



Why Ohio's retail electric deregulation has been bad for households and why re-regulation would be even worse

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Scope of the Problem

Ohio has a deregulated retail electricity market in which households and businesses can “shop” from among competing marketers for their electric service. But, have households actually experienced the benefits of this “competition”? A new Ohio State University study finds that Ohio households have lost at least \$1 billion under the current system.

Prior to “restructuring,” as deregulation has been called, Ohio’s predominant electric utility model relied on vertically-integrated monopolies. These utilities were overseen by the Public Utilities Commission of Ohio (PUCO) and subject to price and cost regulation. Ohio initiated its effort to deregulate electric utilities by passing SB 3 in June 1999, in response to low natural gas prices, recently deregulated wholesale markets (via FERC Orders 888 and 2000), and pressure from the state’s large industrial sector. SB 3 established a five-year market development period during which time incumbent utilities could collect transition revenues. At the conclusion of this period, however, competitive electric markets did not develop as envisioned by the proponents of SB 3.

The PUCO, concerned that a clean change to market-based rates would lead to “rate sticker shock,”¹ opted instead to delay the end of the market development period with the backing of the Ohio Legislature. Between October 2002 and January 2005 the PUCO approved individually negotiated Rate Stabilization Plans (RSPs) with all four major Ohio utilities. During this period utilities received higher than average returns as a means to recover stranded costs prior to open wholesale market competition.

The end of market development and the passage of SB 221 in May 2008 set in motion provisions for full retail choice.² SB 221 required that Ohio’s incumbent

²Retail Choice

Retail choice means that residential customers can either “shop” from among competing marketers to supply their electricity on a contractual basis, or remain with the regional distribution utility and receive a rate that is set by an auction process.

³Market Rate Offer (MRO)

MROs entail a Competitive Bidding Process (CBP) after which the selected least-cost bids are used to set the Standard Service Offer (SSO). These essentially work to peg rates close to wholesale prices.

⁴Electric Security Plan (ESP)

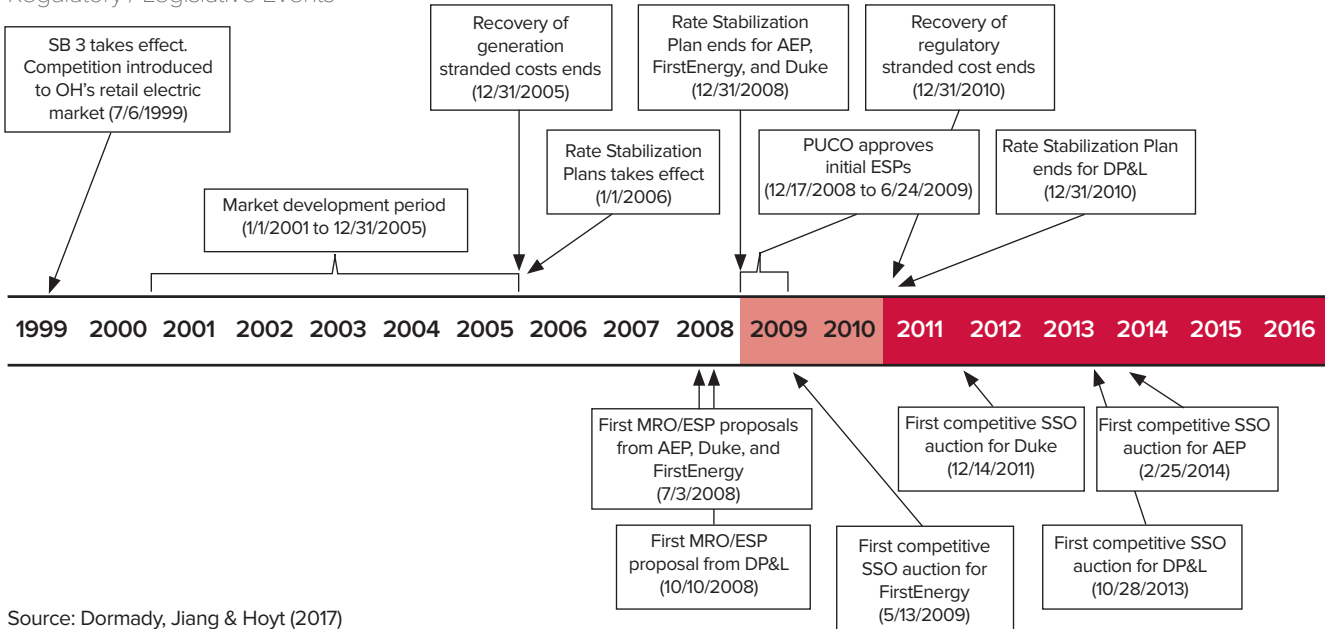
ESPs allow for regulated provisions, including cost recovery and surcharges for transmission, distribution, and related services, in addition to a Competitive Bidding Process (CBP) auction. The ESP is less of a fully-market-oriented approach to setting a Standard Service Offer (SSO) than the MRO.

¹ PUCO (2007, May 7). *Electric rate stabilization plans: Ensuring rate certainty in Ohio*. Retrieved from <http://www.getpurenergy.com/states/forms/Electric%20Rate%20Stabilization.pdf>



Timeline of Major Market Events in Ohio's Electric Restructuring

Regulatory / Legislative Events



Source: Dormady, Jiang & Hoyt (2017)

utilities obtain PUCO approval for either a Market Rate Offer (MRO)³ or an Electric Security Plan (ESP)⁴ to fulfill their Standard Service Offer (SSO) obligations. The legislature preferred MROs but established hybrid ESPs to allow utilities “to ‘ramp up’ to market.”⁵

To date, Ohio has not had an MRO in any of its service territories; ESPs have been the exclusive avenue by which utilities have fulfilled their SSO obligations. Utilities overwhelmingly prefer ESPs to MROs, as ESPs provide protections on revenues that a market-based rate does not provide.

Critically important to retail deregulation in any context is the functional separation (or divestiture) of generation from retail services (i.e., the distribution of electricity to homes and businesses). Ohio's restructuring under SB 221 neglected this important step—instead opting for only corporate separation of generation from retail services. For example, American Electric Power (AEP) created AEP Generation Resources Corporation as its corporately separated generation business, rather than selling or transferring assets to an actual separate company that did not have access to revenue protections under the system of ESPs.

These past eight years also coincided with a natural gas boom and expansions in hydraulic fracturing utilization in Ohio. The resultant low natural gas prices have reduced the profitability of utility-owned generation, predominantly coal-fired plants. These changes have driven down generation costs. The PUCO, however, has permitted through its ESP approval process atypical increases in riders and surcharges on household electric bills that allow utilities to recover lost profits from their corporately-separated generation businesses. In essence, households in Ohio never saw the benefits of competition, but have instead been forced to subsidize the losses of an aging coal fleet through a system of inflated riders and surcharges on their home electricity bills.

⁵ Ohio Legislative Service Commission [OLSC] (2008). *Final Analysis, Am. Sub. S.B. 221. Columbus, OH*. Retrieved from <http://www.lsc.ohio.gov/analyses127/08-sb221-127.pdf>



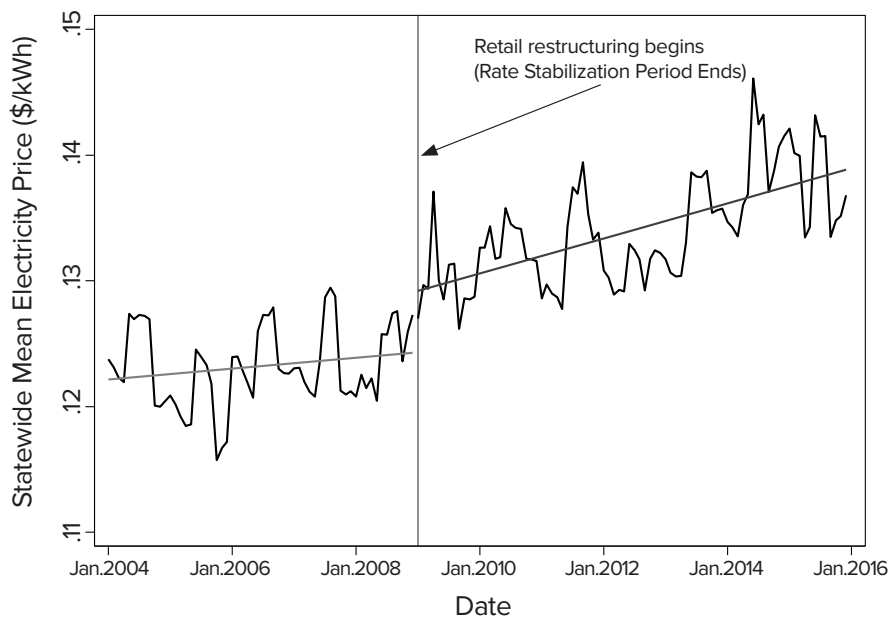
The Ohio State University Study

Noah Dormady, Zhongnan Jiang and Matthew Hoyt, researchers at the John Glenn College of Public Affairs at The Ohio State University, use an interrupted time series regression analysis to measure the effects of Ohio's restructuring on residential electricity bills. The study uses robust time series household final bill survey data, standardized to show the costs of 750 kWh of electricity usage per month, provided by the PUCO. This data provides the final costs that standard service offer (SSO) customers incur, inclusive of riders and surcharges. Prior studies that have shown that retail deregulation has provided a benefit to Ohioans have relied upon the incomplete U.S. Energy Information Administration (EIA) 826 data that excludes those riders and surcharges.

The results of the Ohio State study indicate that household electric bills have increased in all service territories in Ohio, with the exception of the Cincinnati area (Duke Energy's service territory). It should be noted that Duke Energy is the only investor-owned utility in the state that fully divested its generation business as of the completion of the Ohio State study.

The aggregate statewide electricity price (in constant 2014 \$/kWh) is provided in the figure below for both the pre-restructuring period and the post-restructuring period through the end of 2015. The figure excludes Dayton Power and Light (DP&L) as DP&L delayed its implementation of SB 221 two years longer than the other utilities. The aggregate electricity price exhibits a jump upward and a general month-to-month increasing trend subsequent to retail restructuring. Whereas the mean statewide aggregate electricity price before restructuring was 12.63 cents/kWh, it was 13.29 cents/kWh following restructuring. During this time wholesale energy prices fell due to the declining price of natural gas; however most Ohio households have been excluded from these savings. The increased costs of electricity that a majority of Ohio households have experienced is due almost entirely to the regulated portions of customer bills (i.e., riders and surcharges).

Statewide Average Electricity Price Before and After Retail Restructuring



The Ohio State study is limited by the fact that final customer bill data is available only for SSO customers—those customers who did not switch to a marketer. However, the inflation in costs associated with riders and surcharges is incurred by all customers, SSO and marketer customers alike, as the riders and surcharges are predominantly non-bypassable. The Ohio State study estimates the lower bound welfare loss to residential SSO customers associated with retail electric restructuring to be approximately \$1 billion between January 2009 and December 2015 (when the study period ended). Including customers who switched to a marketer would likely more than double this estimate.



Recommendations

While perfect competition is not possible, policymakers can take simple and direct action in the following areas to help reduce the cost burden on households and allow them to experience many of the intended benefits of competition.

1. Require utilities in Ohio to fully divest generation assets.

- Functional, rather than corporate, separation of generation is essential to the success of a deregulated system.
- Functional separation would weaken utilities' incentive to inflate customer costs through riders and surcharges to offset generation losses.

2. Set a firm date in the very near term by which utilities must be moved to an MRO.

- Under the current system of ESPs, customers are paying for generation twice. They are paying for generation through their energy costs (i.e., through PJM), and they are paying for generation through non-bypassable riders and surcharges.
- Moving to MROs, and away from ESPs, can move the pricing mechanism more closely toward wholesale prices and reduce double charging.
- Under MROs, customers may also experience the added benefit of increased competitiveness of wholesale markets. The double recovery that utility-affiliated generation currently receives can distort their wholesale market behavior. Moving to an MRO could substantially lessen the incentives of subsidized generation to distort their wholesale market bids, encouraging them to operate more efficiently to the benefit of customers.

For more information about this study please contact Dr. Noah Dormady at 614-688-1668 or email him at dormady.1@osu.edu. To read the full report go to glenn.osu.edu/research/policy.

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