Regulating Electricity-Market Manipulation: A Proposal for a New Regulatory Regime to Proscribe All Forms of Manipulation

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NOTE

REGULATING ELECTRICITY-MARKET MANIPULATION:
A PROPOSAL FOR A NEW REGULATORY REGIME TO
PROSCRIBE ALL FORMS OF MANIPULATION

Matthew Evans*

Congress broadly authorized the Federal Energy Regulatory Commission
(“FERC”) to protect consumers of electricity from all forms of manipulation in
the electricity markets, but the regulations that FERC passed are not nearly so
expansive. As written, FERC’s Anti-Manipulation Rule covers only instances
of manipulation involving fraud. This narrow scope is problematic, however,
because electricity markets can also be manipulated by nonfraudulent activity.
Thus, in order to reach all forms of manipulation, FERC is forced to interpret
and apply its Anti-Manipulation Rule in ways that strain the plain language
and accepted understanding of the rule and therefore constitute an improper
extension of the fraud-based regulations to nonfraudulent activity. This Note
argues that FERC ought to fix the current anti-manipulation regulatory re-
gime, both as a matter of sound governmental regulation and to ensure fair
notice to the regulated entities. In particular, this Note contends that FERC
should redraft its Anti-Manipulation Rule and that, in doing so, it should use
the Commodity Futures Trading Commission (“CFTC”)’s rules as a model. By
adopting the CFTC’s rules, FERC could design a new anti-manipulation regu-
lation that would properly and flexibly encompass all forms of potential ma-
nipulation in the electricity markets—a solution that would allow the law
adequately to respond to future attempts at manipulation.

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Introduction

In the summer of 2013, the Federal Energy Regulatory Commission (“FERC” or “Commission”) concluded two of the largest investigations in its history. These investigations, which examined potential electricity-market manipulation by Barclays and JP Morgan, resulted in $720 million in penalties, $159.9 million in disgorged profits, and $18 million in penalties imposed against individual traders.1 Shortly thereafter, FERC launched another investigation, this time against BP America, seeking $28 million in civil penalties and $800,000 in disgorged profits.2 Such aggressive actions to regulate electricity-market manipulation indicate that FERC’s enforcement efforts are likely to continue.3 This trend has made the Commission’s regulatory scheme a significant issue, both for regulated entities and for those who use and benefit from well-functioning, reliable electricity markets.

FERC is an independent agency charged with, among other things, regulating the interstate transmission4 of electricity.5 In 1920 Congress created the Federal Power Commission—the predecessor agency to FERC—to coordinate federal control of hydroelectric projects,6 and FERC has seen its

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3. For a brief overview of FERC’s increased enforcement activity, see Heslin, supra note 1.

4. All sales of wholesale electricity are understood to be interstate because the transmission grid crosses state boundaries, except for in the majority of Texas. Most of that state’s transmission system remains within state borders and therefore qualifies as intrastate. Electricity Primer—The Basics of Power and Competitive Markets: What Is a Wholesale Electricity Market?, ELECTRIC POWER SUPPLY ASS’N, http://www.epsa.org/industry/primer/?fa=wholesale (last visited Aug. 18, 2014).


congressionally delegated authority significantly expanded ever since. The most recent example is the Energy Policy Act of 2005, which gave FERC new tools to prevent and penalize the manipulation of electricity markets, as well as bestowed on the Commission considerably more authority and responsibility. FERC’s expanded authority includes the ability to impose civil penalties of up to $1 million per day for each violation of the anti-manipulation regulations. FERC’s Office of Enforcement is the agency branch most heavily involved in regulating electricity-market manipulation. The Obama Administration has increased the office’s budget by almost 50 percent and has also increased its staff, which now includes experienced criminal investigators and specialists charged with detecting manipulation.

Defining and characterizing manipulation can be an exceedingly difficult task: the term manipulation has traditionally been used “imprecisely and indiscriminately.” At one time or another, issues such as blameworthiness, artificiality, speculation, and collusion have all served as the touchstone of manipulation. FERC promulgated its Anti-Manipulation Rule pursuant to the Energy Policy Act, and it used the Securities and Exchange Commission (“SEC”)’s own Anti-Manipulation Rule as a model. Although Congress granted FERC broad authority to proscribe all forms of manipulation, the rule is crafted specifically to proscribe only fraudulent manipulations. By prohibiting this activity, FERC sought to protect consumers from unfairly high electricity prices by ensuring that all rates are “just and

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7. For a more extensive overview of FERC’s history, see id.
8. Id.
10. For a helpful explanation of FERC’s enforcement process, see Suedeen Kelly & Julia E. Sullivan, Navigating the FERC Enforcement Process, in Inside the Minds: Complying with Energy and Natural Resources Regulations 7 (2014). FERC’s Office of Enforcement is responsible for serving the “public interest by protecting consumers through market oversight and surveillance; assuring compliance with tariffs, rules, regulations, and orders; detecting, auditing, and investigating potential violations; and crafting appropriate remedies, including civil penalties and other measures.” Office of Enforcement (OE), Fed. Energy Reg. Comm’n, https://www.ferc.gov/about/offices/oe.asp (last updated Aug. 6, 2014).
15. See infra Part II.
reasonable.” Indeed, consumers foot the bill when electricity markets are manipulated.

Understanding the basic vulnerabilities of electricity markets is key to appreciating the weakness in FERC’s regulatory regime and the manner in which electricity markets can be manipulated in nonfraudulent ways. In a simplified but realistic example, the entity that creates the electricity, the generator, does not directly deliver that electricity to consumers. Rather, the generator sells the electricity on a special market by submitting bids that specify the price, quantity, and time of generation. Based on their expected demand, utilities and large consumers, such as a major industrial factory, bid to purchase electricity on the same market, and then the utilities resell that electricity to their customers. In most of the United States, entities called Independent System Operators (“ISOs”) manage these wholesale electricity markets, which are subject to FERC regulation. The wholesale markets are complex and do not simply reflect supply and demand: they are specially designed to handle the unique characteristics of electricity production. Because electricity generation and consumption must be instantaneous and because storing electricity in batteries remains impractical for large-scale energy needs, the markets must strike a delicate balance between supply and demand in order to ensure reliable service. Furthermore, generators—that is, the physical power plants that produce electricity—face a variety of physical constraints that require special treatment in order for the generators to function properly.

Part I of this Note examines a few schemes that have recently been subject to FERC investigations in order to show that, while the schemes are manipulative, they cannot fairly be characterized as fraudulent. This Part then reviews FERC’s congressionally granted authority and its current regulations, finding that, although Congress gave FERC broad authority to proscribe and prevent all forms of manipulation of electricity markets, the regulations that the Commission ultimately promulgated remain insufficient. Part II outlines FERC’s Anti-Manipulation Rule and argues that, as a matter of fair notice and sound governmental policy, FERC should amend its regulations to cover nonfraudulent forms of manipulation. Finally, Part


17. Electricity Primer, supra note 4.


19. See, e.g., id. (describing this process in the New York market).

20. See, e.g., id. (describing this process in the New York market).


22. See Electricity Primer, supra note 4.

23. See infra note 35.
III proposes a flexible solution that adopts as a model the Commodity Futures Trading Commission (“CFTC”)’s regulatory response to electricity-market manipulation.

I. Nonfraudulent Manipulation Occurs in Electricity Markets

This Part explores two recent high-profile manipulation schemes in the electricity markets and demonstrates that such markets can be manipulated in nonfraudulent ways. In the context of securities regulation—the source of FERC’s Anti-Manipulation Rule—*manipulation* is a term of art. In *Santa Fe Industries, Inc. v. Green*, the Supreme Court stated that market manipulation “refers generally to practices, such as wash sales, matched orders, or rigged prices, that are intended to mislead investors by artificially affecting market activity.”24 While it is unnecessary to catalogue every form of manipulation, general manipulation clearly does not require fraudulent—that is, deceptive—behavior. In the examples that follow, this Note simplifies the manipulation schemes in order to articulate concisely their basic mechanisms while preserving their most important characteristics.25

In July 2013, FERC assessed $435 million in civil damages and $34.9 million in unjust profits, plus interest, against Barclays Bank PLC (“Barclays”).26 FERC claimed that, between 2006 and 2008, Barclays made money-losing trades in electricity markets to improve its position on financial instruments that were tied to the markets.27 Using such complex instruments, Barclays would effectively place a large bet on the price of electricity at some point in the future. For example, the bank’s traders would bet millions of dollars that the price of electricity would rise above a set price at a set time in the future. Barclays would then make trades on the physical electricity markets in order to inflate the price, even though the trades were often unprofitable.28 Because these trades raised the price of electricity, Barclays would win its derivative bet—and this huge win would essentially reimburse the bank for its relatively small loss in the electricity market. In other words, Barclays did not profit on the primary trade but instead profited because the primary trade manipulated prices such that the derivatives became more profitable.29 Through such legitimate transactions, manipulators made

25. For a more comprehensive description of these examples, see JP Morgan Ventures Energy Corp., 144 FERC ¶ 61,068, and Barclays Bank PLC, 144 FERC ¶ 61,041 (2013).
26. Barclays Bank PLC, 144 FERC ¶ 61,041, para. 8 (assessing civil damages of millions of dollars against Barclays employees for their actions with respect to market manipulation).
28. Robeck & Barrowes, supra note 27.
millions of dollars in the derivatives market without engaging in any “objectively 'bad' or fraudulent behavior.”

In July 2014, FERC approved a consent agreement with JP Morgan Chase & Co. and its subsidiary JP Morgan Ventures Energy Corporation (collectively, "JP Morgan") that imposed a $410 million penalty. FERC had investigated JP Morgan bidding strategies and found that twelve such strategies violated the Anti-Manipulation Rule. Many of these strategies took advantage of different accommodations in the electricity markets for the physical constraints of power plants, a tactic that allowed the company to reap $125 million in unjust profits.

ISOs bid on power using various mechanisms that make the electricity susceptible to strategic bidding schemes in which the cheapest bids do not always prevail. For example, bidders can place bids that they know the ISO will accept, even though those units of electricity are overpriced, sometimes significantly so. A bidder like JP Morgan could then submit honest offers—without providing false information or omitting any required information—while still manipulating the ISO and making millions of dollars.

30. Id. at 102.
32. Id. at paras. 69–72.
33. Id. at para. 2; see infra note 35.
35. JP Morgan’s first scheme to manipulate prices involved a feature of the market called “ramping.” Some ISOs allow generators to “self-schedule,” whereby an electricity generator like JP Morgan (although JP Morgan is known as financial firm, a part of its investment portfolio involves ownership of power plants that produce electricity) essentially pays the ISO to accept the generator’s service at specific times on the Day Ahead market—that is, a market for electricity that will be purchased the next day. Many ISOs have built-in accommodations for the physical limitations of power plants, one of which is the accommodation for ramping time. This arrangement requires the ISO to pay the generator whatever the generator bids during ramping periods, a process that is subject to certain restrictions to prevent further manipulation. JP Morgan would submit a self-schedule according to which every third hour it would produce electricity at a cheaper-than-market rate, thereby ensuring that it would be scheduled to produce electricity every third hour. The company would then submit a bid for the intervening two hours at a rate three times higher than the market rate—bids that would never be accepted but for the ramping accommodation. Therefore, the ISO would pay the slightly lower self-scheduled price every third hour, but it would then pay very high prices in the two ramping hours.

JP Morgan also used a different strategy that took advantage of ramping in order to manipulate the market. On day one, the company would submit a low Day Ahead bid for the final hours of day two. Then on day two, it would submit $999/MWh bids—the average Day Ahead price was $30/ to $35/MWh—for the first two hours of day three. Because the ISO assesses prices only one day at a time, it would agree to buy electricity from JP Morgan for the final hours of day two without knowing that it would be forced, because of the accommodation for ramping, to pay high prices for the ramping hours in day three. This scheme resulted in huge profits for JP Morgan.

Many ISOs also include accommodations for “minimum run time,” accommodations that JP Morgan similarly used to manipulate prices. Some ISOs allow generators to submit a
These recent examples illustrate the ways in which electricity markets are manipulated and demonstrate that effective manipulation does not require fraud or deception. Because electricity markets are susceptible to non-fraudulent forms of manipulation, regulations targeting electricity-market manipulation necessarily require a more comprehensive scope in order to adequately protect ratepayers. To regulate properly against all forms of manipulation in the electricity markets, therefore, Congress and the relevant agencies need to create a scheme that proscribes all forms of manipulation. Moreover, the JP Morgan and Barclays examples are unlikely to be the most difficult cases that FERC will confront because potential manipulators are continually creating new schemes to stay one step ahead of the regulators. With that in mind, this Note’s proposed solution seeks to prevent litigation challenging FERC’s approach by fixing the problem before a case is lost or a manipulator goes unpunished.

Historically, the SEC and CFTC regulated electricity-market manipulation—the SEC through its Anti-Manipulation Rule and the CFTC through its artificial-price standard. This regulatory scheme was woefully inadequate, however. The SEC’s Anti-Manipulation Rule, Rule 10b-5, was

minimum run time—the minimum amount of time a generator agrees to produce electricity—and then consent to pay the generator for all the electricity produced during that time. JP Morgan would submit a minimum run time of twenty-four hours and a low bid for the last few hours in the Day Ahead market, thereby ensuring compensation for all twenty-four hours of production. The company would then submit the maximum price that it could charge for the next day—which the ISOs’ rules capped at twice the price that it would cost to produce the electricity—and receive in turn this higher-than-market rate for those twenty-four hours.

JP Morgan utilized at least nine other similar strategies to manipulate electricity markets. These strategies allowed the company to take unfair advantage of various features of different ISO bidding structures. Without using false statements or deception, JP Morgan was able to earn millions of dollars that individual ratepayers ultimately paid for in the form of higher prices. See JP Morgan Ventures Energy Corp., 144 FERC ¶ 61,068.


37. Ledgerwood & Harris, supra note 36, at 4.

38. SEC Rule 10b-5 reads as follows:

It shall be unlawful for any person, directly or indirectly, by the use of any means or instrumentality of interstate commerce, or of the mails or of any facility of any national securities exchange,

(a) To employ any device, scheme, or artifice to defraud,

(b) To make any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in the light of the circumstances under which they were made, not misleading, or

(c) To engage in any act, practice, or course of business which operates or would operate as a fraud or deceit upon any person, in connection with the purchase or sale of any security.

limited to securities and did not include commodities or financial derivatives, and the CFTC’s artificial-price standard contained many loopholes concerning physical and self-regulated markets. Worse yet, FERC was seriously constrained because it previously enjoyed only limited authority under the Federal Power Act.

The California energy crisis and the related Enron scandal in the early 2000s exposed the inadequacies of the existing regulatory regime and served as a catalyst for many of the changes in electricity-market regulation. The California energy crisis was a period in which electricity prices skyrocketed and the state’s electricity system almost failed. The crisis nearly bankrupted two of the state’s largest companies and frustrated deregulation of the electric industry. Following these events, Congress expanded FERC’s authority to regulate manipulation in the electricity markets through Section 1283 of the Energy Policy Act of 2005. The Energy Policy Act amended the Federal Power Act and granted FERC authority to promulgate regulations prohibiting manipulation in the electricity markets. Congress “drafted broadly to combat manipulation in all its forms[,]” and it was this expansive statutory language that authorized FERC to prohibit manipulation in the electricity markets. Indeed, the statute expressly states as follows:

It shall be unlawful for any entity . . . directly or indirectly, to use or employ, in connection with the purchase or sale of electric energy . . . any manipulative or deceptive device or contrivance . . . in contravention of such rules and regulations as the Commission may prescribe as necessary or appropriate in the public interest or for the protection of electric ratepayers.

As the text of the statute makes clear—particularly in light of the fact that Congress was legislating on the heels of the California energy crisis—Congress granted FERC broad authority and considerable flexibility to prescribe and prosecute all forms of electricity-market manipulation. And yet despite the obvious need for expansive regulations, FERC narrowly drafted its Anti-Manipulation Rule to proscribe only fraud.

39. Ledgerwood & Harris, supra note 36, at 4.
40. Id.
41. Id.
42. See Timothy P. Duane, Regulation’s Rationale: Learning from the California Energy Crisis, 19 Yale J. on Reg. 471, 472–73 (2002); Kelliher & Farinella, supra note 9, at 627.
44. Id.
47. Multer, supra note 29, at 100 (emphasis added).
II. FERC Has Authority to Regulate All Forms of Electricity-Market Manipulation, but Its Current Regulations Fail to Do So

This Part examines FERC’s congressionally granted authority over electricity-market manipulation and determines that the Commission’s current regulations are far more limited than congressional authority would allow. Section II.A begins with a discussion of the regulatory scheme that served as a model for FERC’s Anti-Manipulation Rule. It then concludes that, contrary to congressional intent and practical necessity, FERC’s rule encompasses only fraudulent manipulation. Section II.B then argues that FERC’s current regime amounts to bad governmental regulation and raises issues of fair notice.

A. FERC’s Current Anti-Manipulation Rule Proscribes Only Fraudulent Manipulation

Although Congress gave FERC authority to regulate all forms of electricity-market manipulation, FERC’s regulations take a much narrower approach and prohibit only fraudulent manipulation.50 In crafting this narrow rule, FERC actually used as a guide SEC Rule 10b-5, the SEC’s Anti-Manipulation Rule.51 Not only does the language of the two rules mirror each other52 but FERC uses Rule 10b-5 precedent in adjudicating manipulation cases.53 Subsection 2 of FERC’s Anti-Manipulation Rule, titled “Prohibition of electric energy market manipulation,” reads in part as follows:

(a) It shall be unlawful for any entity, directly or indirectly, in connection with the purchase or sale of electric energy or the purchase or sale of transmission services subject to the jurisdiction of the Commission,

(1) To use or employ any device, scheme, or artifice to defraud,

(2) To make any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in the


52. SEC Employment of Manipulative and Deceptive Devices, 17 C.F.R. § 240.10b-5 (2014) (“It shall be unlawful for any person, directly or indirectly, by the use of any means or instrumentality of interstate commerce, or of the mails or of any facility of any national securities exchange, (a) To employ any device, scheme, or artifice to defraud, (b) To make any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in the light of the circumstances under which they were made, not misleading, or (c) To engage in any act, practice, or course of business which operates or would operate as a fraud or deceit upon any person, in connection with the purchase or sale of any security.”).

light of the circumstances under which they were made, not misleading, or
(3) To engage in any act, practice, or course of business that operates
or would operate as a fraud or deceit upon any entity.54

SEC Rule 10b-5 is a fraud-based provision, which is appropriate for reg-
ulating securities. One of the main premises of securities regulation in the
United States is that a fair and efficient securities market requires that accu-
rate information be available to all investors.55 In fact, the primary purpose
of the Securities Act is to “ensure full and fair disclosure of the character of
securities sold.”56 Securities prices are significantly determined by the infor-
mation about the securities that is known to investors; it therefore makes
sense to emphasize fraud and deceit in regulating securities manipulation
because such conduct impairs the necessary flow of truthful information,
which facilitates accurate valuation.57 Indeed, universally accessible informa-
tion allows the free market to function most effectively. By deceiving inves-
tors about the value of a security, a manipulator can influence the price of
that security in such a way that makes it vulnerable to exploitation.58 As a
result, the SEC requires publicly traded companies to accurately disclose im-
portant information to the public.59 These requirements provide “a common
pool of knowledge for all investors to use to judge for themselves whether to
buy, sell, or hold a particular security. Only through the steady flow of
timely, comprehensive, and accurate information can people make sound
investment decisions.”60 There are other methods that can be used to manip-
ulate securities markets—methods such as wash transactions or matched
orders elevate perceived trading volume and thus artificially alter the securi-
ties’ valuations—and these methods are regulated under Section 9 of the
Securities Exchange Act.61 In its efforts to regulate electricity-market manip-
ulation, however, FERC has not adopted any regulations similar to Section 9.

This type of information-based regulation proves insufficient to pro-
hibit all forms of manipulation in the electricity markets. As the examples
above demonstrate, manipulators can identify flaws in the markets’ designs
and turn those flaws into profits.62 Entities are able to manipulate effectively

54. 18 C.F.R. § 1c.2(a).
55. The Investor’s Advocate: How the SEC Protects Investors, Maintains Market Integrity,
whatwedo.shtml (last visited Aug. 18, 2014).
(internal quotation marks omitted).
57. Craig Pirrong, Electricity Market Manipulation: Definition, Diagnosis and Deterrence,
58. Id.
59. The Investor’s Advocate, supra note 55.
60. Id.
62. See supra Part I.
the electricity markets without ever making a knowing misrepresentation of a material fact or concealing a material fact. Although the names of both the SEC’s and FERC’s anti-manipulation regulations suggest a focus on manipulation, the word “manipulate,” or derivations of it, appears only in the titles, not in the regulations themselves. And the SEC’s Anti-Manipulation Rule proscribes only fraud. The rule does not speak to nonfraudulent behavior, and “the closest [it] comes to [regulating such actions] is to make it unlawful to engage in any act, practice or course of business that operates as a fraud.”

FERC considered expanding the SEC’s rule but ultimately decided against it. During the rulemaking process, parties filed comments specifically identifying “the inconsistency between securities law concepts and the operation of energy commodity trading markets.” At the request of some commenters, FERC considered the potential for nonfraudulent manipulations in the energy markets but chose not to adopt more expansive regulations. FERC’s reasoning in this instance misses the mark—the issue is not whether electricity markets, like securities markets, can be manipulated through fraud (they can be) but rather whether fraud is the exclusive method of manipulating markets. FERC’s response suggests only that using SEC Rule 10b-5 or another fraud-based rule is necessary, not that it is sufficient.

Along with importing the exact language of SEC Rule 10b-5, FERC also adopted SEC precedent relating to the rule, though FERC maintained that it would flexibly apply such precedent. This decision was based on the idea that SEC anti-manipulation case law would provide “a level of substantial certainty” and clarify how the new regulations would operate. Importantly, FERC’s decision to adopt Rule 10b-5 precedent means that FERC has given

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precedential value to decisions that have the limited scope of "fraud." Beginning with *Ernst & Ernst v. Hochfelder* in 1976, the Supreme Court has narrowed the scope of Rule 10b-5 by requiring intent. Moreover, as previously mentioned, the *Santa Fe* Court limited Rule 10b-5’s applicability to practices “intended to mislead investors by artificially affecting market activity.” The Supreme Court’s jurisprudence makes clear that a violation of the SEC’s Anti-Manipulation Rule requires actions intended to *mislead*. In this context, courts have widely followed the requirement that behavior must be deceptive in order to qualify as manipulation.

FERC’s decision to adopt SEC Rule 10b-5 precedent supports the conclusion that the Commission’s Anti-Manipulation Rule proscribes only a specific type of manipulation—manipulation that entails an act of fraud. In cases involving securities manipulation, regulators have other means of preventing harmful manipulative conduct, such as Section 9 of the Securities Exchange Act. FERC, by contrast, has not passed an analogous regulation, a failure that critically undermines its ability to prevent electricity-market manipulation.

B. **FERC’s Underinclusive Anti-Manipulation Rule Is Problematic**

Electricity markets are materially different from securities markets, and securities regulation is therefore an unsuitable model for electricity-market regulation. In the United States, securities regulation aims to create a fair and efficient securities market through ensuring the availability of accurate information to all investors. The goal is not to protect an investor who has accurate and sufficient information from making an unwise investment but rather to ensure that the investor has access to the information necessary to make the decision: “The main goal of the securities laws is to provide sufficient disclosure to enable investors to make informed decisions about the securities they buy and sell.” Electricity markets are different. In purchasing electricity, the consumer doesn’t actively participate in the market in order to choose the power plant from which it will buy electricity; rather, that choice is made by ISOs, which pass the costs on to the consumer.


77. See supra Part I.
Regulating electricity markets is therefore necessary in order to ensure that the ISOs are functioning properly and are free of manipulation. Because of the current regime's failure to proscribe nonfraudulent manipulations, FERC's enforcement efforts raise fair-notice issues and pose substantial difficulties for both regulated entities and for FERC's Office of Enforcement.

Simply applying Rule 10b-5 to the electricity context cannot fully protect the markets and ratepayers because electricity markets are susceptible to forms of manipulation that do not implicate fraud.78 This exposure to broader forms of manipulation stems from the nature of modern trading, electricity markets, and derivatives.79 Because electricity markets are more vulnerable to manipulation, then, FERC's Anti-Manipulation Rule proves misguided and ill-suited to protecting electricity markets from all the forms of manipulation to which they are susceptible.80

FERC's attempts to regulate nonfraudulent manipulative conduct “require extreme logical contortions to fit the square [manipulation] peg into the round fraud and deceit hole.”81 FERC's current approach constitutes a form of bad governmental regulation. While sound regulatory practices create reasonably clear boundaries and punish those who cross the boundaries, FERC's approach provides hazy guidance to regulated entities, thereby making it difficult for businesses to plan their affairs and act accordingly. When regulations are universally understood and reliably enforced, the regulated entities are more likely to comply voluntarily—a more efficient outcome than enforcement actions, and an outcome that mitigates any perceived injustice or capriciousness.82 FERC’s approach is especially problematic for its Office of Enforcement, which lacks clear instructions from the Commission about which types of behavior merit the agency’s time and resources. This regime also invites after-the-fact challenges to the rule, a process that can be resource intensive for FERC, the regulated entity, and the already overburdened judiciary.83

Given its deficient regulatory practices, FERC’s enforcement activity is also susceptible to legal challenges based on the fair-notice doctrine in administrative law.84 In the context of civil regulation, “the fair notice doctrine

78. Robeck & Barrowes, supra note 27 (stating that “FERC’s new manipulation provision uses the language of 10b-5 and the FERC has said that it will consider SEC precedent for enforcement of 10b-5, but the concepts are not easily transferable”).
79. See Multer, supra note 29, at 99–101; Pirrong, supra note 57, at 1.
80. Pirrong, supra note 57, at 2.
81. Id. at 12.
83. See id.
84. Although the basis for the fair-notice doctrine has not been authoritatively settled, the doctrine plausibly sounds in both the Due Process Clause and Section 706 of the Administrative Procedure Act, “which prohibits agency action that is ‘arbitrary’ and ‘capricious,’ or otherwise not in accordance with law.” Albert C. Lin, Refining Fair Notice Doctrine: What Notice Is Required of Civil Regulations?, 55 BAYLOR L. REV. 991, 998 (2003).
provides that where application of a regulation may involve a civil penalty or drastic sanctions, an agency must provide fair notice of its regulatory interpretation to the regulated public.\textsuperscript{85} Although the Supreme Court has yet to decide how the fair-notice doctrine should be applied, some of the federal courts of appeals have made this determination,\textsuperscript{86} albeit in an inconsistent manner. For example, the U.S. Court of Appeals for the District of Columbia Circuit held that the fair-notice requirement applies in any civil case where “sanctions are drastic,”\textsuperscript{87} a requirement that is easily met when the penalties assessed are in the hundreds of millions of dollars. The court further held that the “ascertainable-certainty” test should be applied when adjudicating fair-notice claims:

If, by reviewing the regulations and other public statements issued by the agency, a regulated party acting in good faith would be able to identify, with “ascertainable certainty,” the standards with which the agency expects parties to conform, then the agency has fairly notified a petitioner of the agency’s interpretation.\textsuperscript{88}

Other circuits have similarly fashioned standards for interpreting the fair-notice doctrine. For example, the U.S. Court of Appeals for the Seventh Circuit stated that regulations cannot be “incomprehensibly vague,”\textsuperscript{89} and the Second, Ninth, and Tenth Circuits applied some variation of the inquiry, focusing on whether “a reasonably prudent person, familiar with the conditions the regulations are meant to address and the objectives the regulations are meant to achieve, has fair warning of what the regulations require.”\textsuperscript{90} The unifying theme is that the regulated entity must have notice of what is permitted and what prohibited, and it must play by the rules as promulgated. In other words, the regulated entity is not expected to guess or predict whether an agency will stretch the language of its rules to proscribe otherwise legal behavior.

To be sure, FERC is free to create and develop policy through either adjudication or notice-and-comment rulemaking. As the Supreme Court emphasized in one of its landmark administrative-law decisions, “the choice made between proceeding by general rule or by individual, ad hoc litigation is one that lies primarily in the informed discretion of the administrative

\textsuperscript{85} Id. at 994; see also Gen. Elec. Co. v. EPA, 53 F.3d 1324, 1328–29 (D.C. Cir. 1995); Diamond Roofing Co. v. Occupational Safety & Health Review Comm’n, 528 F.2d 645, 649 (5th Cir. 1976).
\textsuperscript{86} Lin, supra note 84, at 996–97.
\textsuperscript{87} Gen. Elec. Co., 53 F.3d at 1329 (citing Radio Athens, Inc. v. FCC, 401 F.2d 398, 404 (D.C. Cir. 1968)).
\textsuperscript{88} Id.
\textsuperscript{89} Tex. E. Prods. Pipeline Co. v. Occupational Safety & Health Review Comm’n, 827 F.2d 46, 50 (7th Cir. 1987).
\textsuperscript{90} Lin, supra note 84, at 1009 (quoting Rock of Ages Corp. v. Sec’y of Labor, 170 F.3d 148, 156 (2d Cir. 1999)); see also Walker Stone Co. v. Sec’y of Labor, 156 F.3d 1076, 1083–84 (10th Cir. 1998); Stillwater Mining Co. v. Fed. Mine Safety & Health Review Comm’n, 142 F.3d 1179, 1182 (9th Cir. 1998).
agency." 91 But the freedom to decide between adjudication and rulemaking does not grant the agency authority to hold regulated entities liable without first giving them fair notice. The agency cannot use an adjudicative proceeding to change the substance of a policy if the regulation itself does not give the regulated entity fair notice that it could be sanctioned for its behavior. 92

Under any standard of the fair-notice doctrine, it remains doubtful that FERC's anti-manipulation rule would properly give a regulated entity in the electricity industry fair notice that its behavior constituted fraud—that its action was “[a] knowing misrepresentation of the truth or concealment of a material fact to induce another person to act.” 93 After all, JP Morgan and Barclays provided all the required information, and they did so accurately. In light of these difficulties, FERC’s strongest argument may be that its Anti-Manipulation Rule aims to proscribe all forms of manipulation. And yet such a claim struggles to find support, especially given the clear language of the Anti-Manipulation Rule and an administrative history that rejects an expansive interpretation that would cover all forms of manipulation. 94 Moreover, FERC’s current rule discusses only manipulative conduct involving the use of fraud. 95 And the Commission’s decision to adopt the SEC precedent makes its case even harder, because such a move shows (1) that FERC intended only to regulate fraud and (2) that “fraud” should be construed narrowly. 96 As a result of these difficulties, entities subject to a FERC enforcement action may plausibly offer the defense that they lacked fair notice, which may result in increased litigation that would prove costly for both FERC and the regulated entities.

FERC’s impermissible extension of its Anti-Manipulation Rule has yet to be tested in federal court. 97 Jurisprudence relating to Rule 10b-5’s reach and FERC’s recent enforcement actions signal that FERC’s broad application of its rule may present serious issues for the Commission. For example, in United States v. Radley, a federal district court held that a different analogue 98 to the SEC’s Anti-Manipulation Rule failed to cover nonfraudulent manipulations. 99 Radley therefore suggests that federal courts may not look favorably on agency attempts to regulate behavior falling outside the scope of what an agency’s rules proscribe. More recently, in March 2013, the D.C.

94. See supra Section II.A.
95. See supra Section II.A.
96. See supra Section II.A.
98. That is, a different regulation that is based on the SEC’s Anti-Manipulation Rule.
Circuit decided Hunter v. FERC, in which the court held that FERC lacked jurisdiction to fine a former natural-gas trader for his allegedly fraudulent actions. The court determined that Hunter’s scheme operated solely within the commodity futures market and that FERC therefore overstepped its authority in fining him. In these ways, Hunter indicates that FERC’s authority remains limited and that the federal judiciary is willing to rein in overly aggressive enforcement efforts.

III. FERC Should Adopt a Modified Version of the CFTC’s Anti-Manipulation Rule

The current regulatory scheme should be modified to reflect the realities of electricity markets: these markets are susceptible to various forms of manipulative conduct—including fraudulent behavior—which poses many regulatory problems. This Part examines the CFTC’s primary manipulation regulation and argues that FERC should adopt it, with modifications, in order to regulate manipulation in the electricity markets. Because regulations prohibiting fraudulent manipulative conduct are necessary but not sufficient, the new rule should supplement—rather than supplant—FERC’s existing anti-manipulation rule.

A. The CFTC’s Anti-Manipulation Regime

The CFTC, which regulates markets for commodity futures, has “broad statutory authority to prohibit and prosecute fraud, deception, price manipulation, and false reporting in the commodity and associated derivative markets.” After the Dodd–Frank Wall Street Reform and Consumer Protection Act was passed in 2010, the CFTC promulgated Rules 180.1 and 180.2 to change how it regulated manipulation. Rule 180.1 is substantially similar to SEC Rule 10b-5 and FERC’s Anti-Manipulation Rule; the only differences are nonmaterial linguistic changes that reflect the various subjects of the regulations. Given these similarities, adopting the CFTC’s rule

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101. Id.
102. A fair counterargument to the suggestion that FERC should modify its Anti-Manipulation Rule is that FERC and the ISOs should instead fix their markets. To be sure, one could argue that many of JP Morgan’s schemes took advantage of loopholes that were waiting to be exploited. This Note does not argue that the current markets are designed perfectly. Market reforms are indeed necessary, but they ultimately remain insufficient. Rather, this Note’s proposal assumes that future opportunities for manipulation will inevitably arise, and it works from that assumption in concluding that modifying FERC’s regulatory regime is prudent.
103. Multer, supra note 29, at 110.
105. See 17 C.F.R. § 180.1 (2014). The CFTC’s rule states as follows:

(a) It shall be unlawful for any person, directly or indirectly, in connection with any swap, or contract of sale of any commodity in interstate commerce, or contract for future delivery on or subject to the rules of any registered entity, to intentionally or recklessly:
would largely preserve FERC’s Anti-Manipulation Rule, which could still be used to prevent and penalize fraudulent manipulation.

The CFTC’s regime extends further than SEC Rule 10b-5, explicitly distinguishing fraud from other forms of manipulation in its Anti-Manipulation and Anti-Fraud Rules. In particular, CFTC Rule 180.2, titled “Prohibition on price manipulation,” reads as follows: “It shall be unlawful for any person, directly or indirectly, to manipulate or attempt to manipulate the price of any swap, or of any commodity in interstate commerce, or for future delivery on or subject to the rules of any registered entity.” Four elements comprise a violation: “(1) a manipulative act or omission; (2) intent; (3) causation; and (4) artificial price.” In its rule, the CFTC further clarified that a violation does not require fraud or otherwise illegal behavior. Thus, if FERC were to adopt an analogue to CFTC Rule 180.2, FERC’s regime would be expanded to cover all fraudulent manipulation (through its current Anti-Manipulation Rule), as well as all other forms of manipulation.

Importantly, the new rule’s intent requirement ensures that only those actors who are trying to manipulate electricity markets will be held liable. The most crucial issues that the requirement raises concern proof. In the absence of clear evidence of intent, such as recordings or email conversations, intent may be proved by circumstantial evidence. Courts have inferred intent when the underlying conduct would be “uneconomic or

(1) Use or employ, or attempt to use or employ, any manipulative device, scheme, or artifice to defraud;
(2) Make, or attempt to make, any untrue or misleading statement of a material fact or to omit to state a material fact necessary in order to make the statements made not untrue or misleading;
(3) Engage, or attempt to engage, in any act, practice, or course of business, which operates or would operate as a fraud or deceit upon any person; or,
(4) Deliver or cause to be delivered, or attempt to deliver or cause to be delivered, for transmission through the mails or interstate commerce, by any means of communication whatsoever, a false or misleading or inaccurate report concerning crop or market information or conditions that affect or tend to affect the price of any commodity in interstate commerce, knowing, or acting in reckless disregard of the fact that such report is false, misleading or inaccurate. Notwithstanding the foregoing, no violation of this subsection shall exist where the person mistakenly transmits, in good faith, false or misleading or inaccurate information to a price reporting service.

Id.

106. See id. § 180.1–.2.
107. Id. § 180.2 (emphasis added).
108. Abrantes-Metz et al., supra note 13, at 369–70.
110. In the wake of the Enron scandal, a huge body of evidence was found that showed intent. Indeed, FERC made publicly available more than 500,000 emails from various Enron employees, a trove that later became “Enron Corpus,” an online dataset used to study linguistics and computer science. See John Markoff, Armies of Expensive Lawyers, Replaced by Cheaper Software, N.Y. Times, Mar. 5, 2011, at A1, available at http://www.nytimes.com/2011/03/05/science/05legal.html; Enron Email Dataset, Carnegie Mellon Univ., http://www.cs.cmu.edu/
irrational, absent an effect on market price.”111 Adopting this inference in the case of the Barclays trades, it is evident that Barclays engaged in intentional market manipulation. The bank’s uneconomical trades designed to affect prices, although not fraudulent, strongly indicate manipulative intent.112

Previous CFTC adjudications can be used to understand how the elements of the proposed rule would play out in electricity-market regulation and can guide FERC in adopting the CFTC’s anti-manipulation rule. The jurisprudence tends to focus jointly on the causation and price-artificiality elements and then addresses intent separately.113 (For its part, the artificiality requirement essentially requires a price that does not “reflect basic forces of supply and demand,”114 and this element is often proved by econometric analyses of price trends and asymmetric market information, such as supply and price increasing together.115) By looking to CFTC case law, then, FERC can ensure that it is faithfully adopting the CFTC’s anti-manipulation rule.

B. Proposed Anti-Manipulation Language

This Note proposes that FERC, using CFTC Rule 180.2 as a model, adopt an anti-manipulation rule to supplement its existing anti-fraud rule.116 FERC’s new anti-manipulation rule should read as follows: “It shall be unlawful for any entity, directly or indirectly, to manipulate or attempt to

112. Other forms of circumstantial evidence used to prove motive include “profit motive; tying up delivery and/or transportation facilities; establishment of substantial futures and cash positions and subsequent disposition of those positions, particularly if not consonant with ordinary commercial behavior; use of step-up orders; and payment of prices in excess of fair market value.” Abrantes-Metz et al., supra note 13, at 377 (citations omitted). But defendants can overcome all of these forms of evidence with sufficient justification for the seemingly irrational behavior.
113. Perdue, supra note 111, at 370.
manipulate the price of electric energy in interstate commerce or any financial instrument regarding electric energy.” 117

FERC should model its anti-manipulation regulations on CFTC Rule 180.2 primarily because of that rule’s flexibility. Neither the Energy Policy Act nor the Commodity Exchange Act defines manipulation, which permits the term to encompass new forms of manipulation as they develop. As discussed above, manipulation has been and continues to be a difficult term to define.118 Although the issue of a proper definition remains beyond the scope of this Note, the debate itself lends support to the following maxim that exists in manipulation regulation: “The methods and techniques of manipulation are limited only by the ingenuity of man.” 119 This fundamental notion informs many approaches to regulating manipulation and suggests that any attempt to proscribe such conduct must include broad and flexible language. Drafting such language would allow administrative law judges to craft a common law for manipulation regulation.120 This is precisely why CFTC Rule 180.2 serves as the ideal model: it provides FERC with the necessary flexibility to regulate effectively while setting out a four-element test that gives regulated entities fair notice and adequately regulates all forms of manipulation.

Although this solution is flexible and therefore subject to change, it largely avoids the fair-notice and governmental-regulation concerns of FERC’s current rule. And although this rule is broader than the previous

117. This solution, although modeled on the CFTC’s rule, also resembles Section 9 of the Securities Exchange Act, which states as follows:

It shall be unlawful for any person, directly or indirectly, by the use of the mails or any means or instrumentality of interstate commerce, or of any facility of any national securities exchange, or for any member of a national securities exchange—

(1) For the purpose of creating a false or misleading appearance of active trading in any security other than a government security, or a false or misleading appearance with respect to the market for any such security, (A) to effect any transaction in such security which involves no change in the beneficial ownership thereof, or (B) to enter an order or orders for the purchase of such security with the knowledge that an order or orders of substantially the same size, at substantially the same time, and at substantially the same price, for the sale of any such security, has been or will be entered by or for the same or different parties, or (C) to enter any order or orders for the sale of any such security with the knowledge that an order or orders of substantially the same size, at substantially the same time, and at substantially the same price, for the purchase of such security, has been or will be entered by or for the same or different parties.

Id. § 9(a).

118. See supra text accompanying notes 12–16.

119. Cargill, 452 F.2d at 1163.

120. A flexible and broad understanding of manipulation does not raise the same fair-notice concerns as a regulation that is explicitly limited to a separate subset of conduct. If FERC were to adjust its rule as proposed, it would put the regulated entities on notice that all forms of manipulation are proscribed, thereby avoiding a fair-notice problem. FERC’s current anti-manipulation regime, by contrast, has limited itself to a particular set of behaviors and therefore could not put regulated entities on notice that behavior outside of this limited subset is proscribed.
one, its language more accurately describes the unlawful conduct that could warrant FERC enforcement actions. The regulated entities can fairly deduce improper trading activities and thus will be less likely to engage in them. Increased compliance will reduce the need for enforcement actions, benefit ratepayers, and keep disputes out of the courts.

Regulated entities instinctively worry whenever regulations change or expand. And yet a proper understanding of how this Note’s proposal would actually function, including the high threshold that must be satisfied to enforce the manipulation regulations, should mitigate regulated entities’ valid concerns. First, FERC would need to establish manipulative intent, which is “conceptually and doctrinally among the most demanding mental state requirements anywhere in financial law.”121 Second, the evidence needed to establish such intent often involves ambiguous public behavior that can be difficult to link to manipulative conduct.122 Third, FERC must prove that the regulated entity’s conduct caused an artificial price, which is a heavy burden.123 Lastly, courts are often hostile to the use of statistical and economic arguments to support manipulation claims.124 All of this is not to say that FERC would effectively be unable to bring enforcement actions under this new rule. This proposal seeks to strike a balance that sufficiently protects ratepayers from manipulation while allowing participants in the market a reasonable degree of freedom to operate. The language of the proposed regulation is sufficiently flexible to respond to changes in market manipulation, while the doctrinal hurdles described appropriately limit FERC’s enforcement ability.

Finally, regulated entities’ concerns about overregulation can be alleviated by the fact that manipulation investigations are extremely resource intensive125 and enforcement proceedings are generally hard to win.126 It is therefore unlikely that FERC would have the resources to investigate and penalize every instance of potential manipulation. Instead, the Commission would probably focus its attention on the most obvious and detrimental violations.

This Note’s proposed rule creates a superior regulatory regime, and FERC should therefore adopt it. The rule critically expands the coverage of the manipulation regulation, thereby solving the problem created by non-fraudulent manipulative conduct; the rule gives FERC flexible enforcement power to enable it to respond to future manipulations, an essential characteristic in manipulation regulation; and the rule provides fair notice for regulated entities and imposes adequate constraints on FERC’s regulatory power.

121. Abrantes-Metz et al., supra note 13, at 359.
122. Id.
123. Id.
124. Id.
126. Pirrong, supra note 12, at 60.
Conclusion

FERC has been authorized to protect electricity consumers from all forms of manipulation in the electricity markets. The scope of FERC’s Anti-Manipulation Rule is limited only to fraudulent forms of manipulation, however, and this narrow scope poses regulatory problems because non-fraudulent means can also be used to manipulate the electricity markets. As written, then, FERC’s rule is insufficient. The Commission should therefore reform and broaden its current regime, both as a matter of good governmental regulation and in order to provide fair notice to the regulated entities. This Note has argued that FERC should model its new anti-manipulation regulations after those of the CFTC, which proscribe all forms of potential manipulation by using a flexible approach that allows the law to respond to whatever new scheme manipulators might dream up.