

ENERGY LAW JOURNAL

Volume 26, No. 2

2005

THE SUBDELEGATION DOCTRINE AND THE APPLICATION OF REFERENCE PRICES IN MITIGATING MARKET POWER

*Hon. Suedeen G. Kelly, Maria F. Vouras & Jennifer S. Amerkhail**

I. INTRODUCTION

The Federal Energy Regulatory Commission (Commission or FERC) has an exclusive statutory duty to ensure just and reasonable power rates.¹ The Commission relies on competition to ensure just and reasonable rates in bid-based organized markets and has the primary responsibility to ensure that these markets operate without anti-competitive effects.² The entities that operate bid-based organized markets, Independent System Operators (ISOs) and Regional Transmission Organizations (RTOs) (collectively referred to as RTOs), are tasked with operating transmission facilities pursuant to Order Nos. 888 and 2000,³ and thus are FERC-jurisdictional public utilities.⁴

In Order No. 2000, the Commission first proposed that RTOs monitor their markets for market power abuses and market design flaws in order to identify

* Suedeen G. Kelly is a Commissioner of the Federal Energy Regulatory Commission. She received her B.A. degree from the University of Rochester and a J.D. degree from Cornell Law School. Maria F. Vouras is Legal Advisor to Commissioner Kelly. She received her B.A. degree from University of Virginia and her J.D. degree from George Mason University Law School. Jennifer S. Amerkhail is an Energy Industry Analyst in the Office of Markets, Tariffs and Rates at the Federal Energy Regulatory Commission. She received her B.A. from Brown University in 1993 and expects a J.D. degree from George Washington University Law School in 2007. The views expressed herein are those of the authors and do not necessarily represent the views of the Federal Energy Regulatory Commission.

1. 16 U.S.C. § 824(a) (2000).

2. *Gulf States Utils. Co. v. FPC*, 411 U.S. 747, 758–59 (1973).

3. Order No. 888, *Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities*, [Regs. Preambles 1991–1996] F.E.R.C. STATS. & REGS. ¶ 31,036 (1996), 61 Fed. Reg. 21,540 (1996) (to be codified at 18 C.F.R. pts. 35, 385), *order on reh'g*, Order No. 888-A, F.E.R.C. STATS. & REGS. ¶ 31,048 (1997), *order on reh'g*, Order No. 888-B, 81 F.E.R.C. ¶ 61,248, 62 Fed. Reg. 64,688 (1997), *order on reh'g*, Order No. 888-C, 82 F.E.R.C. ¶ 61,046 (1998), *order aff'd* *Transmission Access Policy Study Group v. FERC*, 225 F.3d 667 (D.C. Cir. 2000), *aff'd in relevant part sub nom.*, *New York v. FERC*, 535 U.S. 1 (2002); Order No. 2000, *Regional Transmission Organizations*, [Regs. Preambles 1996–2000] F.E.R.C. STATS. & REGS. ¶ 31,089 (2000), 65 Fed. Reg. 809 (2000) (to be codified at 18 C.F.R. pt. 35) [hereinafter Order No. 2000], *order on reh'g*, Order No. 2000-A, F.E.R.C. STATS. & REGS. ¶ 31,092, 65 Fed. Reg. 12,088 (2000), *aff'd sub nom.*, *Pub. Util. Dist. No. 1 v. FERC*, 272 F.3d 607 (D.C. Cir. 2001).

4. Under section 201(e) of the Federal Power Act, a public utility is “any person who owns or operates facilities subject to the jurisdiction of the Commission.” Federal Power Act § 201(e), 16 U.S.C. § 824(e) (2000).

and react to problems in real time.⁵ Since the issuance of Order No. 2000, all RTOs have established market monitoring units that, *inter alia*, report market flaws to the Commission and implement mitigation plans to address market operations. Recently, the Commission elaborated on the tasks of market monitoring units, stating that market monitoring units are responsible for identifying ineffective market rules, notifying the Commission of potential Market Behavioral Rule violations,⁶ reviewing and reporting on the performance of the markets, and supporting the RTO in administering the RTO Tariff.⁷ In supporting the administration of the RTO tariff, market monitoring units play a major role by implementing RTO mitigation plans.

In most RTOs, market monitoring units are solely responsible for calculating reference prices, a tool used both to gauge the competitiveness of the market and to correct for market distortions. In correcting for market distortions, reference prices that are substituted for supplier's bids have the potential to set the jurisdictional rate at least for the hour during which market power is mitigated. This article will focus on the discretion used by market monitoring units in calculating and negotiating reference prices in order to determine whether the use of such discretion by market monitoring units, as non-federal entities,⁸ is a permissible subdelegation of the Commission's exclusive authority to set just and reasonable rates.

In general, delegation of decision-making authority from Congress to the Executive is permissible as long as the delegation is accompanied by an "intelligible principle."⁹ Although not exactly the same, the congressional delegation cases form the predicate for evaluating subdelegation, that is, Executive Branch agency delegation to a subordinate agency or a non-federal entity. A recent decision of the United States Court of Appeals for the D.C. Circuit, *United States Telecom Ass'n v. FCC*,¹⁰ examined the subdelegation doctrine in a situation, like that found in the Federal Power Act (FPA), in which the agency statute is silent about permissible delegations to non-federal entities. The court in *U.S. Telecom* held that executive agencies are prohibited from subdelegating their decision-making authority to non-federal entities when the agency's enabling statute does not specifically provide for subdelegation, except in three limited circumstances.¹¹ The one exception to the subdelegation rule established in *U.S. Telecom*, as relevant here, allows for permissible delegations where agencies provide a reasonable basis for granting limited discretion to a

5. Order No. 2000, *supra* note 3, at 31,155.

6. See *Investigation of Terms and Conditions of Pub. Util. Market-Based Rate Authorizations*, 105 F.E.R.C. ¶ 61,218 (2003) (requiring that all market-based rate tariffs include provisions proscribing all forms of market manipulation, "including market abuses whose precise form and nature cannot be envisioned today"), *reh'g denied*, 107 F.E.R.C. ¶ 61,175, 61,708 (2004), *appeal docketed*, No. 04-1168 (D.C. Cir. 2004).

7. *Policy Statement on Mkt. Monitoring Units*, 111 F.E.R.C. ¶ 61,267 (2005).

8. *Elec. Power Supply Ass'n v. FERC*, 391 F.3d 1255, 1260 (D.C. Cir. 2004) (holding that *ex parte* rules apply to Commission decisional staff communications with market monitoring units because market monitoring units are "not hired, paid, or directly managed by FERC in their work" and in fact are not distinct from other persons with interests greater than that of the general public in proceedings before the Commission).

9. *Whitman v. American Trucking Ass'ns, Inc.*, 531 U.S. 457, 472 (2001). See also *Mistretta v. United States*, 488 U.S. 361, 379 (1989) (upholding Congressional delegation where it is possible "in a proper proceeding to ascertain whether the will of Congress has been obeyed"); *A.L.A. Schechter Poultry Corp. v. United States*, 295 U.S. 495, 530 (1928) (recognizing Congressional delegation as a permissible function).

10. *United States Telecom Ass'n v. FCC*, 359 F.3d 554 (D.C. Cir. 2004).

11. *Id.* at 566.

non-federal entity. Another decision in the D.C. Circuit, *Perot v. FEC*,¹² set the standard for evaluating agency subdelegations to regulated entities charged with implementation of agency regulations and tariffs. In *Perot*, the court found that agencies regularly leave some discretion to those entities regulated by the agencies and that, as long as the agency's regulations establish objective criteria for application of discretion and there is review by the agency of a regulated entity's compliance with the agency's regulation, the agency has not impermissibly subdelegated its authority.¹³ The reconciliation of these two cases and their application to specific discretionary actions of market monitoring units is the subject of this article.

In evaluating whether any action taken pursuant to a FERC-approved tariff represents a subdelegation of the Commission's statutory authority, the Commission should first ask whether there is an exercise of discretion on the part of the entity implementing the tariff that encroaches upon the Commission's exclusive statutory duties. If the Commission finds an encroachment, the Commission should next ask, pursuant to *Perot* and the noted exception in *U.S. Telecom*, whether: (1) the tariff or the Commission has provided objective criteria for implementation of the tariff provisions; (2) the tariff or Commission has provided a reasonable basis for giving a non-federal entity discretion in applying the tariff provisions; and (3) the discretionary actions by non-federal entities are subject to review by the Commission.¹⁴ If these questions are answered in the affirmative, this article posits that the discretionary action is a permissible delegation of the Commission's ratemaking authority.

In answering these questions in the context of reference prices used to ensure competitive outcomes in organized markets, this article first looks at whether the acts are in fact discretionary and, if so, whether they encroach on the Commission's ratemaking authority. We find that, while the vast majority of reference prices are calculated with little or no discretion, the exercise of discretion by the market monitoring units in setting some reference prices could impact the jurisdictional rate under certain rare circumstances. Second, the article posits that the limited discretion exercised by market monitoring units is permissible under the statutory scheme of the FPA because: the Commission has set forth objective criteria for use by market monitoring units in calculating reference prices; there is a reasonable basis for giving market monitoring units the discretion to apply the reference price tariff provisions; and the Commission retains review of the market monitoring units' reference price calculations.

This article is divided into six parts. Part II provides an overview of the relationship between market monitoring units and RTOs, explains the powers of each entity to implement the mitigation provisions in the respective tariffs and rejects the notion that actions of non-public utility market monitoring units are not subject to Commission review. Part III describes the current provisions for calculating and applying reference prices in RTO markets and finds that, while the vast majority of reference prices are calculated with little or no discretion on the part of market monitoring units, these monitors do exercise discretion in setting a small number of reference prices under certain circumstances, and those reference prices can set the jurisdictional rate on rare occasions. Part IV

12. *Perot v. FEC*, 97 F.3d 553 (D.C. Cir. 1996).

13. *Id.* at 560.

14. *U.S. Telecom*, 359 F.3d at 566; *Perot*, 97 F.3d at 553.

examines the relevant caselaw on subdelegations of agency authority and proposes a test to evaluate the Commission's acceptance of tariff provisions that allow non-federal entity discretion in setting reference prices. Part V applies to the proposed test to evaluate that type of discretionary decision-making by market monitoring units. Part VI outlines recommendations for limiting market monitoring unit discretion. Part VII provides conclusions.

II. MARKET MONITORING UNIT RESPONSIBILITIES AND RELATIONSHIP WITH RTO

RTOs are public utilities regulated by the Commission pursuant to the FPA. The primary purpose of RTOs is to independently operate transmission systems, plan transmission expansions, administer competitive markets for energy, ancillary services, and congestion management, and coordinate with other regional entities on reliability and the provision of transmission service.¹⁵ Each RTO has a FERC-approved tariff on file which governs the rates, terms and conditions of service by the RTO. The RTO derives its ability to operate the transmission system and its markets from these tariff provisions.¹⁶

To some degree, each RTO has followed a unique path of development. For this reason, the relationship of the market monitoring unit to the RTO management and boards of directors differs in each RTO, as do the responsibilities assigned to the different monitoring groups and the relationship between market monitoring units and market participants. At one end of the spectrum of independence between the market monitoring unit and the RTO management is PJM Interconnection, LLC (PJM) and at the other end is Midwest Independent Transmission System Operator, Inc. (Midwest ISO).¹⁷

PJM's market monitoring unit is least independent of the RTO because it is made up solely of employees of PJM, subject to the oversight of the PJM's President and Chief Executive Officer, as well as its Board.¹⁸ The market monitoring unit is responsible for monitoring compliance with the rules, standards and procedures of the PJM tariff, including monitoring for compliance with bidding restrictions.¹⁹ The market monitoring unit also proposes

15. Order No. 2000, *supra* note 3, at 31,106 (describing minimum functions of an RTO).

16. While all RTO actions must be consistent with the RTO tariff provisions, many RTOs also operate pursuant to published business practices that expand upon the guiding principles and the general directives contained in the RTO tariffs. See, e.g., MIDWEST ISO, BUSINESS PRACTICE MANUALS (2004), http://www.midwestmarket.org/publish/Folder/20f443_ffd16ced4b_-7fe50a3207d2?rev=1. Market monitoring units and RTOs similarly expand on the provisions of the mitigation plans in published guides, spreadsheets and detailed formulas that are not contained in Commission-approved tariffs. See, e.g., MIDWEST ISO, USER GUIDE: MARKET MONITORING AND MITIGATION (2004), http://www.midwestmarket.org/publish/Document/573257_ffef0fcee0f_-7f9d0a531528/_pdf?action=download&_property=Attachment.

17. In Order No. 2000, the Commission declined to prescribe independence or conflict of interest standards for market monitoring units finding that "in light of the different forms of RTOs that could be developed by market participants and the varying types of markets an RTO may be operating within its region, different market monitoring plans are likely to be appropriate for different RTOs." Order No. 2000, *supra* note 3, at 31,155.

18. PJM Open Access Transmission Tariff, PJM Market Monitoring Plan, Attachment M § V(B), FERC Electric Tariff, Sixth Revised Vol. No. 1, Second Revised Sheet No. 450 (effective May 1, 2004). PJM's market monitoring unit also has independent authority to refer matters governed by the market monitoring plan to the PJM Board. *Id.* § V.

19. PJM Open Access Transmission Tariff, PJM Market Monitoring Plan, Attachment M § III, FERC Electric Tariff, Sixth Revised Vol. No. 1, Substitute Original Sheet No. 448 (effective Mar. 20, 2003).

modifications to the PJM tariff and evaluates proposed enforcement mechanisms.²⁰

Like PJM, the California Independent System Operator Corporation (California ISO) has an internal market monitoring unit that reports to RTO management. However, California ISO differs from PJM in that it also has an external market monitoring unit and an independent contractor to calculate reference prices for ongoing use in the mitigation program.²¹ California ISO's internal market monitoring unit employees are currently under the general management of the ISO's Chief Executive Officer with day-to-day oversight by the ISO's General Counsel. The internal monitoring group is responsible for regular monitoring and analysis, as well as implementation of the mitigation program, with the noted exception of calculating reference prices.²² The external market monitoring group consists of three or more independent industry experts nominated by the California ISO's CEO and approved by the Board.²³ The external monitoring group provides reports and advice to the California ISO's CEO and Board on market performance. The external market monitoring unit may submit reports to the Commission subject to restrictions on sharing confidential information.²⁴

The structure and functions of the market monitoring units in ISO New England, Inc. (ISO New England) and New York Independent System Operator, Inc. (New York ISO) are similar. Each has a market monitoring unit staffed by full-time employees of the RTO which is responsible for implementing the market monitoring and mitigation plan.²⁵ Each RTO also has an Independent Market Advisor who advises the Board and has the power to bring any matter to the attention of the Board at any time.²⁶ The Independent Market Advisors

20. *Id.* § IV(B).

21. In approving California ISO's conduct and impact mitigation method, the Commission required that an independent entity calculate the reference prices rather than the internal or external market monitoring units of the California ISO. *California Indep. Sys. Operator Corp.*, 100 F.E.R.C. ¶ 61,060, 61,246 (2002), *order denying reh'g in relevant part*, 101 F.E.R.C. ¶ 61,061, 61,214 (2002). *See also California Indep. Sys. Operator Corp.*, 103 F.E.R.C. ¶ 61,265, 61,980 (2003) (directing the California ISO to use an independent entity to calculate reference price for decremental bids), *order on reh'g*, 107 F.E.R.C. ¶ 61,028 (2004).

22. California ISO Open Access Transmission Tariff, ISO Market Monitoring & Information Protocol § 3.3.1, FERC Electric Tariff, First Replacement Vol. No. 2, Second Revised Sheet No. 500 (issued May 20, 2004).

23. California ISO Open Access Transmission Tariff, ISO Market Monitoring & Information Protocol § 5.3, FERC Electric Tariff, First Replacement Vol. No. 2, First Revised Sheet No. 506 (effective Feb. 21, 2004). The independent experts have no material affiliation to or financial interest in Market Participants or their affiliates. Additionally, during their service, the independent experts may not provide commercial services to the ISO or any other party in connection with legal or regulatory proceedings. California ISO Open Access Transmission Tariff, ISO Market Monitoring & Information Protocol § 5.2.2, FERC Electric Tariff, First Replacement Vol. No. 2, First Revised Sheet No. 505 (effective Feb. 21, 2004).

24. California ISO Open Access Transmission Tariff, ISO Market Monitoring & Information Protocol § 6.3.1, FERC Electric Tariff, First Replacement Vol. No. 2, First Revised Sheet No. 507 (effective Feb. 21, 2004) The external monitoring group may also make recommendations to the internal monitoring group or regulatory or antitrust agencies on the application of sanctions and penalties. *Id.*

25. *See* ISO New England Open Access Transmission Tariff, Market Rule 1 – Standard Market Design, § III.1.3.2, FERC Electric Tariff No. 3, First Revised Sheet No. 7035 (effective July 1, 2005); *New York Indep. Sys. Operator, Inc.*, 89 F.E.R.C. ¶ 61,196, 61,601 (1999), *order on reh'g and compliance*, 90 F.E.R.C. ¶ 61,317 (2000). These internal market monitoring units report to and act at the direction of the CEO in each RTO. *See generally Cent. Hudson Gas & Elec. Corp.*, 86 F.E.R.C. ¶ 61,062, 61, 238 (1999).

26. ISO New England Open Access Transmission Tariff, Market Rule 1 – Standard Market Design, § III.1.3.2, FERC Electric Tariff No. 3, First Revised Sheet No. 7034 (effective July 1, 2005); 89 F.E.R.C. ¶

consult with the internal market monitoring unit occasionally on reference price determinations and reference price adjustments.²⁷

The Midwest ISO's market monitoring unit is the most independent of RTO management because most of the market monitoring and mitigation functions are performed by the Independent Market Monitor (IMM) who reports to the Midwest ISO Board of Directors.²⁸ The IMM has operational independence of any "person, party or agent, including the Transmission Provider, State Regulatory Commission, or any other administrative oversight group" to carry out monitoring and market reporting duties.²⁹ The IMM is prohibited from having any professional or financial conflict of interests related to the market, such as service contracts with market participants.³⁰ Midwest ISO's tariff empowers the IMM to conduct investigations, respond to requests for data analysis from the FERC or state commissions, respond to customer complaints, implement the mitigation plan, including calculation of reference prices, and make annual reports to the Midwest ISO, state commissions, and the FERC.

Historically, the Commission's main concern with respect to the market monitoring unit's independence from the RTO centered around the unit's monitoring function, i.e., the ability to report inefficiencies in market rules and inappropriate application of market rules by the RTO.³¹ The Commission sought to ensure that RTO management did not interfere with the ability of the market monitoring units to approach the Commission with suggested improvements in market rules or reports of tariff violations by the RTO.³² More recently, with respect to the market monitoring unit's mitigation function, some have expressed concerns regarding whether the actions of external market monitoring units are subject to sufficient Commission review. As discussed, entities that are

61,196 at 61,601. The Independent Market Advisor in New York ISO must be financially and professionally independent of market participants. *See generally* 86 F.E.R.C. at 61,238.

27. ISO New England Open Access Transmission Tariff, Market Rule 1 – Standard Market Design, app. A § III.A1.1, FERC Electric Tariff No. 3, Substitute Original Sheet No. 7046 (effective July 1, 2005); Comments of ISO New England Inc., *Establishing Reference Prices for Mitigation in Markets Operated by Regional Transmission Organizations and Independent System Operators*, FERC Docket No. PL05-6-000 (2005); Comments of the New York Independent System Operator, Inc., *Establishing Reference Prices for Mitigation in Markets operated by Regional Transmission Organizations and Independent System Operators*, FERC Docket No. PL05-6-000 (2005). *See also* ISO NEW ENGLAND INC., PROCEDURES FOR CONTACTING THE MARKET ADVISOR TO THE ISO-NE BOARD OF DIRECTORS, available at http://www.iso-ne.com/markets/mktmonmit/ind-mkt_advsr/procedures_for_contacting_market_advisor.doc (last visited Sept. 20, 2005).

28. *See* Midwest ISO Open Access Transmission Tariff, § 50.1, FERC Electric Tariff, Third Revised Vol. No. 1, First Revised Sheet No. 702 (effective Apr. 1, 2005). The Midwest ISO Board of Directors appoints a Market Monitoring Liaison Officer to oversee the contract with the IMM, aid the IMM in collection of data from the Midwest ISO, and deliver RTO officer's comments on the accuracy of IMM reports. Midwest ISO Open Access Transmission Tariff, § 51.1–51.2, FERC Electric Tariff, Third Revised Vol. No. 1, Second Revised Sheet No. 707–08 (effective Apr. 1, 2005).

29. Midwest ISO Open Access Transmission Tariff, § 50.4, FERC Electric Tariff, Third Revised Vol. No. 1, Second Revised Sheet No. 706 (effective Apr. 1, 2005).

30. Midwest ISO Open Access Transmission Tariff, § 52.2, FERC Electric Tariff, Third Revised Vol. No. 1, First Revised Sheet No. 710 (effective Apr. 1, 2005).

31. *See, e.g., Midwest Indep. Transmission Sys. Operator, Inc.*, 97 F.E.R.C. ¶ 61,326, 62,518 (2001) (requiring the RTO to submit the market monitoring unit retention agreement for Commission review to assess market monitoring unit independence from the RTO); *Southwest Power Pool, Inc.*, 108 F.E.R.C. ¶ 61,003, 61,026 (2004).

32. 97 F.E.R.C. ¶ 61,326, at 62,518; 108 F.E.R.C. ¶ 61,003, at 61,026.

independent of RTO management and not jurisdictional public utilities provide varying levels of input into reference price calculations. This input varies from consultative input in New York ISO and ISO New England to the ability to negotiate reference prices and reference price adjustments in California ISO and Midwest ISO. We find this concern over sufficient review of external market monitoring units to be misplaced because, as contract employees to RTOs, market monitoring units are agents of the RTOs directly answerable to the RTO boards and, more importantly, are obligated by contract to implement FERC-approved tariff provisions for setting reference prices.³³ The Commission has sufficient ability to review actions taken to implement tariff provisions, whether or not the implementing entity is a public utility or a contractor for the public utility.³⁴

Further, the more relevant issue in examining reference price calculations in the context of the subdelegation doctrine is whether market monitoring units are independent from market interests. An RTO or its external market monitoring unit does not meet the Commission's independence requirement if it has incentives to negotiate reference prices in a way that benefits certain market participants or its own business interests. The Commission has appropriately required that the entity calculating reference prices should not be under the influence or control of entities that have an interest in the outcomes of the bid-based organized markets. In fact, the Commission dealt with this exact issue in ordering that an independent entity calculate reference prices in California ISO, reacting to the concern that the California ISO lacked independence from one of the most active participants in the market at that time, the State of California.³⁵ As discussed below, the independence issue plays a pivotal role in determining permissible exercises of discretion by non-federal entities under the subdelegation doctrine.

III. MITIGATION SCHEMES AND THE CALCULATION OF REFERENCE PRICES

Mitigation is the primary tool used by the Commission to keep market power in check in markets that, although workably competitive in some broad geographic areas, can instantly become subject to transmission, generation and other constraints that might allow the exercise of market power. The goal of mitigation is to temper the market effects of any conduct that would substantially distort competitive outcomes in the bid-based organized markets, while avoiding

33. We note that the Commission has required Midwest ISO to incorporate the contract between the RTO and its Independent Market Monitor into the RTO tariff. See 97 F.E.R.C. ¶ 61,326, at 62,518 (requiring that the RTO submit the market monitoring unit retention agreement for Commission review).

34. Furthermore, we note that, in Order No. 2000, the Commission allowed similar flexibility for the RTOs "to contract out OASIS responsibilities to another independent entity." Order No. 2000, *supra* note 3, at 31,045.

35. *California Indep. Sys. Operator Corp.*, 100 F.E.R.C. ¶ 61,060, 61,246 (2002), *order denying reh'g in relevant part*, 101 F.E.R.C. ¶ 61,061 (2002) (finding that the calculation process for determining reference prices affords too much discretion to the California ISO and citing to *Mirant Delta, L.L.C.*, 100 F.E.R.C. ¶ 61,059 (2002), *order denying reh'g in relevant part*, 100 F.E.R.C. ¶ 61,271 (2002), *rev'd and remanded sub nom.*, *California Indep. Sys. Operator Corp. v. FERC*, 372 F.3d 395 (D.C. Cir. 2004), *order on remand*, 112 F.E.R.C. ¶ 61,010 (2005) (granting request for declaratory order in favor of California ISO's proposed changes to the board selection process and finding that current California ISO board meets independence requirements)).

unnecessary interference with competitive price signals.³⁶ Mitigation is necessary in RTO markets to ensure just and reasonable rates because these markets suffer from flaws that are currently difficult to address.³⁷

The exercise of market power can have immediate, widespread impacts in bid-based organized markets with single-clearing price auctions. Most RTOs employ single-clearing price auctions to set spot market prices the day before and in real time. For each unique location on the grid, every supplier is paid and every buyer pays the same price, representing the value of the last bid that clears the market to meet the given demand at that location. When a supplier exercises market power and the supplier's bid sets the market clearing price, buyers in the spot market pay a rate and suppliers in the spot market receive a rate that does not reflect a competitive price. In a single-clearing price auction, the harm from the exercise of market power spreads beyond just a single buyer interacting with a single seller to cause substantial harm to the market itself. Because prices set in single clearing price auctions cannot be effectively mitigated after the market clears,³⁸ mitigation programs have been developed to address market operations in real time or close to real time.

The discussion of reference prices (also called default bids or reference levels) usually revolves around the conduct and impact mitigation method first implemented in New York ISO and later adopted by ISO New England, Midwest ISO and California ISO,³⁹ but tends to overlook the mitigation method currently used by PJM. However, both mitigation methods rely on reference prices as substitutes for supplier's bids when bids are deemed non-competitive. Although the two methods approach the measurement of non-competitive bids in different ways, the substitution of a reference price for a bid under either mitigation method has the potential to impact or even set the market clearing price at particular locations on the transmission grid. Below, each mitigation method is described along with the level of discretion used by the market monitoring units in calculating reference prices.

36. Midwest ISO Open Access Transmission Tariff, § 62(a), FERC Electric Tariff, Third Revised Vol. No. 1, Second Revised Sheet No. 746 (effective Apr. 1, 2005).

37. The two most recognizable flaws are the lack of significant demand response and barriers to entry that prevent additions of generation and transmission resources. See Harry First, *Regulated Deregulation: The New York Experience in Electric Utility Deregulation*, 33 *LOV. U. CHI. L.J.* 911, 929-30 (2002) (analyzing New York ISO markets and finding that environmental and siting issues slow the entry of supply-side resources and the lack of enhanced metering stymies customer response to high prices). Additionally, RTOs continue to reformulate market rules and refine mitigation.

38. In order to reset market clearing prices, all of the prices in all of the markets would likely need to be recalculated with new assumptions in place about how suppliers would react to modeled prices. The most efficient dispatch could be assumed, but that leaves a question of how to treat suppliers who actually generated power but were not designated for operation in the efficient dispatch. These issues represent, at best, a partial list of the difficulties faced when trying to remedy the harm caused by an exercise of market power in a bid-based organized market. The crisis in California markets and the West has taught this lesson most effectively. Four years after the Commission required refunds as a result of the crisis, the parties are still arguing about the assumptions to use for recalculating the clearing prices and the California ISO continues to rerun its models of the system to recalculate prices. Penalties and other *ex post* measures can punish the supplier exercising market power, but they cannot sufficiently remedy the harm caused by such action.

39. While California ISO currently employs the conduct and impact mitigation method, the Commission has preliminarily approved its proposal to implement the PJM-style mitigation in its new market design. *California Indep. Sys. Operator Corp.*, 112 F.E.R.C. ¶ 61,013, 61,125-26 (2005). As described below, the PJM-style mitigation uses reference prices only when resources are dispatched out of economic merit order due to transmission constraints.

A. *Mitigation Based on Conduct and Impact Tests*

Conduct and impact tests are the most common mitigation method used to ensure competitive results in bid-based markets. Generally, the tests check for significant deviations in a supplier's bids as compared with its historical bidding practices and then measure the impact of these bids on prices in the market. If the expected impact of the bid would raise the market prices by a certain threshold, reference prices are inserted in the place of the bid prior to the selection of the bids that set the market clearing price.

The conduct test assesses whether a supplier has raised its bids by an amount indicative of market power as compared with the reference price. For example, a supplier fails the conduct test for broadly constrained areas in Midwest ISO if its energy bid exceeds the reference price by the lesser of \$100 per megawatt-hour or 300%.⁴⁰ A supplier's other bid components, such as start-up bids, could also fail the conduct test if they represent a 200% increase in daily payments to the supplier.⁴¹

Impact tests are applied only when the conduct thresholds are violated. The impact test assesses whether the supplier's bid would raise the market price at a specific location on the grid by a significant amount. Market monitoring units use models to compare the market results of using the actual bid or the reference price. If the use of the actual bid is projected to increase uplift payments by a threshold amount or substantially change locational market prices, then the reference price is substituted for the bid prior to clearing the market.

Different markets have different thresholds for determining what constitutes substantial market impacts. For example, in California, if a bid is projected to raise a price in a pricing zone by either 200% or \$50 per megawatt-hour, the reference price is substituted for the offending bid.⁴² On the other hand, in New York ISO, a bid at locations outside New York City can raise the price by either 200% or \$100 per megawatt-hour, whichever is lower, without triggering mitigation.⁴³

All four RTOs with conduct and impact test mitigation methods have lower threshold levels in areas where transmission constraints regularly prevent significant levels of imports into generation-limited areas, known as load pockets. For example, in Midwest ISO load pockets, a supplier's energy bid would fail the conduct tests if it exceeded its reference price by an annually determined dollar amount, currently \$36.93, representing the costs of a new peaking generator.⁴⁴ If the bid also raised the price in the load pocket by the

40. Midwest ISO Open Access Transmission Tariff, § 64.1.2(a)(i), FERC Electric Tariff, Third Revised Vol. No. 1, Second Revised Sheet No. 768 (effective Apr. 1, 2005).

41. Daily payments include "uplift payments" made to the supplier to account for resources' start-up and minimum load costs. The supplier's bids for start-up and minimum load costs do not set location-specific energy clearing prices in the market; rather, the costs are socialized or uplifted to all of the customers on the grid.

42. See *California Indep. Sys. Operator Corp.*, 100 F.E.R.C. ¶ 61,060, 61,245-46 (2002).

43. New York ISO Open Access Transmission Tariff, ISO Market Power Mitigation Measures, Attachment H, § 3.2.1(1), FERC Electric Tariff, Original Vol. No. 2, Second Revised Sheet No. 471.01 (effective Feb. 2, 2005).

44. Midwest ISO Open Access Transmission Tariff, § 64.1.2(c), FERC Electric Tariff, Third Revised Vol. No. 1, Second Revised Sheet No. 770-72 (effective Apr. 1, 2005). The IMM posts the threshold amount at http://www.midwestmarket.org/publish/Document/10b1ff_101f945f78e_-75d30a48324a?rev=1 (last visited Oct. 7, 2005).

same dollar amount, then the bid would be mitigated. New York ISO has similar lower threshold levels for resources located in New York City. The ISO calculates a narrow threshold by taking two percent of the average annual price at New York City locations and multiplying by a small number representing the ratio of constrained hours in the city to total annual hours. Should a bid by an in-city supplier exceed the resource's reference price by this small amount and increase the price by the same small amount, mitigation is applied to the bids.⁴⁵

1. Setting Reference Prices for Use with Conduct and Impact Tests

The Commission has acknowledged that reference prices are "a pre-determined proxy for what a profit-maximizing resource would offer if it had no market power."⁴⁶ The standard for the calculation of reference prices is that the reference level should reflect the marginal costs of a resource.⁴⁷ Reference prices are always set in advance of application of conduct and impact tests and a generation resource would likely have different reference prices for each capacity output level that represents a different set of running costs.⁴⁸ Additionally, reference prices can change as often as every hour, but most change daily. While the method for calculating reference prices varies slightly in different markets, the vast majority of reference prices used in the application of conduct and impact tests are calculated using historical data, without the application of discretion by the market monitoring unit. The one major exception to this rule is the calculation of reference prices in new markets where historical bid or price data is not available.

Reference prices are generally calculated one of four ways. The preferred method for calculating reference prices is the use of the mean or median of a unit's accepted bids in competitive periods over the previous ninety days as adjusted for changes in fuel prices and emissions costs.⁴⁹ Per the relevant tariff

45. For example, in May 2005, resources at the Staten Island node that bid \$8.91 above their reference price and raised the price in the Day Ahead market by the same amount would trigger bid mitigation. Other thresholds for In-City Mitigation were substantially smaller. See NEW YORK ISO, DAY AHEAD IN CITY LOAD POCKET THRESHOLDS (May 15, 2005), available at http://www.nyiso.com/public/webdocs/services/market_monitoring/load_pocket_thresholds/DayAhead/2005/dam_lpt_4_30_05.pdf.

46. *ISO New England, Inc.*, 100 F.E.R.C. ¶ 61,287, 62,264 (2002).

47. See, e.g., Midwest ISO Open Access Transmission Tariff, § 64.1.4(a), FERC Electric Tariff, Third Revised Vol. No. 1, Substituting First Revised Sheet No. 774 (effective Apr. 1, 2005); California ISO Open Access Transmission Tariff, ISO Market Monitoring & Information Protocol § 4.2.1, FERC Electric Tariff, First Replacement Vol. No. 2, Third Revised Sheet No. 508I (effective Oct. 30, 2002); ISO New England Open Access Transmission Tariff, Market Rule 1 – Standard Market Design, Appendix A – Market Monitoring, Reporting, and Market Power Mitigation, § III.A.5.7.3, FERC Electric Tariff No. 3, Original Sheet No. 7431–32 (effective Feb. 1, 2005); New York ISO Open Access Transmission Tariff, ISO Market Power Mitigation Measures, Attachment H, § 4.2.1, FERC Electric Tariff, Original Vol. No. 2, Fourth Revised Sheet No. 473 (effective Feb. 1, 2005).

48. Most combustion generation resources have different heat rates, and therefore consume more or less fuel at different levels of output. The Midwest ISO tariff requires that suppliers submit energy bid curves for each resource, representing the full output of the resource in either a simple staircase curve of prices versus megawatts or a 10-segment monotonically increasing curve. Each stair of the staircase or segment of the monotonically increasing bid curve would have a reference price assigned by the Midwest ISO's Independent Market Monitor.

49. California ISO Open Access Transmission Tariff, ISO Market Monitoring & Information Protocol § 3.1.1.1(a)(1)(1), FERC Electric Tariff, First Replacement Vol. No. 2, Second Revised Sheet No. 508E (effective Oct. 30, 2002); Midwest ISO Open Access Transmission Tariff, § 64.1.4(a)(i), FERC Electric Tariff,

provisions, the market monitoring unit selects the lower of the mean or median when setting the reference price under this method.⁵⁰ A bid is considered accepted during a competitive period if the resource is selected to operate and its bid is not replaced by a reference price.⁵¹ A resource's reference prices would likely change daily under this method, because the reference prices represent a rolling average of the bids over the prior three month period. A single accepted bid during the previous ninety days can serve as the basis for calculating a reference price.⁵²

If there are insufficient accepted bids for calculating a reference price, most markets employ a second method based on historical market prices to set the reference price. ISO New England, New York ISO and the Midwest ISO use the mean of the locational marginal price at the resource's location during the lowest-priced twenty-five percent of the hours that the resource was dispatched over the previous ninety days for similar hours or load levels, as adjusted for changes in fuel prices. The California ISO employs a similar method but uses the market clearing prices for the zone where the resource is located and divides the ninety-day period into peak and off-peak periods.

The third method employed in ISOs and RTOs for calculating reference prices, referred to as the consultation method, involves a consultation between the market monitoring unit and the supplier. In the Midwest ISO, when there is insufficient information to calculate reference prices using historically-accepted bids or the lowest-priced twenty-five percent of historical prices, the Independent Market Monitor consults with the supplier prior to application of conduct and impact tests to determine a reference price that reflects the resource's "marginal costs, including legitimate risks and opportunity costs."⁵³ The Midwest ISO Independent Market Monitor posts spreadsheets for suppliers to enter information on risk premium and opportunity costs.⁵⁴ These spreadsheets show how such costs are used in reference price calculations. In ISO New England and New York ISO, when the first two methods do not result in dependable reference prices, the market monitoring units calculate the sum of the

Third Revised Vol. No. 1, Second Revised Sheet No. 775 (effective Apr. 1, 2005); ISO New England Open Access Transmission Tariff, Market Rule 1 – Standard Market Design, Appendix A – Market Monitoring, Reporting, and Market Power Mitigation, § III.A.5.6.1(b)(i), FERC Electric Tariff No. 3, Second Revised Sheet No. 7429 (effective July 1, 2005); New York ISO Open Access Transmission Tariff, ISO Market Power Mitigation Measures, Attachment H, § 3.1.4(a)(1), FERC Electric Tariff, Original Vol. No. 2, Fourth Revised Sheet No. 470B (effective Feb. 1, 2005).

50. *Id.*

51. *See generally ISO New England, Inc.*, 111 F.E.R.C. ¶ 61,184, 61,889 (2005) (discussing the bids available for averaging in the first method).

52. California ISO Market Monitoring and Information Protocol provides that a single data point per time period (peak or off-peak) is sufficient to set a reference price for each bid segment (bids are divided into 10 equal bid segments). California ISO Open Access Transmission Tariff, ISO Market Monitoring & Information Protocol § 3.1.1(a)(1)(1), FERC Electric Tariff, First Replacement Vol. No. 2, Second Revised Sheet No. 508E (effective Oct. 30, 2002).

53. Midwest ISO Open Access Transmission Tariff, § 64.1.4(iii), FERC Electric Tariff, Third Revised Vol. No. 1, Second Revised Sheet No. 775–76 (effective Apr. 1, 2005).

54. These spreadsheets are accessed through either the Midwest ISO password-protected portal or the main data management system (XML system) used by Midwest ISO. *See* E-mail from Michael Chiasson, Potomac Economics, to Market Participants, Cost-Based Reference Levels, available at http://www.midwestmarket.org/publish/Document/10b1ff_101f945f78e_-7be50a48324a/_pdf?action=download&_property=AttachmentMISO (last visited Sept. 23, 2005) (describing review and input methods for reference prices).

incremental fuel costs, incremental emissions costs and variable operating and maintenance costs for each resource to determine the reference price.⁵⁵ In addition to this formula, both tariffs provide that the RTO shall include “other factors or adjustments as the [RTO] shall reasonably determine to be appropriate based on such data as may be furnished by the [supplier] or otherwise available to the [RTO].”⁵⁶

The fourth method for determining reference prices, referred to as the estimate method, is used when insufficient data is available and the market monitoring unit cannot come to agreement with the supplier during the consultation.⁵⁷ The fourth method allows the market monitoring unit to “estimate” the costs of the resource or use “an appropriate average of competitive bids of one or more similar generation resources.”⁵⁸ This estimate method may be used frequently for newly built resources that have no bidding history, no history of operating costs for evaluation, and may be located at a new pricing location.⁵⁹

The Midwest ISO, New York ISO, and ISO New England use the four methods in the order described above. If there is insufficient information for determining a reference price using the first method, the RTOs attempt to use the second method and so on. The order of application of the different methods varies slightly in the California ISO. The independent contractor in California ISO uses the methods in the following specified order: (1) ninety day historic bid average; (2) for a gas-fired resource with no significant limitations, a formula based on heat rates, gas prices and variable operations and maintenance costs; (3) for resources that use fuels other than natural gas and energy limited resources, the consultation method; (4) the average of the lowest twenty-five percent of prices; and (5) the market monitoring unit’s estimate of the reference price based

55. ISO New England Open Access Transmission Tariff, Market Rule 1 – Standard Market Design, Appendix A – Market Monitoring, Reporting, and Market Power Mitigation, § III.A.5.6.1(iii), FERC Electric Tariff No. 3, Second Revised Sheet No. 7429 (effective July 1, 2005); New York ISO Open Access Transmission Tariff, ISO Market Power Mitigation Measures, Attachment H, § 3.1.4(a)(3), FERC Electric Tariff, Original Vol. No. 2, Fourth Revised Sheet Nos. 470B–470C (effective Feb. 1, 2005).

56. ISO New England Open Access Transmission Tariff, Market Rule 1 – Standard Market Design, Appendix A – Market Monitoring, Reporting, and Market Power Mitigation, § III.A.5.6.1(iii), FERC Electric Tariff No. 3, Second Revised Sheet No. 7429 (effective July 1, 2005); New York ISO Open Access Transmission Tariff, ISO Market Power Mitigation Measures, Attachment H, § 3.1.4(a)(3), FERC Electric Tariff, Original Vol. No. 2, Fourth Revised Sheet Nos. 470B–470C (effective Feb. 1, 2005).

57. In Midwest ISO, this method can be used if the IMM determines that the consultation approach is “not applicable.” Midwest ISO Open Access Transmission Tariff, § 64.1.4(b), FERC Electric Tariff, Third Revised Vol. No. 1, Second Revised Sheet Nos. 776–77 (effective Apr. 1, 2005).

58. California ISO Open Access Transmission Tariff, ISO Market Monitoring & Information Protocol § 3.1.1.1(a)(1)(5), FERC Electric Tariff, First Replacement Vol. No. 2, Second Revised Sheet No. 508F (effective Oct. 1, 2002); Midwest ISO Open Access Transmission Tariff, § 64.1.4(b), FERC Electric Tariff, Third Revised Vol. No. 1, Second Revised Sheet Nos. 776–77 (effective Apr. 1, 2005); ISO New England Open Access Transmission Tariff, Market Rule 1 – Standard Market Design, Appendix A – Market Monitoring, Reporting, and Market Power Mitigation, § III.A.5.6.2, FERC Electric Tariff No. 3, Second Revised Sheet No. 7430 (effective July 1, 2005); New York ISO Open Access Transmission Tariff, ISO Market Power Mitigation Measures, Attachment H, § 3.1.4(b), FERC Electric Tariff, Original Vol. No. 2, Sixth Revised Sheet Nos. 471 (effective Feb. 1, 2005).

59. However, even for new resources, this method is used only rarely because new resources will generally accumulate a bidding history sufficient to establish a reference price in as little as one month. As discussed above, in some markets, a single bid can provide sufficient data to set a reference price under the historical bidding calculation method.

on available cost-specific information or data on similar resources.⁶⁰ Under the California ISO Tariff, the supplier must provide data on the resource's energy limitations and its operating and opportunity costs as specified by the California ISO.⁶¹ If the resource is not energy limited and there is insufficient information to calculate reference prices using past accepted bids or the lowest-priced twenty-five percent of historical prices, the reference price is calculated by the independent contractor "taking into account available operating costs data, opportunity costs, and appropriate input from the [supplier], and the best information available to the ISO" or "an appropriate average of competitive bids of one or more similar Electric Facilities."⁶²

There are a few exceptions to the order of application of the reference price calculation methods. First, in newly-formed markets, since there is no resource bidding or locational pricing history upon which to base reference prices, the market monitoring units must rely on the consultation method or estimate method, at least during an interim period.⁶³ Second, RTOs with expanding footprints must incorporate new resources that have no bidding history and new pricing locations on the RTO-operated grid. The Commission has not yet encountered this second situation in an RTO that uses conduct and impact mitigation tests. Third, the Commission recently approved the consultation method as the sole method for calculating reference price for certain resources that are scheduled frequently for reliability services.⁶⁴ The order of reference price calculation method switches for these resources located in ISO New England if the resources have been run out of economic merit order in the last ninety days.⁶⁵ These three exceptions amount to very few instances of reference price calculations that rely primarily on the consultation method because they represent either a method used in a transitional period, as is the case in new markets or expanded areas, or application to a limited number of resources, as in the case of ISO New England's reliability units. Thus, the exceptions do not change the fact that the vast majority of reference prices in bid-based markets are

60. Under the California ISO tariff, reference prices for gas-fired resources with no significant energy limitations cannot be calculated through consultation with the market monitoring unit. California ISO Open Access Transmission Tariff, ISO Market Monitoring & Information Protocol § 3.1.1.1(a)(2), FERC Electric Tariff, First Replacement Vol. No. 2, Second Revised Sheet No. 508E (effective Oct. 30, 2002).

61. California ISO Open Access Transmission Tariff, ISO Market Monitoring & Information Protocol § 3.1.1.1(a)(3), FERC Electric Tariff, First Replacement Vol. No. 2, Second Revised Sheet No. 508E (effective Oct. 30, 2002).

62. California ISO Open Access Transmission Tariff, ISO Market Monitoring & Information Protocol § 3.1.1.1(a)(5)(i)(ii), FERC Electric Tariff, First Replacement Vol. No. 2, Second Revised Sheet No. 508F (effective Oct. 1, 2002).

63. *Midwest Indep. Transmission Sys. Operator, Inc.*, 108 F.E.R.C. ¶ 61,163, 61,924 (2004) (noting that the IMM would conduct surveys and estimate production costs to determine reference prices for the first 60 days of market operations and requiring application of a cost-based mitigation scheme rather than the conduct and impact thresholds). This issue was not present in ISO New England or New York ISO, since both RTOs operated tight power pools with cost-based bidding procedures prior to implementation of conduct and impact mitigation thresholds. California also operated bid-based markets prior to implementation of conduct and impact mitigation.

64. *ISO New England Inc.*, 111 F.E.R.C. ¶ 61,184 (2005) (approving ISO New England's request to address the ability of certain suppliers to gradually increase reference prices above levels that represent a resource's marginal costs due to limited competition), *reh'g pending*.

65. *Id.*; *see also* ISO New England Open Access Transmission Tariff, Market Rule 1 – Standard Market Design, Appendix A – Market Monitoring, Reporting, and Market Power Mitigation, § III.A.5.6.1(b)(iv), FERC Electric Tariff No. 3, Second Revised Sheet No. 7429–30 (effective July 1, 2005).

calculated using formulas with historical data inputs.

2. Ad Hoc Reference Price Adjustments

Reference price adjustments are made by market monitoring units when the calculation methods understate the marginal costs specific to a particular resource. Usually reference prices are adjusted to take into account specific conditions that a resource is experiencing for intermittent periods and to avoid errant application of mitigation measures. The most common example cited as a good case for an upward adjustment in the reference prices is a resource with a tube leak. A tube leak in a steam generator increases the probability of forced outage if the unit operates at close to full output. An increase in the reference prices for the highest levels of output from a resource with a tube leak can compensate for the increased risk of outage and corresponding loss of energy revenues. Other unforeseen situations that may require an adjustment to the reference price include resources with energy limitations due to unexpected emission limitations or limited fuel resources, resources affected by periods of high fuel price volatility and uncertain availability, resources that have switched fuels due to fuel shortages, and resources with other temporary mechanical problems.

The mitigation provisions in California ISO, ISO New England, New York ISO, and Midwest ISO all provide for suppliers to contact either the RTO or the market monitoring unit to request adjustments to their reference prices.⁶⁶ Additionally, the market monitoring units in these RTOs will proactively contact suppliers whose resources are likely to set market clearing prices if the suppliers' bids exceed the conduct thresholds. The Midwest ISO tariff, which contains provisions representative of the provisions in the other mitigation plans, states that "if a [supplier's] explanation of the reasons for its Offers indicates to the satisfaction of the IMM that the questioned conduct is consistent with competitive behavior, no further action will be taken."⁶⁷

Although reference price adjustments can occur in all markets that employ conduct and impact threshold mitigation methods, they rarely occur in practice. For instance, New York ISO received only eleven requests to adjust reference prices in 2004.⁶⁸ One of the requests involved a generation resource with a tube leak and three others involved generation resources with limited run times due to environmental restrictions. The remaining requests involved inaccurately

66. California ISO Open Access Transmission Tariff, ISO Market Monitoring & Information Protocol § 3.3, FERC Electric Tariff, First Replacement Vol. No. 2, First Revised Sheet No. 508H (effective Oct. 1, 2002); Midwest ISO Open Access Transmission Tariff, § 64.3, FERC Electric Tariff, Third Revised Vol. No. 1, Substitute Second Revised Sheet Nos. 782-84 (effective Apr. 1, 2005); (The supplier who anticipates submitting bids that will exceed the conduct and impact thresholds may provide the IMM with an explanation of the basis for the bid prior to bid submission.); ISO New England Open Access Transmission Tariff, Market Rule 1 - Standard Market Design, Appendix A - Market Monitoring, Reporting, and Market Power Mitigation, § III.A.3.1.4, FERC Electric Tariff No. 3, First Revised Sheet No. 7417 (effective July 1, 2005); New York ISO Open Access Transmission Tariff, ISO Market Power Mitigation Measures, Attachment H, § 3.3, FERC Electric Tariff, Original Vol. No. 2, Second Revised Sheet Nos. 472A-73 (effective Feb. 1, 2005).

67. Midwest ISO Open Access Transmission Tariff, § 64.3(f), FERC Electric Tariff, Third Revised Vol. No. 1, Second Revised Sheet No. 784 (effective Apr. 1, 2005).

68. Comments of the New York Independent System Operator, Inc., *Establishing Reference Prices for Mitigation in Markets operated by Regional Transmission Organizations and Independent System Operators*, FERC Docket No. PL05-6-000 (2005).

entered data or software problems. New York ISO internal market monitoring staff negotiated with the suppliers in these eleven requests and made adjustments to the reference prices.⁶⁹ In California ISO, the entity responsible for determining reference prices consults about once per month on reference price adjustments.⁷⁰

Market monitoring units defend the use of reference price adjustments as necessary because the formulas for calculating reference prices cannot account for unusual circumstances facing a resource. Potomac Economics, a firm that provides market monitoring and mitigation services to Midwest ISO, New York ISO, ISO New England, and California ISO, states that reference price adjustments “require that the market monitor employ some measure of professional judgment in assessing whether the requested adjustment reflects a legitimate risk or other costs and thus should be made, or is a pretext for exercising market power.”⁷¹ Since immediate responses to requests to adjust reference prices are necessary to avoid errant application of mitigation, market monitoring units are available every day, all day, to consult with suppliers.

B. Mitigation Based on Transmission Constraints and Pivotal Suppliers

The second type of mitigation in bid-based markets, which is currently applied by PJM, also relies upon substitution of reference prices for bids when the market is deemed uncompetitive.⁷² PJM mitigates only when a transmission constraint requires that the generating resource must run to meet reliability.⁷³ Also, the tariff limits mitigation to situations in which there are three or fewer pivotal suppliers.⁷⁴ When transmission constraints are present, PJM substitutes reference prices for the bids of all resources on the limited side of the constraint, reorders the bid stack and calculates a market price at the location based on the reference price of the marginal unit.⁷⁵ As with all bid-based electric markets, all

69. *Id.*

70. Comments of Potomac Economics, Inc., *Establishing Reference Prices for Mitigation in Markets operated by Regional Transmission Organizations and Independent System Operators*, FERC Docket No. PL05-6-000 (2005).

71. *Id.* at 5–6. Potomac Economics is the IMM for the Midwest ISO, the market advisor for New York ISO and ISO New England, and has a contractual obligation to set reference prices for the California ISO markets.

72. While the PJM tariff styles its mitigation method as one that relies on “offer price caps,” these offer caps do not differ from reference prices in that they are intended to represent the costs of mitigated resources and are substituted by the market monitoring unit for actual bids in non-competitive conditions.

73. PJM Open Access Transmission Tariff, Attachment K § 6.1, FERC Electric Tariff, Sixth Revised Vol. No. 1, Sixth Revised Sheet No. 399 (effective May 1, 2005).

74. PJM Open Access Transmission Tariff, Attachment K § 6.4.1(e), FERC Electric Tariff, Sixth Revised Vol. No. 1, Substitute Sixth Revised Sheet No. 402 (effective Jan. 26, 2005). *See also PJM Interconnection, L.L.C.*, 110 F.E.R.C. ¶ 61,053, 61,237 (2005) (accepting pivotal supplier test for interim application but instituting a proceeding under section 206 of the FPA to determine whether the pivotal supplier test is just and reasonable), *order on reh'g*, 112 FERC ¶ 61,031 at 61,249 (2005) (establishing hearing procedures on the pivotal supplier test). Normally, PJM dispatches generation based on the economic merit order of suppliers' bids. However, bids for generation resources are subject to mitigation when, as the result of transmission congestion, the resource is selected out of economic order to maintain reliability. PJM Open Access Transmission Tariff, Attachment K § 6.1, FERC Electric Tariff, Sixth Revised Vol. No. 1, Sixth Revised Sheet No. 399 (effective May 1, 2005).

75. PJM Open Access Transmission Tariff, Attachment K § 6.4.1, FERC Electric Tariff, Sixth Revised Vol. No. 1, First Revised Sheet No. 401 (effective June 1, 2004) (“[I]f, at any time, it is determined by the Office of the Interconnection . . . that any generation resource may be dispatched out of economic merit order

resources are paid the market price as set by the bid of the marginal unit.

There are also four ways of setting the reference price in PJM. Reference price calculation in PJM diverges most significantly from reference price calculation in RTOs using the conduct and impact test in that the PJM tariff allows suppliers rather than market monitoring units discretion to select among the methods of reference price calculation. However, the choices for the supplier are predominately limited to either a cost plus ten percent formula or an estimate of appropriate market prices made by the PJM market monitoring unit.

The cost plus ten percent method is the most commonly applied reference price calculation method and is determined by taking the incremental operating costs of each individual unit and adding ten percent to those costs.⁷⁶ Incremental operating costs are calculated by summing the incremental fuel cost, maintenance cost, labor costs and other incremental operating costs for each individual generation resource.⁷⁷ The PJM Board, with advice of the PJM Members, is responsible for defining, in detail, the method for determining incremental costs.⁷⁸ While emissions allowance costs have been approved by the Commission and included in the PJM tariff, no other cost details are present in the tariff.

Suppliers in PJM may also select a reference price for their resources as set by the market price at the location where power from their resource enters the grid. The reference price is determined by taking a weighted average of the price during a specified number of hours during which the resource was dispatched based on the economic merit order of its bids. PJM determines the specified number of hours by deciding the number of hours that are "sufficient to result in an offer price cap that reflects reasonably contemporaneous competitive market conditions for that unit."⁷⁹ The later provisions make this reference price calculation method analogous to the estimate method used by RTOs in the conduct and impact test mitigation methods.

Finally, two other options for setting the reference price are available for suppliers whose resources are mitigated eighty percent or more of the resource's run time. Such suppliers may choose a reference price equal to the resource's incremental costs plus \$40 per megawatt-hour or a reference price that represents the resource's "unit-specific going forward costs" as reflected in an agreement between PJM and the supplier.⁸⁰

to maintain system reliability as a result of limits on transmission capability, the offer prices for energy from such resources shall be capped at the levels specified . . .").

76. PJM Open Access Transmission Tariff, Attachment K § 6.4.2(a)(ii), FERC Electric Tariff, Sixth Revised Vol. No. 1, Second Revised Sheet No. 402A (effective Jan. 26, 2005).

77. Suppliers are responsible for providing information on their incremental costs to PJM. PJM Operating Agreement, Schedule 2 – Components of Cost, § b, Third Revised Rate Schedule No. 24, Second Revised Sheet No. 167 (May 1, 2004). Other incremental operating costs include the costs of emissions allowances as set forth in great detail in Schedule 2-Exhibit A of the Operating Agreement. PJM Operating Agreement, Schedule 2, Exhibit A – Explanation of the Treatment of the Costs of Emission Allowances, Third Revised Rate Schedule No. 24, Second Revised Sheet No. 168 (May 1, 2004).

78. PJM Operating Agreement, Schedule 2 – Components of Cost, § d, Third Revised Rate Schedule No. 24, Second Revised Sheet No. 167 (May 1, 2004).

79. PJM Open Access Transmission Tariff, Attachment K § 6.4.2(a)(i), FERC Electric Tariff, Sixth Revised Vol. No. 1, Second Revised Sheet No. 402A (effective Jan. 26, 2005).

80. PJM Open Access Transmission Tariff, Attachment K § 6.4.2(a)(iii)–(iv), FERC Electric Tariff, Sixth Revised Vol. No. 1, Second Revised Sheet No. 402A (effective Jan. 26, 2005). Agreements on unit-specific going forward costs between PJM and suppliers are filed as information filings with the Commission.

C. *Impact of Discretionary Action on the Jurisdictional Rate*

A small number of decisions made by market monitoring units on reference price calculations are discretionary and reference prices infrequently have a direct impact on the jurisdictional rate. While the Commission has recognized that the setting of reference prices involves, at times, the exercise of some discretion by market monitoring units,⁸¹ RTO tariffs require that the majority of reference prices, especially in more mature markets, be calculated by plugging numbers into formulas.

In RTOs that apply conduct and impact tests, the order of application of the reference price calculation methods is important because the four methods represent a continuum of permitted discretion by the market monitoring units. The first and second methods are applied without discretion by the market monitoring units. The consultation method provides some discretion by the market monitoring units in exercising their verification and validation role and in some RTOs determining which costs are validly included in the reference price. Even in the case of calculating opportunity costs and risk premiums incorporated into reference prices under the consultation methods used by the RTOs, market monitoring units use standardized spreadsheets and formulas to collect data and determine reference price inputs.⁸² The least used calculation method, the estimate method, calls for the most discretion in that it allows the market monitoring unit to choose which resources represent similar resources for the resource that lacks cost data. Importantly, this exercise of discretion is allowed only if historical data is not available or if consultation with suppliers does not come to fruition. Finally, all RTOs using conduct and impact test mitigation have provisions that allow suppliers to seek and market monitoring units to provide ad hoc adjustments in order to account for intermittent exigent circumstances. While these ad hoc adjustments are used very infrequently, they mark the zenith of discretionary action by the market monitoring units.

In PJM, where mitigation is applied based on transmission constraints and pivotal suppliers, the discretion in calculating reference prices is shared between suppliers and the market monitoring unit. The PJM tariff is the only RTO tariff that gives suppliers the discretion to choose between two calculation methods for establishing their reference prices in the market. Perhaps in an attempt to balance the supplier's discretion, the market monitoring unit is allowed a high level of discretion in calculating reference prices under the second method

PJM Open Access Transmission Tariff, Attachment K § 6.4.2(d), FERC Electric Tariff, Sixth Revised Vol. No. 1, Second Revised Sheet No. 402A.01 (effective Jan. 26, 2005).

81. See, e.g., *California Indep. Sys. Operator Corp.*, 101 F.E.R.C. ¶ 61,061, 61,214 (2002) (noting that calculating reference prices "is not just a matter of 'plugging in' numbers" and that "[s]everal of the criteria" for determining reference prices include "subjective decisions" including some provisions for "negotiated rates").

82. See, e.g., *supra* note 54; ISO NEW ENGLAND, REPORTING OF GENERATING UNIT FUEL COST & RELATED DATA FOR ISO NEW ENGLAND MARKET MONITORING & MARKET POWER MITIGATION (2001), available at http://www.iso-ne.com/committees/comm_wkgrps/mrks_comm/mrks/mtrls/2001/apr24252001/A1_AttachmentC--ReportingofGeneratingUnitFuelCostandRelatedDataforISO-NEMMM.doc (detailing inputs, formulas and reporting requirements for the reference price calculation process); NEW YORK ISO, REFERENCE PRICE DATA TEMPLATE INSTRUCTIONS (2004), available at http://www.nyiso.com/public/webdocs/services/market_monitoring/reference_price_data_submittal/ref_price_instructions.pdf (detailing spreadsheet inputs for marginal costs including risk premium, emergency output costs, opportunity costs, environmental costs, regulatory and other ISO-imposed costs, PURPA status, hydro unit costs).

Since the vast majority of reference prices in RTOs using conduct and impact test mitigation methods are set using non-discretionary formulas based on historical accepted bids or average prices, and discretion on the part of the market monitoring unit in adjusting reference prices would not result in mitigation, it is unlikely that a market monitor's discretionary action would set the jurisdictional rate. In PJM, the reference price calculation methods are less formulaic than those applied through conduct and impact tests and both suppliers and the market monitoring unit exercise discretion in determining the reference prices. Under both mitigation methods, reference prices clearly impact prices in bid-based organized markets, thereby impacting the justness and reasonableness of the jurisdictional rate in certain circumstances, even if they have never set clearing prices in the markets. Therefore, we must next examine the limited discretion in calculating reference prices afforded to market monitoring units by the Commission through the lens of the subdelegation doctrine.

IV. THE SUBDELEGATION DOCTRINE

In *U.S. Telecom*, the court examined the question of permissible delegations by an Executive Branch agency to non-federal entities.⁹⁷ Pursuant to its enabling act, the Federal Communications Commission (FCC) is authorized to require carriers to unbundle certain network elements and thereby make the services available to their competitors if it finds that the failure to unbundle network elements would "impair" the competitors' ability to compete.⁹⁸ After making a finding of the need to unbundle the national market, the FCC instructed state commissions to eliminate unbundling if the relevant market met certain criteria. The court found that the FCC gave the state commissions "virtually unlimited discretion over the definition of the relevant market"⁹⁹ and unwarranted discretion over the "application of the FCC's . . . impairment standard to the specific circumstances . . ."¹⁰⁰ The court was also unconvinced that the review rights for parties aggrieved by the state commission decisions, namely an opportunity to seek a declaratory ruling from the FCC, provided timely and assured protections to the aggrieved parties.¹⁰¹ The court characterized the FCC's actions as an "attempted punt" of its statutory obligations,¹⁰² holding that the FCC had improperly delegated to the states the key decisions of defining and applying the statutory "impairment" standard to the specific circumstances of the local telecom markets.¹⁰³

The *U.S. Telecom* opinion establishes a new rule: where an enabling statute is silent as to the agency's subdelegation of authority to non-federal entities, an agency may subdelegate its decision-making authority to a subordinate federal

set the clearing price makes such an occurrence extremely remote. In reality, most mitigation occurs when a supplier is not aware of its resource's reference levels and either does not realize that it is bidding above the conduct threshold or expects that its resource will not be a marginal resource in the market thereby impacting the clearing price.

97. *United States Telecom Ass'n v. FCC*, 359 F.3d 554, 564 (D.C. Cir. 2004).

98. *Id.*

99. *U.S. Telecom*, 359 F.3d at 564.

100. *Id.* at 567 (citing *United States v. Matherson*, 367 F. Supp. 779 (E.D.N.Y. 1973) and *S. Pac. Transp. v. Watt*, 700 F.2d 550 (9th Cir. 1983)).

101. *U.S. Telecom*, 359 F.3d at 564.

102. *Id.* at 567.

103. *United States Telecom Ass'n v. FCC*, 359 F.3d 554, 566 (D.C. Cir. 2004).

officer or agency, but not to non-federal entities.¹⁰⁴ In supporting this new rule, the court cited the dual policy objectives of maintaining the democratic check on government decision-making and providing consistent national perspective in applying congressional authority.¹⁰⁵ In short, the court was concerned that a non-federal entity, if given discretionary decision-making ability, “may pursue goals inconsistent with those of the agency and the underlying statutory scheme.”¹⁰⁶

The court also carved out three exceptions to the rule: “(1) establishing a reasonable condition for granting federal approval; (2) fact gathering; and (3) advice giving.”¹⁰⁷ The primary exception that concerns us here is the first one. In describing this exception, the court relied on two cases where the federal agency conditioned its approval on the decision of a non-federal entity and found that the decision of the non-federal entity served as one element of the agency decision-making process and addressed relevant local concerns.¹⁰⁸ By contrast, the court held that the FCC’s actions did not fit into this exception because the FCC delegated “almost the entire determination of whether a specific statutory requirement” has been met to a non-federal entity.¹⁰⁹

While *U.S. Telecom* suggests that delegation by a federal agency to a non-federal entity requires that the delegation be authorized by statute (unless the exceptions above apply), it did not delve into whether decision-making authority can be delegated if standards for decision-making are provided to the non-federal entity charged with tariff implementation. However, the D.C. Circuit did address this issue in *Perot*. The *Perot* opinion involves the setting of decision-making standards by a federal agency and the implementation of those standards by a regulated, non-federal entity.¹¹⁰ In *Perot*, the underlying action in question was the Federal Election Commission’s (FEC) determination that “eligible non-profit organizations may stage candidate debates, so long as they ‘use pre-established objective criteria to determine which candidates may participate in a debate.’”¹¹¹ The court held that the FEC allowed the non-profit organizations to “use their discretion to formulate objective criteria [that] they think will conform with the agency’s definition” of the term “objective criteria” and secure an FEC advisory opinion about the objectiveness of those criteria.¹¹² The court, in rejecting the contention that the FEC’s action was an impermissible delegation of its statutory responsibility to prevent corporate funding of party candidates, found that under the plaintiff’s mistaken assertion, “virtually any regulation of a private party could be described as a ‘delegation’ of authority, since the party must normally exercise some discretion in interpreting what actions it must take to comply.”¹¹³ The court held that delegation of the exclusive authority of an administrative agency does not occur when a private party is merely implementing agency

104. *Id.* at 566.

105. *U.S. Telecom*, 359 F.3d at 565–66.

106. *Id.* at 566.

107. *U.S. Telecom*, 359 F.3d at 566.

108. *Id.* at 567.

109. *United States Telecom Ass’n v. FCC*, 359 F.3d 554, 567 (D.C. Cir. 2004).

110. *Perot v. FEC*, 97 F.3d 553, 560 (D.C. Cir. 1996).

111. *Id.* at 556.

112. *Perot*, 97 F.3d at 559–560.

113. *Id.* at 560.

regulations and the non-federal entity's implementation of the regulations is subject to the agency's ultimate review.¹¹⁴

The *U.S. Telecom* and *Perot* decisions apply some similar elements in determining whether exercises of discretion by non-federal entities are permissible. Both decisions focus on the ability of an agency to review discretionary decisions made by non-federal entities as one element to review in determining whether the agency has inappropriately delegated its statutory authority. When agency review represents more than just a "rubber stamp" of a non-federal entity's decision and is "assured" and "timely,"¹¹⁵ this weighs in favor of granting an exception to the *U.S. Telecom* rule. Agency review is also one of the two prongs in the *Perot* test.¹¹⁶ Further, both decisions develop a variation of the "intelligible principle" requirement applied in court evaluations of legislative delegations.¹¹⁷ In *U.S. Telecom*, when there is a reasonable basis for granting discretion to a non-federal entity and limits on the scope of that discretion, decision-making by that entity is permitted under the subdelegation rule.¹¹⁸ In adopting the "objective criteria" requirement, the court in *Perot* used a slightly different variation of the intelligible principle requirement, focusing on the standards provided to non-federal entities that guide their discretionary actions.¹¹⁹ In reconciling these variations, we adopt a stricter test than that applied in either decision.

We posit the following test to apply when discretionary action by a non-federal entity is found to encroach upon an agency's statutory authority: An agency does not violate the subdelegation rule where (1) an agency's regulations provide objective criteria for a non-federal entity to apply when implementing those regulations, (2) there is a reasonable basis for giving the non-federal entity discretion to apply the regulations, and (3) the non-federal entities' actions in implementing the regulations are subject to review by the agency. We next apply this test to the discretionary decisions made in the calculation of reference prices.

V. APPLICATION OF THE SUBDELEGATION TEST TO REFERENCE PRICE DECISION-MAKING

The subdelegation issue must be addressed because the FPA is silent as to whether the Commission may delegate its authority over electric rates to non-federal entities, market monitoring units sometimes exercise discretion in determining reference prices,¹²⁰ and reference prices can impact market prices in bid-based organized markets, which in turn affect the justness and

114. *Perot*, 97 F.3d at 560. See also *United Black Fund, Inc. v. Hampton*, 352 F. Supp. 898 (D.D.C. 1972) (holding that since the Chairman of the U.S. Civil Service Commission retains authority to review the policies of regulated charities to ensure that they meet federal requirements, screening of charities by United Way does not amount to a surrender of authority over policies of charities regulated by the agency).

115. *United States Telecom Ass'n v. FCC*, 359 F.3d 554, 567-78 (D.C. Cir. 2004).

116. *Perot*, 97 F.3d at 560.

117. See *Whitman v. Am. Trucking Ass'ns, Inc.*, 531 U.S. 457 (2001); *Mistretta v. United States*, 488 U.S. 361 (1989); *A.L.A. Schechter Poultry Corp. v. United States*, 295 U.S. 495 (1928).

118. *U.S. Telecom*, 359 F.3d at 567.

119. *Perot v. FEC*, 97 F.3d 553, 560 (D.C. Cir. 1996).

120. We also address here the discretion exercised by PJM suppliers in choosing between methods for reference price calculation.

reasonableness of the jurisdictional rate in certain circumstances. Application of our proposed test indicates that the Commission appropriately limited the discretion of market monitoring units by establishing objective criteria for them to follow in determining reference prices and retaining review of market monitoring units' decisions. We also find that there is a reasonable basis for giving market monitoring units discretion to determine reference prices because market monitoring units are independent of market participants and possess the requisite understanding of specific markets and expertise to determine market costs given the tight time constraints in the organized markets.

The competitive market is the mechanism that the Commission relies upon to set just and reasonable rates in organized bid-based markets. In the last decade, the Commission has relied increasingly on competitive forces to control wholesale power prices through its use of market-based rates and structural market rules. This reliance is consistent with the Commission's legal duty to assure just and reasonable rates for wholesale power sales and has been upheld by the courts.¹²¹ The Commission has allowed market-based pricing in organized bid-based markets so that jurisdictional rates are determined by the interplay of supply and demand. But the Commission cannot rely solely on competition in meeting its statutory duty to ensure just and reasonable rates. Federal appellate courts have held that safeguards are necessary to ensure that market-based rates continue to be just and reasonable.¹²² Accordingly, "[t]he Commission has the statutory responsibility to ensure that public utilities selling in competitive bulk power markets do not engage in market power abuse and also to ensure that markets within the Commission's jurisdiction are free of design flaws and market power abuse."¹²³ Tariff provisions allowing for the use and determination of reference prices are safeguards used by the Commission to ensure that conditions in organized markets are competitive, consistent with the Commission's grant of market-based rates to suppliers in those markets.

RTO reference price tariff provisions satisfy the first prong of our subdelegation test by incorporating "objective criteria." The Commission has established through its approval of RTO tariffs, as well as its orders, that reference prices in organized markets should reflect the marginal costs of a resource.¹²⁴ In establishing that reference prices should reflect marginal costs and by further defining the elements of marginal costs in the RTO tariffs, the Commission has created objective criteria for market monitoring units to follow when it is necessary to use discretion to determine reference prices. Of course, most of the RTO tariffs provide detailed formulas, such as historical bid

121. See *California v. FERC*, 383 F.3d 1006, 1013 (9th Cir. 2004); *La. Energy & Power v. FERC*, 141 F.3d 364, 365 (D.C. Cir. 1998). See also Joseph T. Kelliher, *Market Manipulation, Market Power, and the Authority of the Federal Energy Regulatory Commission*, 26 ENERGY L.J. 1, 9-12 (2005) (describing steps the FERC has taken to strengthen its market-based regulatory regime). But see Gerald Norlander, *May the FERC Rely on Markets to Set Electric Rates*, 24 ENERGY L.J. 65 (2003) (arguing that the FERC's assertion of market-based rate authority is contrary to Supreme Court precedent and based on D.C. Circuit decisions which did not decide the issue).

122. See, e.g., *California*, 383 F.3d at 1012; *La. Energy & Power*, 141 F.3d at 365.

123. *PJM Interconnection, L.L.C.*, 96 F.E.R.C. ¶ 61,061, 61,239 (2001).

124. See *supra* note 47; *PJM Interconnection, L.L.C.*, 110 F.E.R.C. ¶ 61,053, 61,240 (2005) (explaining that suppliers who bid above their resources' marginal costs are subject to mitigation in PJM), *order on reh'g and clarification*, 112 F.E.R.C. ¶ 61,031, 61,262 (clarifying that a market monitoring unit's accounting of costs may not truly reflect all marginal costs, including opportunity costs, for each resource).

averages, that represent a preferred way of measuring marginal costs allowing market monitoring units to determine reference prices without using any discretion. Notably, with the exception of the PJM tariff, each Commission-approved RTO tariff contains much more detail and less discretion for the market mitigation function than the objective criteria applied by the regulated entity in *Perot*.¹²⁵ In the case of PJM, while the PJM tariff provisions for implementing mitigation do not explicitly contain this objective criteria, the Commission has set the objective criteria for PJM in repeatedly stating that bids will be mitigated to marginal costs when the market is uncompetitive.¹²⁶ The objective marginal cost criteria, whether contained in an RTO tariff or specified by Commission order, sufficiently circumscribe the limited delegated authority provided to market monitoring units by the Commission and meet the “objective criteria” standard set forth in the first prong of our test.

We analyze the “reasonable basis” for allowing discretion under the second prong of our subdelegation test in two parts: RTOs that use the conduct and impact test mitigation method and PJM-style mitigation. In RTOs that apply conduct and impact tests, the Commission has a reasonable basis for allowing limited discretion by market monitoring units in determining reference prices. The Commission-approved tariffs provide for preferred methods of calculating reference prices that rely on formulas and historical data inputs. Where there is a modicum of discretion allowed in implementing the tariff provisions, the Commission relies on the professional engineering, economic, and market expertise of the individuals constituting the market monitoring units to fill in the gaps in the data consistent with the objective criteria. Additionally, the Commission has only delegated its authority to pre-determined independent entities that have no conflicts of interest with those participating in the market. Further, the scope of the delegation in *U.S. Telecom* is distinguishable from the Commission’s approval of mitigation provisions because reference prices only on rare occasions impact the rate for electricity in bid-based markets, and thus the Commission has not abdicated “almost the entire determination” of whether a just and reasonable rate has been set.¹²⁷ Specifically, the tariffs provide for discretionary actions by the market monitoring units in determining estimates when the consultation method fails and ad hoc adjustments when exigent circumstances exist. The time-sensitive nature of these rarely-applied discretionary calculation methods, in addition to the courts’ mandate that the Commission must safeguard competition in organized markets, provides a reasonable basis for giving limited discretion to non-federal entities that are independent of market participants and can act quickly with expertise in the relevant markets to mitigate uncompetitive prices.

125. The criteria used by the Commission on Presidential Debates, a non-profit corporation, to determine if a non-major party candidate was allowed in the debates included signs of national newsworthiness as shown by professional opinions of Washington bureau chiefs and indicators of public enthusiasm as demonstrated through public opinion polls. *Perot v. FEC*, 97 F.3d 553, 556 (D.C. Cir. 1996).

126. The PJM tariff also differs from the other RTO tariffs in that the order of application of formulas to determine the marginal costs is unspecified. Instead the supplier is allowed to choose between an average of prices at its resource’s node as adjusted by the market monitoring unit and incremental costs (to include incremental fuel costs, incremental maintenance costs, incremental labor costs, and other incremental operating costs) plus ten percent. PJM Open Access Transmission Tariff, Attachment K § 6.4.2, FERC Electric Tariff, Sixth Revised Vol. No. 1, Second Revised Sheet No. 402A (effective Jan. 26, 2005).

127. *United States Telecom Ass’n v. FCC*, 359 F.3d 554, 554 (D.C. Cir. 2004).

We next evaluate the second prong of our subdelegation test with regard to the PJM-style mitigation method. By providing discretion to suppliers in determining reference prices, the current tariff provisions in PJM may not fully meet the “reasonable basis” prong of our test. Suppliers are certainly experts in their costs and many are experts in the workings of the PJM market, but suppliers are market participants and have a clear conflict of interest in playing a discretionary part in the determination of market prices. Since an independent expert entity is available in PJM to determine which reference price calculation method to apply and, moreover, since the Commission could designate the order in which the calculation methods should apply, the PJM tariff may need to be revisited with the reasonable basis standard of *U.S. Telecom* in mind.¹²⁸

The Commission’s review of tariff provisions and its review of the exercise of discretion by market monitoring units meets the third prong of our subdelegation test. First, the Commission has approved all of the mitigation measures, including the process for determining reference prices, contained in each RTO tariff through its normal filing and comment process and thereby provided parties with the ability to challenge the current tariff provisions. Second, parties can appeal ADR decisions reached pursuant to the RTO Tariff provisions directly to the Commission. New York ISO’s, California ISO’s, Midwest ISO’s, and ISO New England’s tariffs contain provisions that require aggrieved parties to enter into alternate dispute resolution (ADR) with the ISO.¹²⁹ In *New York ISO v. Dynegy*,¹³⁰ the Commission asserted primary jurisdiction over arbitration awards that involve novel and technical policy issues within its technical expertise. The Commission has found that where there is concurrent jurisdiction to review arbitration awards and “when agency action would produce needed uniformity in an area or when the agency has ‘special competence’ over the issue[s] to be decided” the arbitration award is subject to the Commission’s jurisdiction.¹³¹ It is likely that under the rationale in *New York ISO v. Dynegy*, the Commission would assert primary jurisdiction over an arbitration decision on any disputed reference price.¹³² Third, suppliers whose bids are mitigated can ultimately appeal the determination of their reference prices to the Commission under the Commission’s formal complaint procedures.¹³³ The Commission’s formal complaint procedures are more robust than the review procedures found suitable in *Perot*, but not that different from the FCC provisions that the *U.S. Telecom* court found objectionable.¹³⁴

128. *Id.*

129. California ISO Open Access Transmission Tariff, ISO Market Monitoring & Information Protocol § 6, FERC Electric Tariff, First Replacement Vol. No. 2, First Revised Sheet No. 508K (effective Oct. 30, 2002); Midwest ISO Open Access Transmission Tariff, § 67, FERC Electric Tariff, Third Revised Vol. No. 1, First Revised Sheet No. 807 (effective Apr. 1, 2005); ISO New England Open Access Transmission Tariff, Market Rule 1 – Standard Market Design, app. A § III.A.10, FERC Electric Tariff No. 3, Original Sheet Nos. 7441–42 (issued Dec. 22, 2004); New York ISO Open Access Transmission Tariff, ISO Market Power Mitigation Measures, Attachment H, § 6, FERC Electric Tariff, Original Vol. No. 2, Fifth Revised Sheet No. 477B (effective Feb. 1, 2005).

130. *New York Indep. Sys. Operator, Inc. v. Dynegy Power Mktg, Inc.*, 105 F.E.R.C. ¶ 61,249 (2003).

131. *Id.* at 62,301 (footnote omitted).

132. 105 F.E.R.C. ¶ 61,249.

133. We note that while buyers in the market certainly have appeal rights under the Commission’s formal complaint procedures, they face a high burden since buyers do not have access to information on each resource’s confidential and commercially sensitive cost data.

134. *Perot v. FEC*, 97 F.3d 553 (D.C. Cir. 1996); *United States Telecom Ass’n v. FCC*, 359 F.3d 554, 554

However, the Commission's formal complaint procedures in combination with the Commission's review of proposed tariff provisions and the right to appeal ADR decisions to the Commission provides more extensive appeal rights than those at issue in *U.S. Telecom*.¹³⁵ Therefore, we believe that the substantial opportunity for review of market monitoring units' discretion meets the third prong of our subdelegation test.

The Commission's appeal provisions and those incorporated in Commission-approved RTO tariffs provide for timely and assured review of the few discretionary actions by market monitoring units, as well as objective criteria for evaluating the market monitoring units' discretionary actions. There is also a reasonable basis for allowing limited discretion by market monitoring units given their market expertise and independence from market participants, as well as their ability to act quickly in the fast-changing electricity markets. Thus, with the possible exception of some minor provisions in PJM's tariff, the reference price tariff provisions do not result in impermissible delegation of the Commission's statutory authority to market monitoring units.

In addition, there are policy reasons for allowing limited discretion on the part of market monitoring units. Reference price provisions do not give the market monitoring unit discretion to set national policy of the type that was found objectionable in *U.S. Telecom*.¹³⁶ Rather the provisions allow market monitoring units limited discretion that is used on an RTO-by-RTO basis. The Commission has set both the national policy on mitigation to assure competitive prices in bid-based organized markets through its regulations, and approved RTO tariffs that account for unique market structures and unique local market conditions.

Furthermore, the discretion exercised by non-federal regulated entities in complying with the Commission's regulatory scheme is consistent with the finding in *Perot* that exercises of discretion are commonplace among regulated entities because they must necessarily exercise some discretion in interpreting and complying with regulations. Decisions that the RTO makes about reliability and resource dispatch have just as much ability to set a price in the market as decisions about whether information submitted by a supplier accurately represents a resource's marginal costs for the purposes of a reference price calculation. For instance, when an RTO decides through its implementation of RTO tariff provisions to instruct a specific resource to operate instead of selecting the next resource available in the economic order of the bid stack, the RTO is setting the level of costs paid through uplift mechanisms and determining the bid that will set the market clearing price. Some might view this as unwarranted discretion on the part of the RTO. However, without these and other exercises of discretion by RTOs, bid-based organized markets might cease to function and certainly would not be responsive to reliability needs and emergency situations. Additionally, the Commission has allowed and continues to allow the use of such discretion by the RTO concerning reliability, dispatch protocols and, sometimes, emergency operations requirements because the RTO is acting pursuant to the objective criteria included in each tariff. This is not to say that a challenge of such provisions under the subdelegation doctrine would

(D.C. Cir. 2004).

135. *U.S. Telecom*, 359 F.3d at 554.

136. *Id.*

necessarily fail; rather, it is important that the Commission recognize that exercises of discretion by non-federal entities encompass more than simply the determination of reference prices for use in mitigation and this discretionary decision-making is an inherent and necessary part of organized market operations.

Moreover, it is important to note that occurrences of non-federal entity discretionary decision-making are not limited to the organized market context. Another example of discretionary decision-making that impacts whether rates are unduly discriminatory is the calculation of available transfer capability (ATC) by transmission providers.¹³⁷ The Commission has long required that transmission providers post the formula for calculating ATC,¹³⁸ but only recently has the Commission sought to standardize the formula.¹³⁹ Even in stressing the need for greater transparency in the calculation of ATC, the Commission recognized that a public utility's exercise of discretion is necessary in order to calculate ATC.¹⁴⁰ Notably, RTO tariffs provide the same verification provisions for ATC calculation that might be found objectionable in the consultation method used to determine reference prices.¹⁴¹ These examples of discretionary decision-making highlight the necessity for some limited exercises of discretion by non-federal entities in implementing the Commission's regulatory scheme under the FPA. Therefore, in light of legal and policy considerations it is appropriate for the Commission to allow some limited exercises of discretion on the part of non-federal entities, including the setting of reference prices by market monitoring units.

VI. RECOMMENDATIONS

Although we find that most of the current tariff provisions related to setting reference prices allow for permissible exercises of discretion by market monitoring units, one way for the Commission to eliminate the perception of

137. ATC is the unused transmission capacity that a transmission provider can sell; it determines whether suppliers can access the grid to wheel their power to customers. Transmission providers calculate ATC by subtracting existing transmission uses and transmission capability reserved to ensure reliable grid operation from the total system transfer capacity.

138. 18 C.F.R. § 37.6 (2005).

139. See Notice of Inquiry, *Information Requirements for Available Transfer Capability*, F.E.R.C. STATS. & REGS. ¶ 35,549 (2005), 70 Fed. Reg. 34,417 (2005) [hereinafter *Information Requirements*]. See also Notice of Proposed Rulemaking, *Remedying Undue Discrimination Through Open Access Transmission Service and Standard Electricity Market Design*, [1998–2002 Proposed Regs.] F.E.R.C. STATS. & REGS. ¶ 32,563 at 34,351–52, 67 Fed. Reg. 55,451 (2002) (proposing calculation of ATC by an independent entity rather than standardization of the calculation, but also standardization of the calculation of capacity benefit margin, one component of the ATC calculation).

140. *Information Requirements*, supra note 139, at 35,903 (“More rigorous and consistent standards and procedures for ATC calculations would help ensure that transmission providers’ exercise of discretion in their calculation of ATC does not result in undue discrimination with respect to interstate transmission.”). Additionally, in one circumstance, the Commission required that an entity independent of a transmission provider calculate ATC. See Opinion No. 442, *Am. Elec. Power Co. & Cent. and S. W. Corp.*, 90 F.E.R.C. ¶ 61,242, 61,789 (2000) (requiring, as part of a merger proceeding, that the public utility contract out its ATC calculation and transmission scheduling responsibilities to an independent entity), *order on reh’g*, 91 F.E.R.C. ¶ 61,129 (2000), *order on compliance filing*, 91 F.E.R.C. ¶ 61,208, 61,747 (2001) (accepting contract with Southwest Power Pool for calculation of ATC).

141. See *Midwest Indep. Sys. Transmission Operator, Inc.*, 97 F.E.R.C. ¶ 61,326, 62,516 (2001) (Finding that the RTO tariff provisions allowing for the RTO to verify equipment ratings supplied by transmission owners in the RTO’s independent calculation of ATC meets the requirements of Order No. 2000).

inappropriate exercises of discretion would be to require more detailed explanation in some of these provisions. For example, both ISO New England and New York ISO provide spreadsheets and detailed formulas for the incorporation of risk premiums and opportunity costs in the calculation of reference prices under the consultation method. However, the tariff language in both tariffs is vague, allowing for "other factors or adjustments" that the market monitoring unit deems necessary. Spreadsheets or formulas that exist as a backdrop for calculating opportunity costs and risk premiums could be easily incorporated into tariffs to reduce the appearance of discretion by market monitoring units.

Additionally, there are two areas where the market monitoring units' discretionary ability could be limited through more explicit tariff provisions in Midwest ISO and PJM. First, the Independent Market Monitor in Midwest ISO is allowed to use the estimate method if it finds that the consultation approach is "not applicable." Second, in PJM, the supplier is allowed to choose between the methods for calculating reference prices and the market monitoring unit is allowed wide discretion to choose the number of hours that represent competitive conditions under the PJM estimate method for calculating reference prices. Given the subdelegation findings in *U.S. Telecom*, it may be reasonable to limit these areas in the PJM and Midwest ISO tariffs.

To eliminate the discretion of market monitoring units under the infrequently used consultation and estimate methods in RTOs that apply conduct and impact test, the Commission could consider calculating reference prices by processing reference price applications through its standard administrative procedures or by delegating this responsibility to Commission staff. However, either of these options would lead to unworkable results and unacceptable delays. Since reference prices are set at least once per day, allowing a comment period and action by Commission vote would not meet time-sensitive requirements of mitigation. An internal Commission process under delegated authority would require additional resources at the FERC and RTOs to handle information exchange and reference price calculations made around the clock. Also, this delegation to staff would extend beyond what is permissible under current delegation authority.

Removing all discretion by market monitoring units would necessarily lead to abolishment of the ability to make reference price adjustments for special intermittent circumstances faced by suppliers. If reference price adjustments were no longer allowed, then the reference prices could fall below a resource's marginal costs. If reference prices continually fall below the resource's marginal cost it could lead to an impermissible confiscatory rate.¹⁴² Moreover, removal of discretion on the part of the market monitoring units to adjust reference prices is unnecessary because adjusted reference prices do not set market prices.

Although reference prices are not subject to ongoing public reporting requirements like market-based rates, the Commission could require reporting of

142. See *Gulf States Utils. Co. v. FPC*, 411 U.S. 747, 758-59 (1973). The Commission has already found that some markets do not provide reasonable opportunity to earn return on and of capital investment. See, e.g., *Devon Power LLC*, 103 F.E.R.C. ¶ 61,082, 61,270 (finding that, without location-specific capacity resource procurement, rates in the market may not be just and reasonable), *reh'g granted in part and denied in part*, 104 F.E.R.C. ¶ 61,123 (2003), *Devon Power L.L.C.*, 107 F.E.R.C. ¶ 61,240, *order on reh'g*, 109 F.E.R.C. ¶ 61,154 (2004), *order on reh'g*, 110 F.E.R.C. ¶ 61,315 (2005).

reference prices by the market monitoring unit every time a reference price is substituted for a bid and every time an ad hoc adjustment to a reference price is made. However, confidential reporting to the Commission would be necessary since reference prices represent the commercially sensitive information that could not only potentially skew procurement negotiations too far in favor of buyers, but would also provide suppliers with extensive information they could use to raise their bids to a level just below where mitigation might apply.

Additionally, in times of market start-up and expansion of the RTO footprint when there is no pricing or bidding history, reference prices are set by using the consultation method or the estimate method. We recommend that such initial reference prices be calculated well before the energy markets open and be filed under confidential seal with the Commission for Commission approval. In this way, the market monitoring unit would file the proposed reference prices and the Commission would have final approval of the initial reference prices.

VII. CONCLUSION

Mitigation is implemented infrequently in bid-based organized markets. However, when mitigation is implemented, reference prices have the potential to impact market prices. It is important to note that in order for a discretionary action on the part of the market monitoring unit to set the FERC-jurisdictional rate, the reference price must meet several criteria concurrently: (1) it must be substituted for a supplier's bid; (2) it must have been set using either the consultation or estimate reference price calculation method; and (3) it must be the marginal bid. The chance of all three occurring at the same time is remote.

We find that the exercise of discretion by the market monitoring units in determining reference prices is a permissible delegation of the Commission's ratemaking authority under the subdelegation doctrine because: (1) the Commission has provided "objective criteria" for the market monitoring units to apply in exercising their discretion, i.e., reference prices should represent a resource's marginal costs; (2) the Commission has a "reasonable basis" for allowing market monitoring units to exercise discretion that is limited in scope, i.e., market monitoring units are independent experts who can provide timely responses to exercises of market power; and (3) the Commission retains the authority to provide timely and assured review of discretionary decisions by market monitoring units.

The adoption of markets with bid-based single clearing price auctions, location-specific prices and a centralized dispatch necessitates tariff provisions that allow for flexible, quick action to deal with any unexpected exercise of market power. The Commission, in administering markets, must balance predictability and transparency with the appropriate degree of flexibility. Although the Commission should cabin the discretion of market monitoring units, it is important that market monitoring units are allowed discretion within defined parameters to protect customers in organized bid-based markets.

