

MULTIPLE BLOCK OWNERSHIP AND MARKET POWER IN PJM

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Overview

Market power analysis in PJM is currently based on the assumption that the largest owner of a firm controls the firm.² This assumption has generally held true, with a few exceptions. Recently, however, as investment in the electricity market has grown rapidly and diversified—especially due to the load growth from data centers (Aliaga, J.P. Morgan Asset Management, 2024)—these exceptions have become more frequent. One common exception to this assumption is the presence of two or more owners actively involved in a firm’s decision-making, rather than a single controlling owner. Although such cases remain relatively rare, they highlight a potential limitation in the traditional methods of measuring market power, which may overlook the influence of second- or third-largest owners. These owners, who may hold multiple assets in the market, could potentially undermine the competitiveness of PJM markets. While extensive research has been conducted on block holders (Edmans & Holderness, 2017; Holderness & Sheehan, 1988; Morck et al., 1988) and common ownership in other industries (Antón et al., 2023; Azar et al., 2018; O’Brien & Salop, 1999), the concept has rarely been explored within the context of electricity markets (Amundsen & Bergman, 2002). This study examines the prevalence of multiple block ownership in PJM and investigates ways to incorporate it into market concentration and competition analysis using the Herfindahl-Hirschman Index (HHI). Multiple block ownership occurs when entities hold substantial equity stakes in competing firms, potentially altering competitive dynamics and increasing market power. The first part of the analysis assesses the extent of multiple block ownership in PJM using a novel dataset from the market-based rate (MBR) database of the Federal Energy Regulatory Commission (FERC). Based on this data, the second part of the analysis will measure market concentration using modified HHI, or MHHI, for PJM.

Methods

Any market sellers in U.S. electric wholesale markets (energy, capacity and ancillary services markets) under the FERC jurisdiction must report any *affiliates*. Affiliates are defined as entities that own 10 percent or more of the market seller’s voting securities with the power to vote. Market sellers are required to demonstrate that they and their affiliates “lack or have adequately mitigated horizontal and vertical market power.”³ Based on the collected ownership information, FERC launched a MBR database in 2021. The database provides comprehensive ownership information for all market sellers in FERC jurisdictional markets and is open to public. Despite its availability, the database has not been extensively explored in academic research. This study would be the first to review multiple block ownership in PJM using the database. It is important to note, however, that the database does not provide a complete picture of ownership. It only includes ownership stakes greater than 10 percent. Additionally, companies trading exclusively financial products—such as Financial Transmission Rights (FTRs) or virtual bids and offers (including increment offer, or INC; decrement bid, or DEC; and up to congestion, or UTC)—are exempt from the reporting requirements. As a result, this analysis does not account for ownership stakes less than 10 percent or the ownership of FTR and virtual traders. The first part of the analysis restructures ownership data from the MBR portal to evaluate the status of multiple block ownership in PJM. Based on this data, the second part of the analysis will use MHHI to measure market concentration. MHHI extends traditional HHI models by incorporating the effects of shared ownership (Azar et al., 2018; O’Brien & Salop, 1999). The results will assess how overlapping equity stakes influence market concentration measures and competitive behavior.

¹ The views expressed are those of the author and do not reflect the position of Monitoring Analytics, LLC, the Independent Market Monitor for PJM.

² This is consistent with *Market-Based Rates For Wholesale Sales Of Electric Energy, Capacity And Ancillary Services By Public Utilities*, 119 FERC ¶ 61,295 (2007) [Order No. 697] which initiated the market-based rate authorization and market power analysis.

³ *Data Collection for Analytics and Surveillance and Market-Based Rate Purposes*, 168 FERC ¶ 61,039 (2019) [Order No. 860] made updates to the existing market-based rate (MBR) regulations including establishing a relational database (the MBR database at <https://mbrweb.ferc.gov/>) to enhance data transparency and accuracy.

Preliminary Results

Table 1 presents the status of multiple block ownership for all generation units (shown on the left side of the table) and for market sellers (shown on the right side of the table) in PJM. It also distinguishes between ownership with and without Section 203(a)(2) blanket authorization, which mandates ownership be passive. Ownership acquired through Section 203(a)(2) blanket authorization is not included in market power analysis, as it is required to be passive. However, it is included in the table for informational purposes.⁴ The numbers in each column indicate the count of generation units or entities based on the number of block owners. The percentage in each column represent the proportion of generation units or entities within each range of the number of block owners relative to the total number of units or entities in the market. In PJM, 52.3 percent of the generation units have a single owner, while 47.7 percent have two or more block owners. Similarly, 46.0 percent of market sellers in PJM have a single owner, while 54.0 percent have multiple owners. One caveat is that when a unit or an entity is owned by multiple individuals from the same entity, it is counted as having multiple block ownership. In this data, 44.7 percent of the owners are individuals. The final results will take this into account and treat them as one owner.

Table 1 Multiple block ownership in PJM

Number of (Block) Owners	Generation Ownership – the number of units				Market Seller Ownership – the number of entities			
	With ownership acquired through Blanket Authorization		Without ownership acquired through Blanket Authorization		With ownership acquired through Blanket Authorization		Without ownership acquired through Blanket Authorization	
1	274	39.5%	322	52.3%	198	36.9%	238	46.0%
1 to 5	363	52.3%	239	38.8%	297	55.3%	237	45.8%
5 to 10	37	5.3%	36	5.8%	24	4.5%	24	4.6%
More than 10	20	2.9%	19	3.1%	18	3.4%	18	3.5%
Total	694	100%	616	100%	537	100%	517	100%

Conclusions

This study is the first attempt to assess the extent of multiple block ownership in PJM. The preliminary results show that nearly half of the generation units and market sellers in PJM have two or more block owners, signaling a significant presence of multiple ownership across the market. The findings suggest that the increasing complexity of ownership structures in PJM could affect market concentration metrics and competitive behavior in ways not fully captured by current methodologies. This study will explore ways to verify whether all multiple block owners are controlling entities and calculate modified HHI to better understand the competitive dynamics in PJM. This study's results are expected to provide insights into how multiple block ownership could be treated in PJM and in other electricity markets.

References

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⁴ FERC issued a Notice of Inquiry in 2023 to review its policy on blanket authorizations under section 203(a)(2). See *Federal Power Act Section 203 Blanket Authorizations for Investment Companies*, 185 FERC ¶ 61,192 (2023).