

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Modifications to Commission
Requirements for Review of Transactions
Under Section 203 of the Federal Power
Act and Market-Based Rate Applications
Under Section 205
of the Federal Power Act

Docket No. RM16-21-000

COMMENT OF
THE U.S. DEPARTMENT OF JUSTICE AND
THE FEDERAL TRADE COMMISSION

November 28, 2016

I. INTRODUCTION

In a Notice of Inquiry (NOI) in this Docket issued September 22, 2016, the Federal Energy Regulatory Commission (FERC) requested comments on its current approach to identifying and assessing market power under sections 203 and 205 of the Federal Power Act (FPA), and on its scope of review under section 203 of the FPA.¹ The NOI poses a number of questions concerning whether FERC should simplify its analysis of section 203 transactions unlikely to raise competitive concerns, while eliminating blanket authorizations that may be inappropriate; enlarge the kinds of evidence examined under both sections 203 and 205; modify how it treats other kinds of evidence; and make its analyses of market power under the FPA more consistent.

¹ Notice of Inquiry, *Modifications to Commission Requirements for Review of Transactions under Section 203 of the Federal Power Act and Market-Based Rate Applications under Section 205 of the Federal Power Act*, 156 FERC ¶ 61,214, 81 Fed. Reg. 66,649 (2016).

The Department of Justice (DOJ) and the Federal Trade Commission (FTC) commend FERC for opening this inquiry. It has been nearly ten years since FERC adopted its current approach to market-based rate (MBR) authority,² and nearly twenty years since it adopted its current approach to mergers.³ Electricity markets have evolved substantially during that time. New electricity trading platforms have come into existence, including formal markets administered by regional transmission organizations (RTOs) and independent system operators (ISOs). Market data has grown exponentially, as have information technology and tools for analyzing data. Distributed generation and demand response technologies have grown and matured. In light of these developments, it is appropriate for FERC to re-examine its approach to merger and MBR applications.

DOJ and the FTC (the Agencies) respectfully submit this comment based on their experience analyzing market power, especially with respect to electricity markets and electric power mergers. As a general matter, we encourage FERC to reduce its reliance on market structure measures to assess market power in electricity markets. Structural measures, such as market shares and market concentration, should be the starting point of

² *Market-Based Rates for Wholesale Sale of Electric Energy, Capacity and Ancillary Services by Public Utilities*, Order No. 697, FERC Stats. & Regs. ¶ 31,252, *clarified by* 121 FERC ¶ 61,260 (2007), *order on reh'g*, Order No. 697-A, FERC Stats. & Regs. ¶ 31,268, *clarified by* 124 FERC ¶ 61,055, *order on reh'g*, Order No. 697-B, FERC Stats. & Regs. ¶ 31,285 (2008), *order on reh'g*, Order No. 697-C, FERC Stats. & Regs. ¶ 31,291 (2009), *order on reh'g*, Order No. 697-D, FERC Stats. & Regs. ¶ 31,305 (2010), *aff'd sub nom. Montana Consumer Counsel v. FERC*, 659 F.3d 910 (9th Cir. 2011), *cert. denied*, 133 S. Ct. 26 (2012).

³ *Inquiry Concerning the Commission's Merger Policy Under the Federal Power Act: Policy Statement*, Order No. 592, FERC Stats. & Regs. ¶ 31,044 (1996), *reconsideration denied*, Order No. 592-A, 79 FERC ¶ 61,321 (1997). FERC has issued supplemental guidance since 1996. *See FPA Section 203 Supplemental Policy Statement*, FERC Stats. & Regs. ¶ 31,253 (2007), *order on clarification and reconsideration*, 122 FERC ¶ 61,157 (2008). However, the basic framework of the 1996 Merger Policy Statement still guides merger review under section 203.

an analysis of market power, not its end.⁴ This is especially true of electricity markets as experience suggests that market participants can exercise market power despite holding relatively small market shares. We encourage FERC to supplement its market power analyses as the Agencies do:⁵ with other types of evidence, such as a supply curve analysis, to reduce the likelihood of an incorrect market power determination.⁶

When considering a merger or an MBR application, FERC should balance the risk that approval will increase or permit the exercise of market power against the risk that denial will thwart a procompetitive or benign application. An approach that considers more than market structure evidence alone is more likely to accomplish this goal. The Agencies recognize, however, that FERC may wish to use structural screens to streamline its market power inquiries. In that case, we urge FERC to establish screens that reduce the likelihood that a merger or MBR approval will result in increased market power or permit its exercise because of the risk that electricity market participants can exercise substantial market power with relatively small market shares.⁷

⁴ Cf. U.S. Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines* § 4 (Aug. 19, 2010) (discussing use of market shares and concentration to assess competitive effects of merger), <https://www.ftc.gov/sites/default/files/attachments/merger-review/100819hmg.pdf>.

⁵ Cf. *id.* at § 5 (“The Agencies evaluate market shares and concentration in conjunction with other reasonably available and reliable evidence for the ultimate purpose of determining whether a merger may substantially lessen competition.”).

⁶ A merger frequently will have consequences for capacity and ancillary services markets, as well as electric energy markets. Although we focus on electric energy markets in this comment, we encourage FERC not to rely solely on structural measures – but rather to supplement its analysis with other types of evidence – when assessing market power in capacity and ancillary services markets.

⁷ There are two types of incorrect market power determinations. False positives involve erroneously determining that market power increases or exists. False negatives involve erroneously failing to determine that market power increases or exists.

As explained in more detail below, the Agencies respectfully suggest that FERC consider taking the following actions:

- Add a supply curve analysis to its examination of mergers under section 203.⁸ A supply curve analysis can give greater insight into competitive effects than traditional measures of market concentration.
- Account for transmission constraints when defining a geographic market to assess market power.⁹ When binding, constraints can limit the size of the relevant geographic market to an area smaller than RTO/ISO or balancing authority areas.
- Make its section 205 market power analysis as consistent as possible with its section 203 competitive effects analysis.¹⁰ In particular, FERC should use the same approach to defining geographic markets under both sections.
- Account for incremental acquisitions in its merger analysis.¹¹ If an applicant has made multiple acquisitions over a period of years, FERC may wish to analyze the competitive effects of the series of acquisitions.
- Take a more flexible approach to assessing the competitive effects of power purchase agreements (PPAs).¹² Because a PPA's competitive effect will depend on several factors, FERC may wish to incorporate a wider range of information into its analysis of PPAs.
- Require that applicants under section 203 submit certain merger-related documents.¹³ However, before it adopts such a requirement, FERC should be certain that it can protect confidential information from public disclosure.

II. INTEREST OF THE AGENCIES

The Agencies share responsibility for enforcing the federal antitrust laws, for which a core concern is the creation or enhancement of market power. Each Agency has

⁸ See NOI PP 20-21; *infra* Section IV.

⁹ See NOI P 16; *infra* Section V.

¹⁰ See NOI P 11; *infra* Section V.

¹¹ See NOI P 19 (serial *de minimis* mergers), P 17 (partial acquisitions); *infra* Section VI.

¹² See NOI PP 31-32; *infra* Section VII.

¹³ See NOI PP 33-34; *infra* Section VIII.

substantial experience analyzing the market power effects of mergers that involve electric utility companies. The FTC typically reviews proposed mergers that involve electric and natural gas utility companies, where the primary effect of the merger is on gas markets.¹⁴ DOJ typically reviews proposed mergers that involve electric utilities or that involve electricity and natural gas utility companies, where the primary effect of the merger is on electricity markets.¹⁵ The Agencies also analyze regulatory or legislative proposals that affect competition or efficiency in the electric power industry.¹⁶

III. MARKET POWER IN ELECTRICITY MARKETS

Measures of market concentration traditionally have played an important role in analyses of market power under section 203 and section 205 of the FPA. The Agencies

¹⁴ See, e.g., Analysis of the Complaint and Consent Order to Aid Public Comment, *DTE Energy Company and MCN Energy Group Inc.*, FTC Dkt. No. C-4008 (Mar. 22, 2001), <https://www.ftc.gov/sites/default/files/documents/cases/2001/03/dteanalysis.htm>; Analysis of the Complaint and Consent Order to Aid Public Comment, *Entergy Corporation and Entergy-Koch, LP*, FTC Dkt. No. C-3998 (Jan. 31, 2001), <https://www.ftc.gov/sites/default/files/documents/cases/2001/01/entergycorpana.htm>; Analysis of the Complaint and Consent Order to Aid Public Comment, *Dominion Resources, Inc., and Consolidated Natural Gas Company*, FTC Dkt. No. C-3901 (Nov. 5, 1999), <https://www.ftc.gov/sites/default/files/documents/cases/1999/11/dominionana.htm>.

¹⁵ See, e.g., Competitive Impact Stmt., *United States v. Exelon Corp. and Pub. Servs. Enter. Grp.*, No. 1:06CV01138 (D.D.C. Aug. 10, 2006), <https://www.justice.gov/atr/case-document/competitive-impact-statement-98>; Competitive Impact Stmt., *United States v. Exelon Corp. and Constellation Energy Grp.*, No. 1:11CV02276 (D.D.C. Dec. 21, 2011), <https://www.justice.gov/atr/case-document/competitive-impact-statement-97>.

¹⁶ See, e.g., Reply Comment of the Staff of the Federal Trade Commission, *Proceeding on the Motion of the Commission in Regard to Reforming the Energy Vision*, NY PSC No. 14-M-0101 (Nov. 23, 2015) https://www.ftc.gov/system/files/documents/advocacy_documents/ftc-staff-reply-comment-state-new-york-public-service-commission-reforming-energy-vision-proceeding/112315nypsc.pdf; Comment of the U.S. Department of Justice, *Transparency Provisions of the Energy Policy Act of 2005*, FERC Dkt. No. AD06-11 (Jan. 25, 2007), <https://www.justice.gov/atr/comments-us-department-justice-transparency-provision-energy-policy-act-2005>.

encourage FERC, however, to place less emphasis on concentration and greater emphasis on other types of evidence. This is especially important in electricity markets, which are susceptible to an exercise of market power at low levels of concentration not usually associated with the presence of market power.

A. Susceptibility of Electricity Markets to an Exercise of Market Power

Several features of electricity markets make them vulnerable to an exercise of market power, even at relatively low levels of market concentration. First, supply and demand generally are inelastic. This means that even a small reduction in output by one or more generators can yield a large increase in price. Second, entry can be difficult. For example, it often is difficult to find a suitable site and obtain permits for a new generating facility. Moreover, transmission constraints can limit supply by curbing the ability of existing generation outside a constrained area to sell into that area. Finally, system operators must balance supply and demand continually for engineering reasons, which may accentuate the effect of the market's inelastic supply and demand.¹⁷ For example, in the face of unanticipated changes in supply or demand, a system operator may have to dispatch generation simply to operate the transmission system reliably, which may further limit available supply.

B. Market Power and Harm to Electricity Consumers

Because of the large value of commerce in a typical electricity market, even a modest exercise of market power resulting in a small percentage price increase can substantially harm consumers. For example, DOJ alleged that a merger of Exelon and Public Service Enterprise Group would lessen competition in a subregion of the PJM

¹⁷ Electricity markets may also be susceptible to a coordinated exercise of market power because products are homogeneous and transactions are regular and frequent.

regional market known as PJM East, where annual wholesale electricity sales totaled more than \$10 billion.¹⁸ In a market of that size, a price increase of just one-half of one percent could raise the cost of wholesale electricity to buyers by over \$50 million annually. The susceptibility of electricity markets to the exercise of market power – with potentially large costs to consumers – counsels in favor of a careful analysis of market power under section 203 and section 205.

IV. SUPPLY CURVE ANALYSIS

FERC's current approach to merger analysis under section 203 focuses on market shares and concentration.¹⁹ The Agencies caution FERC against sole or undue reliance on this type of evidence. Although market shares and concentration can be a useful starting point for assessing a merger's competitive effects, they should not be the end of the analysis. Rather, they are useful only to the extent they illuminate a merger's likely competitive effects, which should be the central focus of a merger inquiry. In light of the potentially large costs to consumers from an exercise of market power, it would be appropriate for FERC to conduct a more thorough competitive effects analysis, including use of a supply curve analysis as proposed in the NOI.²⁰

A. Competitive Effects of a Merger

The Agencies frequently consider market power in connection with mergers, which they analyze using the framework articulated in the 2010 Horizontal Merger

¹⁸ Compl. ¶ 22, *United States v. Exelon Corp. and Pub. Servs. Enter. Grp.*, No. 1:06CV01138 (D.D.C. June 22, 2006), <https://www.justice.gov/atr/case-document/complaint-98>.

¹⁹ NOI PP 3-4.

²⁰ *Id.* PP 20-21.

Guidelines (HMG).²¹ A merger can create or enhance market power – the ability of a firm to maintain price above the competitive level profitably for a significant time – through unilateral and/or coordinated effects. Unilateral effects arise when a merger eliminates competition between the merging firms and enhances the merged firm’s ability and/or incentive to raise prices.²² Coordinated effects arise when a merger enables or encourages multiple firms to engage in conduct that is profitable for each of them as a result of accommodating the reactions of others.²³

B. Supply Curve Analysis of Effects

The Agencies encourage FERC to analyze competitive effects using a broader range of evidence, including a supply curve analysis.²⁴ A supply curve analysis considers information about the market supply curve (which reflects individual generating units’ costs) and the market demand curve to determine whether a firm has the ability and incentive to raise the price of electricity by withholding output.²⁵ A supply curve analysis can be a particularly useful tool for assessing a merger’s competitive effects – unilateral or coordinated – and, if necessary, for designing potential remedies. Most important, a supply curve analysis can help determine when a merger is likely to lead to

²¹ U.S. Department of Justice and Federal Trade Commission, *supra* note 4.

²² HMG § 6. Although the Agencies refer frequently to price effects, mergers may adversely affect competition along non-price dimensions, including product quality and innovation. *Id.* § 1.

²³ *Id.* § 7.

²⁴ The Agencies rely on a wide variety of evidence to assess a merger’s competitive effects. *See generally id.* § 2.1. *See also* Transcript of Tech. Conf. on Merger and Acquisition Review Standards, 108:11-110:4, FERC Dkt. Nos. RM05-32 & 34 (Mar. 8, 2007) (testimony of Mark J. Niefer summarizing evidence DOJ may consider in an electric power merger analysis).

²⁵ NOI P 20. Although the NOI and this comment focus on withholding output, generators may use other strategies to exercise market power, including altering generation to congest the transmission system, which may facilitate an exercise of market power in the resulting geographic market.

or enhance a unilateral exercise of market power when traditional concentration thresholds may fail to do so.²⁶

One way that a generator can unilaterally exercise market power in wholesale electricity markets is through its control of generating capacity from which it can withhold output at relatively low cost. Withholding output shifts the supply curve to the left, which can raise the market price of electricity. For a generator to have an incentive to exercise market power, it must be able to offset losses that it incurs from selling less output from withheld capacity by earning higher profits on sales from its inframarginal capacity. Thus, to exercise market power profitably, a generator must have the ability to affect market prices by controlling capacity from which it can withhold output at a relatively low cost; it also must have an incentive to do so, in the form of inframarginal capacity that can more than earn back the profit lost on withheld capacity.²⁷

Although the NOI focuses on the “marginal” unit as a source of ability to exercise market power, a generator can withhold output from any unit (marginal or inframarginal) to shift the supply curve and raise market price. Whether a generator will find it profitable to withhold a particular unit will depend on the facts. It generally is less costly to withhold output from marginal or near-marginal generating units, which have costs relatively close to market prices and, hence, lower profits, than to withhold output from a lower-cost inframarginal unit. As a result, generating units with costs that are near the

²⁶ See, e.g., Competitive Impact Stmt. at 8-11, *United States v. Exelon Corp. and Pub. Servs. Enter. Grp.*, No. 1:06CV01138 (D.D.C. Aug. 10, 2006), <https://www.justice.gov/atr/case-document/competitive-impact-statement-98> (discussing evidence of electric power merger’s competitive effects, including market structure and supply curve analysis).

²⁷ The Appendix to this comment provides a simple graphical illustration of the decision to exercise market power unilaterally through withholding.

market price generally are well suited to be “ability” assets. In the rest of this comment, we refer to “marginal” units with the understanding that a generator may find it profitable to withhold marginal or inframarginal units.

A merger can enhance the ability or the incentive of the newly merged firm to exercise unilateral market power.²⁸ For example, a merger between a generator that owns only inframarginal capacity and a generator that owns only marginal capacity may substantially increase the ability and incentive of the merged firm (relative to that possessed by either firm independently) to exercise unilateral market power profitably. Before the merger, the firm that owns only inframarginal capacity may not have the ability to raise price profitably; and the firm that owns only marginal capacity may not have the incentive to raise price if doing so would be unprofitable. By bringing inframarginal and marginal assets together in a single portfolio, the merger can give the merged firm the ability *and* the incentive to exercise unilateral market power.

A key lesson to emerge from consideration of a supply curve framework is that market shares and market concentration alone may not accurately predict a merger’s unilateral effects. The acquisition of a small marginal unit, for example, will change concentration (as measured by total capacity) by a small amount – small enough that the merger does not raise substantial concerns about market power when measured against FERC’s current thresholds. A small acquisition nonetheless may provide the acquiring firm with the ability to exercise substantial market power. Moreover, a policy that placed

²⁸ A supply curve analysis also can capture the ability and incentive of two or more generators to exercise market power in coordination with one another. To exercise market power jointly, a group of generators will need ability and incentive, just as a single generator does. An analysis of a supply curve can shed light on whether a group of generators collectively has the ability and incentive to coordinate withholding.

such an acquisition in a safe harbor based on conventional thresholds would run the risk of permitting the exercise of market power, thereby increasing electricity prices to the detriment of electricity consumers. In these circumstances, a supply curve analysis can serve as a useful supplement to a traditional concentration screen.²⁹

C. Supply Curve Analysis of Remedies

A supply curve analysis also can help assess remedies.³⁰ Consider a slight variation on the example discussed above. Assume there is a merger between two firms, one owning only inframarginal capacity, the other owning inframarginal *and* marginal capacity. In this simple example, assume that inframarginal capacity can provide incentive only and would never be withheld; also assume that marginal capacity can provide ability only and never provides incentive. In that case, the merger will bring together the incentive to raise price (the combined inframarginal capacity) and the ability to raise price (marginal capacity), such that it might result in unilateral anticompetitive effects. One simple remedy for this harm would be to require the merged firm to divest its marginal capacity. The post-divestiture merged firm would consist only of inframarginal capacity, which, in this simple example, would provide the incentive but not necessarily the ability to exercise market power.³¹

²⁹ A supply curve analysis also can help identify mergers that are not likely to result in unilateral effects. For example, if a merger brought together two firms consisting only of very low-cost generation with high price/cost margins such that capacity would never be withheld, one would not expect the merged firm to exercise unilateral market power.

³⁰ For an example of how a supply curve analysis helped DOJ assess remedies in an electric power merger, *see, e.g.*, Competitive Impact Stmt., *supra* note 26, at 14-15 (explaining how divestiture deprived merged firm of ability and incentive to exercise market power).

³¹ This example is illustrative only. It rarely is the case in practice that inframarginal capacity provides *only* the incentive to exercise market power; and it rarely

V. RELEVANT GEOGRAPHIC MARKETS

The NOI outlines a possible process to determine market shares for purposes of identifying a *de minimis* merger under section 203. The process entails the use of default geographic markets based on RTO/ISO or balancing authority areas.³² The Agencies caution FERC against using such default markets in its merger or MBR analyses. Relevant geographic markets may be much smaller than those areas, and reliance on improperly broad markets may lead to inaccurate conclusions about market power.

Properly defining the relevant geographic market is critical to analyzing market power.³³ A crucial characteristic of electricity markets is that transmission constraints can isolate generation or pockets of demand within smaller areas of the grid. A failure to account for such constraints may result in an improperly defined market, which can yield misleading conclusions about market power in the context of a merger or an MBR analysis. Defining a geographic market too broadly, for example, may yield lower levels of concentration than would be the case for a properly defined market. In the case of a supply curve analysis, it may lead to an erroneous conclusion that supply is elastic enough such that market power is not a concern.

Geographic market definition is further complicated by transmission constraints that may change as supply or demand changes over time. For example, during peak demand months, transmission lines may reach capacity and thereby become constrained, creating smaller geographic markets during those months but not during off-peak months.

is the case that marginal capacity provides *only* the ability to exercise market power. Nonetheless, a supply curve analysis can provide insight into potential remedies that would reduce the incentive or the ability of a merged firm to exercise market power.

³² NOI P 16.

³³ For an example of how DOJ analyzes geographic markets for an electric power merger, *see, e.g.*, Competitive Impact Stmt., *supra* note 26, at 3-7.

Similarly, transmission lines may become constrained during peak hours but not during off-peak hours. As a result, particular geographic markets may exist for less than a full year or even less than a full day, depending on variations in demand conditions. Changes in supply conditions also can affect geographic markets. Planned generation retirements or transmission expansions, for example, may relieve some constraints and create others, which will change relevant geographic markets over the longer term.

Although properly defining a geographic market may seem like a daunting task, there is ample public information about transmission congestion and constraints that may be of substantial assistance to FERC. Indeed, in its review of electric power mergers, DOJ frequently finds that publicly available information is sufficient to make an initial geographic market determination. In RTO/ISO markets, for example, market monitors often compile reports concerning the most important constraints in the system, including information about the temporality of constraints. In addition, RTOs and ISOs publicly report locational marginal prices, which reflect constraints and can help define geographic markets. Finally, regional transmission planning processes required by FERC's Order No. 1000 also typically produce reports describing major transmission constraints.³⁴ The Agencies encourage FERC to use such information to define geographic markets for merger and MBR determinations, using the same approach that the Agencies follow.

³⁴ Final Rule, *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, 136 FERC ¶ 61,051 (Jul. 21, 2011), *order on reh'g and clarification*, 139 FERC ¶ 61,132 (May 17, 2012), *order on reh'g and clarification*, 141 FERC ¶ 61,044 (Oct. 18, 2012). Although data for non-RTO/ISO markets may not be as readily available from public sources, FERC could require that applicants who own transmission provide information concerning constraints.

VI. DE MINIMIS, PARTIAL, AND SERIAL ACQUISITIONS

The NOI poses a number of questions concerning whether the acquisition of small or partial interests in another firm should trigger a fuller market power analysis.³⁵ In particular, the NOI asks whether FERC might adopt a simplified market structure analysis, such as the “2ab” statistic, to demonstrate that the transaction’s effect on competition is small. In addition to the concerns expressed above regarding structural analyses in electricity markets generally, the Agencies set out below additional reasons not to rely solely on “2ab” analyses to assess market power.

The 2ab statistic represents the change in market concentration, as measured by the Herfindahl-Hirschman Index (HHI).³⁶ Under FERC’s current practice, if the 2ab statistic is small enough, a merger purportedly does not present market power concerns. Under the HMG, however, the Agencies use changes in concentration *in conjunction with other evidence* to assess a merger’s competitive effects.³⁷ It is especially important to do so in electricity markets where the *type* of capacity acquired by a firm may matter as much for an analysis of competitive effects as the *amount* of capacity acquired. As a result, a transaction that increases the likelihood of an exercise of market power might escape scrutiny under a *de minimis* 2ab standard, as contemplated in the NOI.

The NOI also raises the prospect of using a 2ab statistic to analyze partial acquisitions.³⁸ Partial acquisitions can take multiple forms. Some may involve the purchase of assets, such as a portion of a generating facility. Others may involve the acquisition of a financial interest in another firm. No matter the form, use of a 2ab

³⁵ NOI PP 16-19.

³⁶ HMG § 5.3 n.10.

³⁷ *Id.* § 5.3.

³⁸ NOI P 17.

statistic to analyze a partial acquisition can be problematic, as the following example illustrates. If one firm were to sell to a competing firm a partial interest in a generating facility, both entities would continue to be present in the post-transaction market.³⁹ In this case, as the NOI notes, each competitor would change its size and asset portfolio such that the 2ab analysis would not capture either firm's new positioning in the market.⁴⁰ Nor would it capture changes in the firms' incentives to exercise market power.⁴¹

The NOI also recognizes that serial *de minimis* mergers may cumulatively affect competition even if a single transaction would not necessarily have an adverse effect.⁴² FERC's authority to determine whether a section 203 transaction is "consistent with the public interest" should be broad enough to require applicants to address the cumulative impact of serial acquisitions.⁴³ Such a requirement would be similar to FERC's current

³⁹ *Id.*

⁴⁰ *Id.*

⁴¹ HMG § 13. The HMG describe three other ways in which partial acquisitions can enhance the likelihood of a unilateral or coordinated exercise of market power. First, the acquiring firm may gain influence over the competitive conduct of the acquired firm. Second, the transaction may reduce the incentive of one or both firms to compete against each other. Third, merging firms may gain access to non-public, competitively sensitive information about each other. *See, e.g.,* Comment of the Federal Trade Commission, *Control and Affiliation for Purposes of the Commission's Market-Based Rate Requirements Under Section 205 of the Federal Power Act and the Requirements of Section 203 of the Federal Power Act*, FERC Dkt. No. RM09-16-000 (Mar. 29, 2010), https://www.ftc.gov/sites/default/files/documents/advocacy_documents/ftc-comment-federal-energy-regulatory-commission-concerning-rulemaking-competitive-assessments/v090008ferc.pdf.

⁴² NOI PP 19, 30.

⁴³ 16 U.S.C. § 824b.

requirement that recipients of MBR authority notify FERC when there is a change in facts upon which FERC granted that authority.⁴⁴

VII. POWER PURCHASE AGREEMENTS

The NOI seeks comment on how FERC should analyze PPAs under section 203.⁴⁵ The Agencies believe that FERC should adopt an analytic framework that more accurately captures how PPAs may affect competition in merger and MBR applications to avoid errors in the analysis of competitive effects.⁴⁶

A PPA can substantially affect the ability and incentive of a firm to exercise market power.⁴⁷ If a generator sells output under a fixed-price PPA, the generator does not benefit from an increase in market prices on that output, which diminishes the generator's incentive to exercise market power. Alternatively, if a generator buys output under a fixed-price PPA, it can turn around and sell that output at a higher price if market prices increase, which increases the generator's incentive to exercise market power. Moreover, a PPA that confers control over the operation of a generating unit may affect the ability to exercise market power. Thus, a contract that gives a generator control of

⁴⁴ *Reporting Requirement for Changes in Status for Public Utilities with Market-Based Rate Authority*, Order No. 652, 70 Fed. Reg. 8,253 (Feb. 18, 2005), FERC Stats. & Regs. ¶ 31,175, *order on reh'g*, 111 FERC ¶ 61,413 (2005).

⁴⁵ NOI PP 31-32.

⁴⁶ Although this section focuses on the role of PPAs in a competitive effects analysis, PPAs also may come into play in a merger remedies analysis. Merging parties occasionally propose a contractual commitment, such as a PPA to sell electricity, as a form of remedy. Such a remedy often is referred to as a "virtual" divestiture. For the reasons outlined in this section, we caution FERC against treating a "virtual" remedy based on the promise to sell a PPA (or any other similar contractual commitment) as the equivalent of a divestiture of generating facilities.

⁴⁷ See, e.g., Armington *et al.*, *The Year in Review: Economics at the Antitrust Division, 2005-2006*, 29 Rev. Indus. Org. 305, 320 (2006) (explaining how forward obligations affect incentive to exercise market power).

marginal capacity is likely to have effects on competition similar to those that would arise from the generator's purchase of marginal capacity, albeit possibly for a limited time.⁴⁸

The extent to which a PPA diminishes or enhances the incentive to exercise market power will depend, in part, on its duration. A long-term (*e.g.*, ten-year) PPA for the purchase of electricity will increase the buyer's incentive to exercise market power more than a short-term (*e.g.*, three-month) PPA. However, because it generally is limited in duration, a PPA will have a weaker effect on the incentive to exercise market power than a permanent merger or asset acquisition. That is to say, whereas the sale of a generating unit permanently deprives its former owner of any incentive to exercise market power associated with output from the unit, a PPA does so only temporarily. Moreover, even if a generator continually renews a PPA to sell electricity, it is not equivalent to the sale of generating capacity. The generator may still have an incentive to exercise market power in the short term in the hope of affecting the price it receives for its PPA upon renewal over the longer term.

FERC's current analytical framework for merger and MBR determinations does not adequately capture the competitive effects of PPAs. Current practice counts the purchase of power under a PPA of one year or longer as part of a merging firm's portfolio of assets.⁴⁹ As noted above, treating a temporary PPA as if it were a permanent asset acquisition can yield misleading conclusions about a merger's competitive effects.

⁴⁸ Contracts other than PPAs also may affect the ability and incentive to raise prices. Any forward purchase or sale of electricity will have incentive effects similar to those we identify in connection with PPAs. *Id.* In addition, any contract that confers control over output from generating will have ability effects similar to those we have identified. In this comment, we focus only on PPAs. FERC, however, may wish to reconsider the way it treats contracts for purchase, sale, or control of output more generally.

⁴⁹ NOI P 31, n. 35 and accompanying text.

For example, if a generator entered into a two-year PPA to purchase the output of a generating facility before filing an application to acquire the same facility, FERC would attribute the generating capacity of that facility to the purchasing utility's pre-acquisition market share.⁵⁰ Because FERC already attributes the capacity of the facility to the purchaser, FERC would not deem the capacity to increase the purchaser's market share under its existing screens.⁵¹ Such treatment of the PPA obscures the true impact of the acquisition, which may not occur until after the expiration of the two-year PPA.

To assess the effects of PPAs more fully, FERC should consider collecting additional information from merger applicants regarding duration, renewal, prices, and control provisions of PPAs. Such information would allow FERC to account for the effects of a PPA in its merger analysis more accurately. Moreover, given the potentially large consumer costs associated with an exercise of market power, the Agencies believe it would be appropriate to treat PPAs in a way that more reliably avoids erroneous results. For example, if a firm acquires a generation facility for which it already has a PPA, FERC still should consider counting the facility's capacity in the change in shares and concentration arising from the acquisition.

VIII. MERGER-RELATED DOCUMENTS

The NOI asks whether FERC should require section 203 applicants to submit to it "consultant reports and other internal reports that assess the competitive effects of the

⁵⁰ FERC has recognized, however, that when entered into in conjunction with an acquisition, a short-term PPA may be considered as part of the acquisition when comparing pre- and post-acquisition market conditions. *Osprey Energy Center, LLC*, 152 FERC ¶ 61,066 (2015).

⁵¹ NOI P 31.

merger” similar to those submitted to the Agencies.⁵² It also asks about the costs and benefits of requiring applicants to submit such documents.⁵³ The Agencies support an approach that will better enable FERC to obtain the information necessary to undertake a thorough analysis of mergers. As explained below, the Agencies gather merger-related information and documents in a stepwise fashion. The Agencies suggest that FERC employ a similar process.

The Agencies receive information about mergers that are reportable under the Hart-Scott-Rodino Antitrust Improvements Act (the HSR Act). The HSR Act requires that companies proposing a merger or acquisition meeting certain size thresholds notify federal authorities. The Agencies’ regulations require the merging parties to submit “4(c) documents,” which include documents prepared by or for senior management to help them evaluate the transaction with respect to markets, market shares, competition, and competitors.⁵⁴ Requiring parties to submit to FERC the documents that they furnish to the Agencies as part of their HSR submissions is unlikely to impose significant additional costs on them.

Based upon the merging parties’ HSR submissions and public information, the Agencies determine whether to open an investigation and request additional information from the merging parties, commonly called a “Second Request.” Upon opening an investigation, the Agencies typically seek information from a variety of third-party

⁵² *Id.* P 33.

⁵³ *Id.* P 34.

⁵⁴ Instructions, Antitrust Improvements Act Notification And Report Form For Certain Mergers And Acquisitions, at VI (rev. 8/8/16), https://www.ftc.gov/system/files/attachments/premerger-notification-program/hsr_form_instructions_090116.pdf. The term “4(c) document” refers to Item 4(c) of the HSR notification form that calls for documents evaluating the transaction.

sources, including customers, competitors, and others with information about the relevant markets (for example, RTOs or ISOs in the case of electric power mergers). In support of these efforts, the Agencies can issue subpoenas or civil investigative demands as part of an investigation.

Section 2 of the HMG describes the kinds of evidence the Agencies seek and rely on to determine whether a merger may substantially lessen competition. This evidence includes not only market shares and concentration but also, for example, evidence of actual effects observed in consummated mergers, direct comparisons based on historical or natural experiments, head-to-head competition, and the competitively disruptive pre-merger role of a merging party.⁵⁵ This is not an exhaustive list; rather, the Agencies look to any reliable, available evidence indicating that a merger may enhance or lessen competition.

FERC's goal likewise should be to obtain reliable, available evidence that it needs to undertake a merger review. The evidence should not be limited to the merging parties' or intervenors' representations about the transaction, but, to the extent possible, should include evidence that will permit FERC to test those representations. FERC should consider ways that it might utilize its investigatory authority to aid in the collection of useful evidence from both the merging parties and market participants.⁵⁶ If the evidence is proprietary or confidential, competitively sensitive, or otherwise considered protected, FERC should use its procedural rules to prevent any public or unauthorized disclosure.⁵⁷

⁵⁵ HMG § 2.1.

⁵⁶ See 18 C.F.R. part 1b.

⁵⁷ See, e.g., 18 C.F.R. § 388.112.

In general, the Agencies encourage FERC to incorporate a more robust evidentiary foundation into its decisional process.

Finally, the Agencies urge FERC to use all the tools and resources at its disposal. For example, we understand that FERC's Division of Energy Market Oversight receives significant information about electric power markets and can analyze that information using its substantial information technology infrastructure. These resources could prove useful in modeling the competitive effects of transactions based on actual and projected generation, load, transmission, fuel cost, and other market data.

The Agencies recognize, of course, that if FERC were to broaden the range of evidence it considers in connection with market power analyses, there would be some additional costs and burdens for applicants, who might be required to submit additional information or analyses. It is likely that applicants already maintain much of the information useful to a market power analysis, so their burden may not increase substantially. There also would be some additional costs to FERC, which would have to devote staff to reviewing additional information or analyses. However, this evidence may yield substantial benefits that are likely to outweigh these relatively small costs.

IX. CONCLUSION

The Agencies commend FERC for reconsidering its approach to assessing market power under sections 203 and 205 of the FPA. If FERC were to revise its market power analyses as the Agencies suggest, two important benefits would follow.

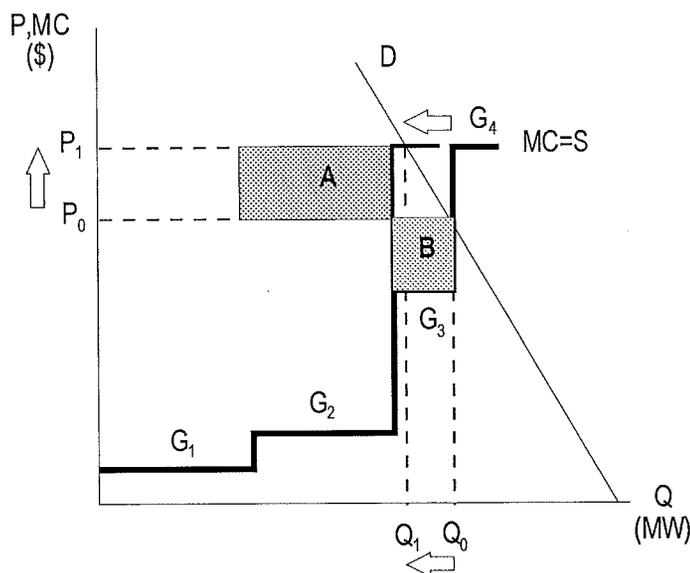
First, by updating its approach to assessing market power under section 203 and section 205, FERC could bring its analytical approach more in line with the underlying economics of market power in electricity markets. Market concentration is a far from

perfect indicator of market power in electricity markets. Any merger or MBR policy that relies largely on concentration to assess market power may produce costly errors. In the case of merger analysis, this results in a policy that sometimes will fail to identify anticompetitive effects (false negatives) and other times will flag anticompetitive effects where none exists (false positives). Use of a broader range of evidence – including information concerning supply curves, transmission constraints, terms of PPAs, and the rationale for the application – is likely to result in a more accurate assessment of market power, reducing the likelihood of false negatives *and* false positives, to the benefit of electricity consumers.

Second, by updating its merger analysis as the Agencies suggest, FERC would follow an approach more in line with the Agencies' analysis. FERC and the Agencies presently rely on different types of evidence and emphasize different types of analytical tools to assess and remedy a merger's competitive effects. Differing approaches can create the risk of inconsistent or conflicting outcomes at FERC and the Agencies, potentially saddling merging firms with a longer, more confusing, and more costly review than is necessary. Indeed, it is possible that FERC and the Agencies could reach different conclusions about a merger's competitive effects and impose different – or even inconsistent – remedies for the same merger. More closely aligning the approaches of FERC and the Agencies would benefit merging firms by reducing the likelihood of inconsistent or conflicting outcomes.

APPENDIX

Illustration of Supply Curve Analysis of Potential Market Power



This appendix provides a simple graphical illustration of a supply curve analysis of the potential unilateral exercise of market power.

The graph above shows a supply curve (S) and a demand curve (D), whose intersection determines the market price, which initially is P_0 , absent withholding. The marginal costs of generating units available to serve the market trace out the supply curve (hence $MC=S$). Each step in the supply curve is the marginal cost for each generating unit. Assume that Firm X owns unit G_1 , and Firm Y owns units G_2 , G_3 , and G_4 . Absent withholding, G_3 is the marginal unit, setting the market price, P_0 ; unit G_4 is idle because its costs are greater than the market price; and units G_1 and G_2 are inframarginal. Firm Y is considering whether unilaterally to exercise market power through a withholding strategy.

Firm Y owns the marginal unit, G_3 , with costs close to the market price, which makes the unit a good “ability” asset. Withholding G_3 , however, is not costless: Firm Y will lose the profit it otherwise would have earned on sales from G_3 . The area B represents this lost profit, *i.e.*, it is the cost to Firm Y of withholding. The area A represents the benefit of withholding. When G_3 is withheld, the supply curve shifts to the left and the market clearing price increases from P_0 to P_1 , with G_4 becoming the new marginal unit. Output from unit G_2 continues to be sold but at the new higher price, P_1 , which increases the profit earned by Firm Y by the area A. That is, the inframarginal, low-cost unit, G_2 , creates an “incentive” (area A) to withhold output. When the benefits of withholding (area A) exceed the costs of withholding (area B), Firm Y will find it profitable to withhold, *i.e.*, profitable to exercise market power.