



Market Monitoring in Wholesale Electric Markets

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May 15, 2015





ROLE OF FEDERAL ENERGY REGULATORY COMMISSION (FERC)

- MARKET OVERSIGHT
 - The FERC Office of Enforcement, Division of Energy Market Oversight (DEMO) oversees the nation's natural gas and electric power markets and related energy and financial markets. DEMO conducts daily oversight of these markets and reports its findings and recommendations to the Commission and the public.
 - DEMO issues seasonal and annual market assessments
- PROHIBITION OF MARKET MANIPULATION
 - Congress made it unlawful for any entity subject to FERC jurisdiction to engage in market manipulation as defined by FERC rule.
 - Remedies for violation of market manipulation rules include ordering the disgorgement of unjust profits and the imposition of civil penalties.





Market Power and Market Manipulation

- Market Power is defined as the ability of any market participant with a large market share to significantly control or affect price by withholding production from the market, limiting service availability, or reducing purchases.
- Market Manipulation is prohibited in rules established by the Federal Energy Regulatory Commission (FERC):

Prohibition of electric energy market manipulation.

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

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

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

(3) To engage in any act, practice, or course of business that operates or would operate as a fraud or deceit upon any entity.





EVENTS LEADING TO FEDERAL LEGISLATION GIVING FERC ENFORCEMENT AUTHORITY

Federal legislation gave FERC authority to assess penalties for market manipulation after the California Electricity Crisis of 2000 and 2001 revealed a need for FERC to be able to enforce prohibitions against market manipulation.





California Electricity Crisis

- California restructured its electricity market in 1998. Initially the average wholesale price dropped but because of flaws in the market design, resource scarcity and market manipulation by suppliers, wholesale electric prices skyrocketed in 2000 and 2001. Supply scarcity also resulted in rolling black outs.
- FERC opened an investigation in 2002 to determine whether market manipulation contributed to the crisis.





California Electricity Crisis (continued)

- The investigation resulted in a report finding that significant market manipulation in the Western Energy markets had occurred.
- Withholding supply was one of the actions that constituted market manipulation; another was exporting lower cost power and through a series of transactions and then importing the power back into the California market at a much higher price.
- A number of FERC proceedings have resulted in consumer refunds, but not all are resolved.





California Electricity Crisis (continued)

- The crisis imposed billions of dollars in additional energy costs on California consumers.
- A 2005 FERC report states that the amount obtained through settlements with Western energy providers was \$6.3 billion.
- The California Electricity Crisis underscored limitations on FERC's authority to impose penalties for market manipulation. As a result the Federal Power Act was amended to give FERC such authority.





EXAMPLES OF FERC ENFORCEMENT CASES

FERC assessed civil penalties of \$435 million against Barclays Bank, PLC, and \$18 million against certain traders and ordered disgorgement by Barclays of \$34.9 million plus interest in unjust profits.

FERC found that Barclays and the traders had violated the Commission's Anti-Manipulation Rule from November 2006 to December 2008 by manipulating the energy markets in and around California through the use of a coordinated, fraudulent scheme.

Specifically, FERC found that Barclays and the traders intentionally engaged in an unlawful scheme to manipulate prices on 655 product days over 35 product months in the Commission-regulated physical markets. They took physical positions that would affect a daily index which benefited Barclays financial swap positions that were affected by the index. The penalties are currently being litigated in federal court.





Examples of FERC Enforcement cases (continued)

FERC approved a market manipulation settlement with JP Morgan Ventures Energy Corporation (JPMVEC), resolving allegations that the company engaged in multiple bidding strategies in the California ISO (CAISO) and Midwest ISO (MISO) markets intended to obtain above-market payments through fraudulent bidding practices.

Among the actions at issue were JPMVECs bids in conjunction with uplift (make whole) payments to units that are committed by the Independent System Operator even though the unit's bid is higher than the energy clearing price. The settlement provides for \$285 million in penalties and \$125 million in disgorgement to ratepayers.





Examples of FERC Enforcement Cases (continued)

FERC approved a Settlement and Consent Agreement (Settlement) with Constellation Energy Commodities Group, resolving allegations that the company traded energy in ISO-NE and NYISO markets to affect market prices in financial instruments based on those prices, and misrepresented the purpose of the trades to the NYISO market monitor.

The Settlement provided for \$135 million in penalties and \$110 million in disgorgement and created a disgorgement fund to be allocated among electric energy consumers in various states. Maine's allocation of approximately \$1.8 million flowed back to consumers in 2013.





ISO NEW ENGLAND, INC. (ISO-NE) EXTERNAL AND INTERNAL MARKET MONITORS

ISO New England, Inc. (ISO-NE) External Market Monitor (EMM)

- ISO New England's EMM is the independent firm <u>Potomac</u> <u>Economics</u>, which reports directly to the ISO Board. Along with its regular market assessments and reporting, the EMM also monitors and reviews the quality and appropriateness of the mitigation conducted by the IMM.
- The EMM produces an annual assessment of the New England Electricity markets. The report examines the overall competitiveness of the New England electricity markets and identifies areas for needed improvement.





ISO-NE External and Internal Market Monitors (continued)

ISO-NE Internal Market Monitor (IMM)

- The IMM is an ISO department composed of economists, engineers, statisticians, and analysts. It functions independently of ISO management and reports directly to the ISO Board of Directors' Markets Committee. Along with regular market assessments and reporting, the IMM is also responsible for the daily detection and mitigation (lessening) of the effects of any anti-competitive behavior in the wholesale markets or market products. This includes actions or transactions that are intended to (or foreseeably could) manipulate market prices, market conditions, or market rules.
- The IMM is consulted in the development of new market rules.





Wholesale Power Markets – Market Based Rate Authority

- Generators and suppliers may participate in wholesale markets at "market based," rather than "cost of service based" rates.
- FERC grants market based rate authority to generators and suppliers that demonstrate they and their affiliates lack or have adequately mitigated horizontal and vertical market power.
- Supplier must apply to FERC under Section 205 of the Federal Power Act. This application must include a proposed market-based rate tariff.





Wholesale Power Markets – Market Based Rate Authority

- There are different ways for suppliers to demonstrate they lack horizontal and vertical market power. For example:
 - If a suppliers entire capacity is committed under long-term contract and affiliates do not own generation, then neither applicant nor affiliate have any uncommitted capacity. Based on this, the applicant passes both the Commission's generation market power screens.
 - Applicants may rely on a recent market power analysis accepted by the Commission. It can adopt the analysis as its own and provide the pivotal supplier and market shares for its, along with its affiliates, generation.





Market Based Rates (continued)

Applicants may submit streamlined applications. For example, if an applicant's entire capacity is fully committed under long-term contract (one year or more) and that applicant's affiliates do not own generation, then neither the applicant nor its affiliate have any uncommitted capacity. Based on this, the applicant passes both the Commission's generation market power screens.

An applicant can use simplifying assumptions when conducting the screens as long as it provides sufficient support for its assumptions.

Another example is an applicant can rely on a recent market power analysis accepted by the Commission. In this instance, the applicant can adopt the analysis as its own and provide the pivotal supplier and market shares for its, along with its affiliates, generation.





Wholesale Power Markets – Market Based Rate Tariff

- Once granted market based rate authority, participant must file a tariff with FERC. Tariff includes some standard provisions:
 - > Agreement to comply with Commission rules and orders
 - Seller category defines which electrical region the seller will be participating
 - List of limitations (including markets where seller does not have market-based rate authority) on its market-based rate authority and all exemptions from or waivers granted of Commission regulations.
 - Other provisions that may be unique to the different market areas (e.g. PJM, MISO, SPP, NY ISO, ISO-NE)





Thank you. We would be happy to answer any additional questions you may have.

Questions?