Investments*, L.A. TIMES, Sept. 24, 1996, at A3.

22. California *ex rel.* Bill Lockyer v. Fed. Energy Regulatory Comm'n, 383 F.3d 1006, 1014-15 (9th Cir. 2004), *cert. denied*, 127 S. Ct. 2972 (2007).

As California again turns to markets valued in the hundreds of billions of dollars, this time as a mechanism for reduction of greenhouse gas emissions, we must learn from the lessons of the energy crisis. As the Ninth Circuit made clear, there is little doubt that the federal energy regulator (FERC) wholly abdicated its regulatory function with respect to the California energy markets. Clearly, that failure must not be repeated with respect to emissions trading markets.[23] We must have a firm commitment from the outset to a robust regulatory system, one that takes violations of market rules seriously and acts with alacrity at the first signs of attempted manipulation.

The energy crisis gashed California's economy, gouged electricity ratepayers and left state regulators and prosecutors to fend for themselves. Rather than work cooperatively with state recovery and prosecution efforts, FERC, more often than not, precluded state attempts to recover massive overcharges, presented roadblocks to discovery of market information, and acted as advocates for electricity marketers rather than consumers. In addition, FERC dusted off a one-hundred-year-old legal doctrine designed for a nonmarket monopoly system and used it as a legal bar to state enforcement and recovery. This time around, we must ensure cooperation among enforcement agencies at all levels, from the outset of the market to any crisis and its aftermath. The federal government and the federal system cannot run roughshod over state and local enforcement.

V.
FEDERAL PREEMPTION OF STATE ENFORCEMENT POSES SIGNIFICANT RISKS

Federal preemption of state enforcement actions had a devastating impact on California's attempts to deal with its energy crisis. If at all possible, it is essential that we avoid a similar situation with greenhouse gas emission reductions.

Preemption of state enforcement may take many forms. Congress could, for example, create a cap-and-trade market for reduction of greenhouse gas emissions and simply preclude state enforcement for violation of market rules. Congress could foreclose state command-and-control laws and enforcement too.

23. Apparently, the lesson was not learned. *See* Maura Reynolds, *Regulators 'Failed Miserably' in Madoff Case, Lawmakers Charge*, L.A. TIMES, Jan. 6, 2009, *available at* http://www.latimes.com/business/la-fi-madoff6-2009jan06,0,2822519.story.

States might still have recourse to enforcement of state criminal laws, such as anti-fraud statutes, depending on the extent of congressional preemption.[24]

A cap-and-trade market, like an electricity market, will operate within states, even if it is a national market. Victims of market manipulation or fraud will reside in states, and the economic impact of a market meltdown most certainly will be felt by states. In the aftermath of the energy crisis, companies charged with market manipulation and antitrust violations challenged the authority of California to pursue the most basic remedies under state and federal antitrust laws and unfair business practice laws, based on various claims of preemption under the Federal Power Act.[25] In multiple cases, federal courts confirmed that most legal remedies were preempted for both states and consumers seeking recourse to market manipulation.[26]

After paying billions of dollars in energy overcharges because of fraud, and manipulation, California and its citizens were left to rely primarily on FERC and secondarily on the Securities and Exchange Commission (SEC) and Commodities Futures Trading Commission (CFTC) to compensate them. The result has been short of satisfactory. FERC continues to this day to refuse to order refunds for billions of dollars of acknowledged overcharges, and the SEC and CFTC took virtually no action in response to the crisis. The absence of state enforcement authority to seek redress contributed substantially to Californians' mistrust of the market and promoted its demise. We should not repeat this mistake as we move forward with federal programs for greenhouse gas reductions.

Inevitably, Congress will pass laws creating a federal program in response to global warming and greenhouse gas emissions, likely including a national cap-and-trade market for a segment of the emissions. It is equally predictable that various industries im-

24. *See* Cal. v. ARC Am. Corp., 490 U.S. 93, 100-02 (1989) (holding that there is a presumption against preemption for fields traditionally occupied by states and further holding that Congress intended to supplement rather than preempt state antitrust laws).

25. Lockyer v. Fed. Energy Regulatory Comm'n, 383 F.3d 1006, 1013 (9th Cir. 2004), *cert. denied*, 127 S. Ct. 2972 (2007); California *ex rel.* Lockyer v. Mirant Corp., 266 F. Supp. 2d 1046, 1057 (N.D. Cal. 2003), *aff'd* 375 F.3d 831(9th Cir. 2004).

26. California *ex rel.* Lockyer v. Dynegy, Inc., 375 F.3d 831, 849-52 (9th Cir. 2004); Pub. Util. Dist. No. 1 of Grays Harbor v. Idacorp Inc., 379 F.3d 641, 647-49 (9th Cir. 2004); Pub. Util. Dist. No. 1 of Snohomish County v. Dynegy Power Mktg. Inc., 384 F.3d 756, 760-61 (9th Cir. 2004); *Mirant Corp.*, 266 F. Supp. 2d at 1057.

pacted by the legislation will lobby hard for preemption of state laws and of state enforcement of both state and federal laws. The issue of preemption of state greenhouse gas reduction laws is beyond the scope of this article, although we note that most federal environmental laws do not preempt state environmental laws on the same subject, and that the dual system has worked without undue hardship for decades.[27]

VI.
THE FILED RATE DOCTRINE HAS NO PLACE IN A CAP-AND-TRADE MARKET

A particularly harmful form of preemption that reared its ugly head in the energy crisis was the Filed Rate Doctrine. The Supreme Court created this doctrine in the 1920s to defend federal agency regulation of monopolies.[28] Entities such as railroads and electrical utilities had monopolies so that customers could not obtain the same product from competitors. As a result, Congress created federal agencies to regulate those entities and approve the rates that the entities could charge. Once the agency approved the rate (and the rate was "filed"), the agency-approved rate could not be challenged, and the entity could not vary the rate, even for a large customer. Thus, no one could challenge a filed rate after the fact, even if the agency had approved the rate based on false or faulty data provided by the entity.

In 2004, the Ninth Circuit ruled that, in the newly deregulated California energy market, FERC "approval" of a "market rate"—FERC allowing California to operate a deregulated market where there were no set, or filed, prices—was still to be considered a "filed rate," and therefore not subject to after-the-fact challenge, as long as market reporting requirements are met.[29] As a result, under many circumstances, prices charged in the electricity market could not, and cannot, be challenged, even if they are based on fraud or manipulation as they were during the energy crisis.

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27. *See, e.g.,* Resources Conservation and Recovery Act, 42 U.S.C. § 6901 (2006); Clean Water Act, 33 U.S.C. § 1370 (1972). *See also* ENVTL. COUNCIL OF STS., DELEGATION BY ENVTL. ACT (2007), http://www.ecos.org/section/states/enviro_actlist (last visited Mar. 23, 2009).

28. *See* Keogh v. Chicago & Nw. Ry. Co., 260 U.S. 156 (1922).

29. California *ex rel.* Lockyer v. Fed. Energy Regulatory Comm'n, 383 F.3d 1006, 1012-1014 (9th Cir. 2004).

The filed rate concept applies to electricity rates through a specific provision of the Federal Power Act.[30] It is a vestige of monopoly regulation of the past, with no place in a market system designed to preclude monopoly power. It is unlikely to appear in any federal legislation for a cap-and-trade market, but because of the substantial damage the doctrine has wrought in California, it is worth highlighting to show the importance of cooperation between the state and federal governments. It is essential that federal law does not preempt state enforcement efforts to enforce greenhouse gas regulations.

VII.
OTHER LESSONS LEARNED FROM THE ENERGY CRISIS

In addition to the overarching issue of preemption, we learned other enforcement lessons from the energy crisis. First and foremost, market monitoring and regulation must be robust and meaningful. FERC barely gave lip service to its monitoring function, and the California Independent System Operator, responsible for monitoring and enforcement of most of the energy bought and sold in California before and during the crisis, had only one employee assigned to market monitoring. Now, we have the additional experience of the country's recent mortgage crisis that was, in part, the result of regulatory agencies' failure to monitor derivatives markets.[31] We cannot afford a repeat of these monitoring failures.

This time around, market monitoring, regulatory oversight, and enforcement must be integrated into the cap-and-trade market from the outset. Every market participant must agree to monitoring, oversight and enforcement. Every transaction could include a modest fee to sufficiently fund the monitoring and enforcement system. For more serious incidents of market manipulation or fraud, market monitors and regulators need to have a system for referral to prosecutors, including district attorneys and state attorneys general. In the energy crisis, not one incident of fraud or manipulation ever resulted in a referral of any kind (including for further investigation) to any prosecutor in the time period leading up to the market meltdown. A few well-consid-

30. 16 U.S.C. § 824(d) (2006).

31. Tom Hamburger, *Much Blame for Financial Crisis Aimed at Congress Past and Present*, L.A. TIMES, Oct. 6, 2008, *available at* http://articles.latimes.com/2008/oct/06/business/fi-blame6.

ered prosecutions tend to have a bracing impact on market participants broadly.

In all aspects of monitoring and enforcement, we must increase cooperation among government agencies, particularly federal and state agencies. Markets are subject to regulation by multiple agencies of the federal government, and often by state and local government agencies as well. In the California energy crisis, federal agency cooperation with State prosecutors was less than ideal. Federal agencies sought to protect their turf and were often less than forthcoming in providing information essential to State investigations. The lesson from this is that in a market or series of markets involving the number of transactions and the amount of money anticipated for the greenhouse gas cap-and-trade markets, federal, state and local agencies must work together.

We learned in the energy crisis that large-scale, after-the-fact investigation and enforcement by a state attorney general is neither efficient nor ideal, but instead reflects a breakdown of the regulatory system. Even so, the ability of an attorney general and other prosecutors to investigate misconduct and prosecute wrongdoing is essential to provide deterrence. Multiple issues limited the effectiveness of the California Attorney General's investigative and enforcement actions in the energy crisis and should be addressed with respect to creating cap-and-trade market enforcement for greenhouse gases.

We believe that a multi-jurisdictional interagency task force, including agencies such as the US Department of Justice, the SEC, the FBI and the CFTC—along with their relevant State counterparts—will be essential to protect participants in the market from the most serious offenders. In addition, we believe that under appropriate circumstances federal law should be amended to allow the sharing of federal grand jury material with state and local prosecutors.

Finally, because fraud and manipulation find an easier foothold away from public scrutiny, the more transparent the market and its transactions are, the more difficult it will be to hide schemes and swindles. The electricity markets in California were opaque, and the state paid a price for that. Public confidence in the market is essential, and the ability of the public to evaluate market operation produces better markets.

VIII.
CONCLUSION

Reducing greenhouse gas emissions will be a daunting task. It cannot succeed without meaningful, consistent, and effective enforcement at the federal, state and local level. The massive potential scale of cap-and-trade markets poses unique problems and challenges. If we apply the lessons of California's experiences with command and control enforcement efforts and with the fallout from the California energy crisis, we will significantly increase our chances of success.