



Free markets. Real solutions.

R STREET SHORTS NO. 50  
October 2017

## ELECTRICITY COMPETITION EXCELS IN THE MIDWEST

Devin Hartman

### INTRODUCTION

Beginning in the 1990s, 13 states and the District of Columbia restructured their electricity systems. This has facilitated competitive wholesale markets and enabled retail customers to choose their electricity supplier, while limiting monopoly ownership and regulation of transmission and distribution lines. Illinois and Ohio were the only Midwest states to follow through on restructuring, while Michigan allows just 10 percent of customers statewide to choose their electricity supplier and remains predominantly a regulated-monopoly state.

Although policymakers and regulators initiated restructuring in the 1990s, mature wholesale and retail markets did not take shape until the late 2000s. The period between served as the transitional decade, marked by retail price controls, developing wholesale market design and mandatory rate-adders, which were designed to allow former monopoly utilities to recover the cost of “stranded” generation assets. For example, from 2000 to 2010, Ohio utilities received more than \$9 billion in “stranded asset” and “regulatory transition” payments.<sup>1</sup> As such, a robust retail market for electricity did not emerge in Ohio until 2011.<sup>2</sup> Thus, restructuring did not result in proper competitive market structures and

functions until roughly the turn of this decade. Since then, competitive markets have unquestionably outperformed the monopoly model both nationally and in the Midwest.

### THE MARKET ADVANTAGE

Customers with choice have become increasingly savvy, including actively shopping for electricity suppliers and customizing agreements to meet their unique cost and risk preferences that the monopoly model never allowed. The digital revolution has amplified this by providing customer-empowerment tools that mesh superbly with the opportunities presented by retail choice. Accordingly, the proportion of customers with retail choice who switched suppliers between 2003 and 2016 rose from 21 percent to 72 percent.<sup>3</sup>

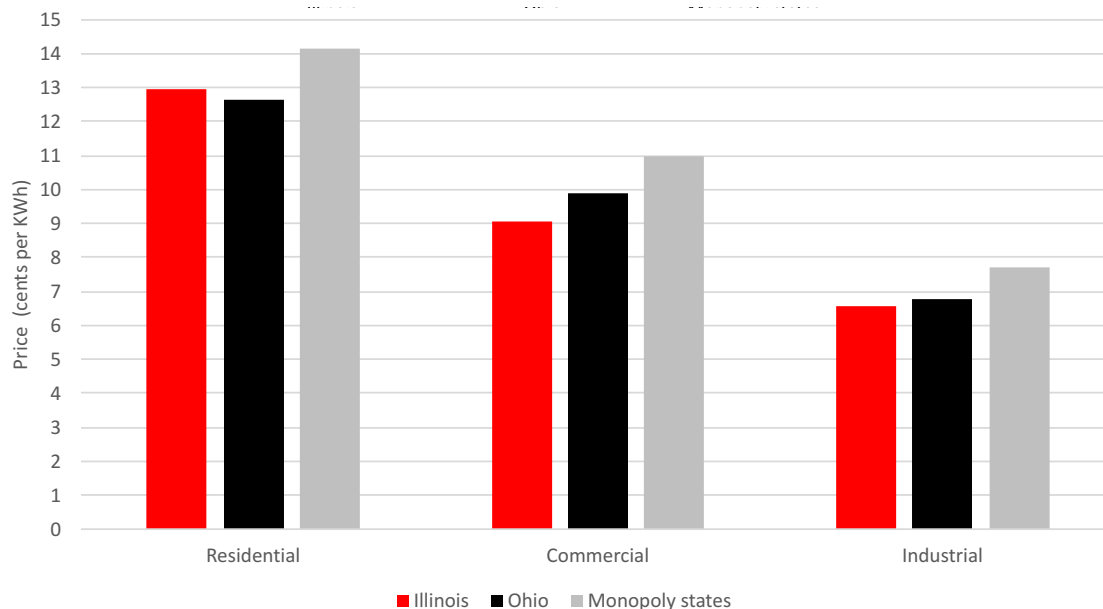
Put simply, restructuring brought economic discipline to wholesale electricity markets. Merchant generators immediately began operating power plants more efficiently than monopoly utilities and began constructing and retiring power plants in a manner more consistent with economic fundamentals.<sup>4</sup> Merchants responded to an abrupt decrease in natural gas prices by building new, efficient gas plants in locations with the lowest-cost access to gas on the pipeline system. They also retired suddenly unprofitable coal and nuclear plants. However, rather than base their investment decisions on these going-forward economics, monopoly utilities clung to many uneconomical assets in attempts to recover their book value through regulated rates.<sup>5</sup> For example, earlier in this decade, monopolies invested billions of dollars into pollution controls for coal plants in the Midwest that merchants would have otherwise closed.<sup>6</sup>

Monopolies also struggled with excess generation after demand softened relative to expectations, which placed upward pressure on rates. This had the opposite effect in competitive markets, where soft demand put downward pressure on rates. The advantages of markets under changing economic and policy conditions illustrates a critical benefit of a market-based system: namely, that the private sector incurs investment risk, whereas the monopoly model socializes risk across captive customers.

The economic advantages of markets have culminated in rates trending in opposite directions in monopoly and restructured states. From 2008 to 2016, the weighted-average price of electricity in monopoly states increased 15 percent, while it decreased 8 percent in restructured states.<sup>7</sup> This national trend holds true in the Midwest.

In the mid-1990s, Illinois, Michigan and Ohio had the highest electricity rates in the Midwest.<sup>8</sup> Currently, Illinois and Ohio have the lowest rates in the region.<sup>9</sup> Meanwhile, Michigan’s rates remain higher than average, including the highest residential rates in the region.<sup>10</sup> On average, Midwestern

**FIGURE I: AVERAGE PRICE OF ELECTRICITY TO MIDWEST END-USE CUSTOMERS, JUNE 2017**



SOURCE: Derived from U.S. Energy Information Administration data.<sup>13</sup>

NOTE: Monopoly states include Minnesota, Iowa, Wisconsin, Indiana and Michigan.

monopoly states have rates that are 11 percent higher for residential customers, 16 percent higher for commercial customers and 15 percent higher for industrial customers than Illinois and Ohio.<sup>11</sup> The gap has become so prominent that Ohio and Illinois have lower commercial and industrial rates than every other Midwest state and only Indiana has lower residential rates.<sup>12</sup>

Consistent with the national delay in achieving mature market structures and functionality, the relative improvements for Ohio and Illinois occurred mostly this decade. Even in 2010, the two states ranked between fourth and seventh in average rates across residential, commercial and industrial customer classes among the seven Midwest states. Since 2010, however, the market advantage in the Midwest has become unmistakable.

A joint study by Cleveland State University and Ohio State University researchers found that, after nearly a decade of regulatory transition, electricity competition and choice in Ohio began functioning in ways consistent with economic theory and thus strongly outperformed monopoly regulation.<sup>14</sup> Since 2011, the study found \$15 billion in consumer savings in Ohio and projected comparable savings through 2020.<sup>15</sup> Similarly, a joint report by the Illinois Chamber of Commerce, Illinois Manufacturers’ Association, Illinois Retail Merchants Association and Illinois Business Roundtable called the state’s decision to restructure a “triumph of market-based public policy;” one that resulted in \$37 billion in consumer savings from 1998 to 2013.<sup>16</sup>

Restructuring has also brought clear advantages for clean energy growth. Competitive wholesale markets more efficiently and reliably integrate variable renewable sources like wind and solar, and spur innovation in advanced low-emissions technologies.<sup>17</sup> Retail choice extends the penetration of dynamic pricing programs, which improve market health and help integrate renewables. Further, enabling choice expands access to lower-cost clean energy supply.<sup>18</sup> In particular, large corporate consumers like Microsoft and Amazon have flocked toward alternative electricity suppliers to procure clean energy, with corporate renewable energy procurement roughly six times higher in 2015-2016 than in the late 2000s and early 2010s.<sup>19</sup> Retail choice is a critical factor for a state to attract corporate and other large institutional buyers of renewable energy.<sup>20</sup> This advantage for procurement of utility-scale renewables also translates into advantages for distributed generation.

As the economics of distributed generation continue to improve, restructured states will hold an immense advantage. The projected shift includes a move toward greater customer pursuit of partial self-supply, which the monopoly model deters. In its attempt to encourage rates that better reflect the causes of electricity costs, the Midwest has followed the national trend of revising retail rate design for distributed energy customers. Monopoly utilities will typically seek fixed charges several multiples greater than “wires-only” distribution monopolies in restructured states.<sup>21</sup> The consequences of the monopoly model are muted customer investments in energy efficiency and distributed energy. The

monopoly model also cannot simultaneously adjust retail rates to reflect avoided going-forward costs, which is necessary to send proper investment signals without creating the kind of stranded investment that it also seeks to recover in rates.<sup>22</sup> Some monopolies have proposed owning customer-sited distributed generation, but this will stifle the kind of competition that has proven crucial to lowering costs and improving service quality for distributed resources.

## POLICY DEVELOPMENTS IN MONOPOLY STATES

Midwestern consumers in monopoly states have experienced rate increases and restricted options, while being surpassed by Illinois and Ohio. The relative climb in once-enviably low rates in Indiana and Wisconsin provide an excellent example. Wisconsin once had the lowest average prices in the region but now has the highest.<sup>23</sup> Rising rates have caused some Wisconsin industrial consumers to consider shifting production to lower-priced states.<sup>24</sup>

Indiana's rates have increased at multiples more than the U.S. average over the last 10 years.<sup>25</sup> In response, the Indiana Chamber of Commerce began sponsoring discussions about the merits of customer choice and monopoly regulation.<sup>26</sup> Indiana Industrial Energy Consumers Inc. has declared that Indiana is "no longer a low-cost energy state" because of "serious problems from rapidly escalating energy prices."<sup>27</sup>

Large customers often see enabling access to third-party providers as the easiest legislative fix. Direct access to third-party suppliers is a "diet" version of retail choice that enables customers to obtain lower and customized rates. But importantly, it does not facilitate a robust retail market, nor does it stimulate the wholesale market advantages that full restructuring does. Moreover, in many states with third-party access, a company that leaves the monopoly provider must pay heavy exit fees, which creates an artificial barrier to exit.<sup>28</sup> Still, enabling third-party power purchases would provide incremental benefits and may boost prospects for comprehensive reform.

Unsurprisingly, the largest energy consumers have provided the loudest calls for such reform, especially industrial firms. For example, Indiana Industrial Energy Consumers Inc. has done so.<sup>29</sup> Similarly, Wisconsin's large manufacturers recently lobbied state regulators to grant them retail choice.<sup>30</sup> In 2017, legislators introduced a new bill in Minnesota to allow industrials access to market-priced power.<sup>31</sup> The bill's increase in residential rates in order to enable a discount to retain at-risk industrial companies is a "classic admission that the regulated monopoly rates are above market and that the business risk falls on captive customers."<sup>32</sup>

Indeed, monopoly utilities failed to eliminate the 10 percent retail choice program in Michigan after years of effort.

Michigan legislators recently announced a renewed push for expanded choice.<sup>33</sup> Efforts to protect and expand retail choice have been spearheaded by state Rep. Gary Glenn, R-Larkin Township; the pro-market Mackinac Center for Public Policy; and key consumer groups, including school systems. For example, the Michigan Schools Energy Cooperative reported in July that the retail choice program saved state schools more than \$140 million.<sup>34</sup>

## POLICY DEVELOPMENTS IN ILLINOIS AND OHIO

Paradoxically, the key advantages of competitive wholesale markets – investor adjustments to economic fundamentals – have created political controversy and interventions that undermine markets. Merchants that follow market signals have swiftly retired unprofitable coal and nuclear plants and invested in new, lower-cost natural gas plants. However, this has also spurred increases in "rent-seeking" behavior, as merchants seek subsidies for their unprofitable assets, justified by specious arguments that "markets are not working."

Regulators and legislators in Illinois and Ohio have caved to subsidy pleas, to the detriment of markets and customers. In 2016, Illinois enacted the Future Energy Jobs Act, which created a program that provides more than \$200 million annually to subsidize two nuclear plants under the guise of environmental policy.<sup>35</sup> In an amicus brief to a court case that challenged the subsidies, energy economists noted that the law will distort wholesale electricity markets, undermine new investment in these markets and may reduce carbon emissions less than would be achieved simply by doing nothing.<sup>36</sup>

Similarly, former monopoly utilities in Ohio are seeking legislative subsidies for unprofitable coal and nuclear plants. They previously convinced the Public Utilities Commission of Ohio (PUCO) to pass subsidies for these plants, which were rejected by the Federal Energy Regulatory Commission. Following the rejection, PUCO broke a cardinal rule of restructuring by subsidizing the competitive merchant arm of a parent company through its regulated distribution affiliate. This raises major anti-competitive concerns by injecting subsidies through a regulatory vehicle into a competitive marketplace where the subsidy recipients' competitors have no such access to out-of-market capital.<sup>37</sup> These subsidies would come on top of more \$14 billion in past subsidies from 2000-2016 and more than \$235 million in yearly charges in 2017.<sup>38</sup>

The indirect benefit of rent-seeking behavior is that it motivates pro-market and consumer groups to become more politically active. For example, the prolonged political battles in Ohio gave time for a diverse coalition of pro-market, consumer, environmental and other groups to ward off legislative subsidies. Now, a counteroffensive is underway.

Influential groups—including the Ohio Manufacturers’ Association, Ohio Consumers’ Council, the pro-market Buckeye Institute, Ohio Farm Bureau and Ohio AARP—have backed a bill by state Rep. Mark Romanchuk, R-Ontario, that would “quarantine the monopoly,”<sup>39</sup> or require monopoly distribution utilities to divest their generation assets.<sup>40</sup> This would isolate the regulated distribution monopoly and would prevent subsidies from the monopoly from flowing through to the company’s affiliates in the competitive wholesale market. To do so is the single most effective approach to create robust retail competition.<sup>41</sup>

## CONCLUSION

The Midwest provides an excellent case study for the effects of electricity restructuring. This decade has revealed the profound advantages of competitive markets and consumer choice on pure economic grounds and for voluntary clean energy growth. Midwestern policymakers have a great home-grown lesson from which to learn, but obstacles remain.

The adoption of competitive reforms has catapulted Illinois and Ohio from worst-to-first in the Midwest. Lower rates and greater consumer options already have helped these states attract and retain businesses, while putting more money in consumers’ pockets. The structural advantages of Illinois and Ohio will continue to grow, as large power consumers increasingly express a clear preference to build and maintain facilities in states that permit retail choice. These states could accelerate their economic advantage by protecting and strengthening markets and consumer choice, and especially by resisting subsidies for unprofitable power plants. They could also do so by “quarantining the monopoly” to eliminate the ability of a distribution monopoly to obtain anti-competitive advantages for its affiliates.

Midwestern monopoly states could take a step in the right direction if they enable third-party power purchases and competitive procurement, but only comprehensive restructuring will put them on a robust path for economic competitiveness. As the market advantage grows, monopoly states will face increasing pressure in the region from savvy and politically influential customer groups to introduce competition and customer choice. The sooner and more comprehensively policymakers respond, the more the benefits of competition and choice will flow through the broader Midwest.

## ACKNOWLEDGEMENTS

The author would like to thank Ben Martin for his research contributions to this report.

## ABOUT THE AUTHOR

**Devin Hartman** is electricity policy manager and senior fellow with the R Street Institute, where he researches and promotes competitive electricity markets, efficient energy innovation and environmental policies, and sensible electric rate designs.

Devin joined R Street in January 2016, having previously conducted economic analysis of wholesale electricity markets at the Federal Energy Regulatory Commission (FERC). His areas of focus included renewables integration, environmental regulation, coordination of natural gas and electric industries, and using markets to procure resources to meet reliability needs.

## ENDNOTES

1. “Senate Bill 155 Opponent Testimony of Kim Bojko, Partner Carpenter Lipps & Leland LLP, Energy Counsel to the Ohio Manufacturers’ Association,” Public Utilities Committee of the Ohio Senate, June 15, 2017, 3. [http://search-prod.lis.state.oh.us/cm\\_pub\\_api/api/unwrap/chamber/132nd\\_ga/ready\\_for\\_publication/committee\\_docs/cmte\\_s\\_pubutil\\_1/testimony/cmte\\_s\\_pubutil\\_1\\_2017-06-15-0900\\_581/kbojko testimonyoveclegislation.pdf](http://search-prod.lis.state.oh.us/cm_pub_api/api/unwrap/chamber/132nd_ga/ready_for_publication/committee_docs/cmte_s_pubutil_1/testimony/cmte_s_pubutil_1_2017-06-15-0900_581/kbojko testimonyoveclegislation.pdf).
2. Andrew R. Thomas, et al., “Electricity Customer Choice in Ohio: How Competition Has Outperformed Traditional Monopoly Regulation,” *Urban Publications*, November 2016, 1. [http://engagedscholarship.csuohio.edu/cgi/viewcontent.cgi?article=2420&context=urban\\_facpub](http://engagedscholarship.csuohio.edu/cgi/viewcontent.cgi?article=2420&context=urban_facpub).
3. Philip R. O’Connor, *Restructuring Recharged: The Superior Performance of Competitive Electricity Markets 2008-2016*, Retail Energy Supply Association, April 2017, p. 16. [https://www.resausa.org/sites/default/files/RESA\\_Restructuring\\_Recharged\\_White%20Paper\\_0.pdf](https://www.resausa.org/sites/default/files/RESA_Restructuring_Recharged_White%20Paper_0.pdf).
4. PJM Interconnection, Resource Investment in Competitive Markets, May 5, 2016, p. 1. <http://www.pjm.com/-/media/library/reports-notice/special-reports/20160505-resource-investment-in-competitive-markets-paper.ashx>.
5. Devin Hartman, “DOE grid study will shift and accelerate energy regulator initiatives,” *Utility Dive*, Aug. 31, 2017. <http://www.utilitydive.com/news/doe-grid-study-will-shift-and-accelerate-energy-regulatory-initiatives/503920/>.
6. Based on observed merchant behavior at in-kind facilities.
7. O’Connor, p. 17. [https://www.resausa.org/sites/default/files/RESA\\_Restructuring\\_Recharged\\_White%20Paper\\_0.pdf](https://www.resausa.org/sites/default/files/RESA_Restructuring_Recharged_White%20Paper_0.pdf).
8. See, e.g., U.S. Energy Information Administration, “Electric Power Monthly: Data for June 1996,” June 12, 1996, 68. <https://www.eia.gov/electricity/monthly/archive/pdf/02269606.pdf>.
9. U.S. Energy Information Administration, “Electric Power Monthly: Data for July 2017,” Aug. 24, 2017. [https://www.eia.gov/electricity/monthly/epm\\_table\\_grapher.php?t=epmt\\_5\\_6\\_a](https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_5_6_a).
10. Ibid.
11. Ibid.
12. Ibid.
13. Ibid.
14. Thomas, et al., 1. [http://engagedscholarship.csuohio.edu/urban\\_facpub/1416](http://engagedscholarship.csuohio.edu/urban_facpub/1416)
15. Ibid.
16. Illinois Chamber of Commerce et al., *Electricity & Natural Gas Customer Choice in Illinois—A Model for Effective Public Policy Solutions*, February 2014, pp. 1-2. [http://media.mlive.com/business\\_impact/other/Illinois%20Energy%20Reform%20Feb%202014%20final.pdf](http://media.mlive.com/business_impact/other/Illinois%20Energy%20Reform%20Feb%202014%20final.pdf).
17. Devin Hartman, “Environmental Benefits of Electricity Policy Reform,” *R Street Institute Policy Study*, No. 82, January 2017, 3-5. <http://www.rstreet.org/wp-content/uploads/2017/01/82.pdf>.
18. Mathew J. Morey and Laurence D. Kirsch, “Retail Choice in Electricity: What Have We Learned in 20 Years?,” Christensen Associates Energy Consulting, LLC, Feb. 11, 2016, vi. <https://sites.hks.harvard.edu/hepg/Papers/2016/Retail%20Choice%20in%20Electricity%20for%20EMRF%20Final.pdf>.

19. Bloomberg New Energy Finance, "2017 Sustainable Energy America Factbook," 2017, 39. <http://www.bcse.org/sustainableenergyfactbook/#>.
20. Andrew Rector et al., *Corporate Clean Energy Procurement Index: State Leadership & Rankings*, January 2017, p. 13. <https://www.itic.org/dotAsset/f9040bd1-7681-455a-9a64-5a518c16551d.pdf>.
21. O'Connor, p. 32. [https://www.resausa.org/sites/default/files/RESA\\_Restructuring\\_Recharged\\_White%20Paper\\_0.pdf](https://www.resausa.org/sites/default/files/RESA_Restructuring_Recharged_White%20Paper_0.pdf).
22. Hartman, "Environmental Benefits," 7. <http://www.rstreet.org/wp-content/uploads/2017/01/82.pdf>.
23. O'Connor, p. 31. [https://www.resausa.org/sites/default/files/RESA\\_Restructuring\\_Recharged\\_White%20Paper\\_0.pdf](https://www.resausa.org/sites/default/files/RESA_Restructuring_Recharged_White%20Paper_0.pdf).
24. Bob Venable, "Time to restore competitive electricity prices," *Milwaukee-Wisconsin Journal Sentinel*, July 7, 2016. <http://archive.jsonline.com/%20news/opinion/time-to-restore-competitive-electricity-prices-b99757278z1-385887411.html>.
25. Indiana Utility Regulatory Commission, *State Electric Price Comparison*, 2015, p. 8. [http://www.in.gov/iurc/files/State%20Electric%20Rate%20Comparison\\_%201990-2015.pdf](http://www.in.gov/iurc/files/State%20Electric%20Rate%20Comparison_%201990-2015.pdf).
26. See the August 2016 Indiana Chamber Energy Management Conference agenda and materials at <http://www.indianachamber.com/index.php/indiana-conference-on-energy-management-conference-materials>.
27. Indiana Industrial Energy Consumers, Inc., "Position Paper on Industrial Consumers on Electric Reform," September 2013, 1 and 18. <https://static1.squarespace.com/static/566ad6fee0327c71c29a88c5/t/56703c00a976afb3eea8dcd/1450195968205/ElecRestPositionPaper+FINAL-Dated+9-12-13.pdf>.
28. These fees have often reached well into the tens of millions of dollars.
29. See, Indiana Industrial Energy Consumers, 1 and 18.
30. See, e.g., Scott Merrell, "Wisconsin Manufacturers Call for Retail Choice," *Tradition Energy*, Sept. 12, 2016. <http://www.traditionenergy.com/news/wisconsin-manufacturers-call-retail-choice>.
31. Minnesota State Legislature, Minnesota House of Representatives. "HF 2248," March 8, 2017. [https://www.revisor.mn.gov/bills/text.php?number=HF2248&version=0&session=ls90&session\\_year=2017&session\\_number=0](https://www.revisor.mn.gov/bills/text.php?number=HF2248&version=0&session=ls90&session_year=2017&session_number=0).
32. O'Connor, p. 38. [https://www.resausa.org/sites/default/files/RESA\\_Restructuring\\_Recharged\\_White%20Paper\\_0.pdf](https://www.resausa.org/sites/default/files/RESA_Restructuring_Recharged_White%20Paper_0.pdf).
33. *Ibid.*, p. 31.
34. Robert Walton, "Michigan advocates fear rollback of retail electric choice program," *UtilityDive*, Sept. 13, 2017. <http://www.utilitydive.com/news/michigan-advocates-fear-rollback-of-retail-electric-choice-program/504836/>.
35. Robert Walton, "Updated: Federal judge dismisses challenge to Illinois nuke subsidies," *UtilityDive*, July 17, 2017. <http://www.utilitydive.com/news/updated-federal-judge-dismisses-challenge-to-illinois-uke-subsidies/447202/>.
36. "Brief of Energy Economists as Amici Curiae in Support of Plaintiffs-Appellants," U.S. Court of Appeals for the Seventh Circuit, Docket Nos. 17-2433 and 17-2455, Sept. 6, 2017. <https://www.rstreet.org/wp-content/uploads/2017/09/Energy-Economists-Amicus-Brief.pdf>.
37. Devin Hartman, "Ohio's fight to preserve energy competition and choice," R Street Institute, Nov. 14, 2016. <http://www.rstreet.org/2016/11/14/ohios-fight-to-preserve-energy-competition-and-choice/>.
38. Office of the Ohio Consumers' Counsel, "Subsidy Scorecard," Sept. 1, 2017. <http://www.occ.ohio.gov/electric/subsidy-scorecard.pdf>.
39. The phrase "quarantine the monopoly" was developed in the 1980s out of concern that the AT&T monopoly would extend its regulated monopoly into markets to the detriment of competition.
40. Gavin Bade, "New Ohio bill would revamp state power market for full deregulation," *UtilityDive*, May 30, 2017. <http://www.utilitydive.com/news/new-ohio-bill-would-revamp-state-power-market-for-full-deregulation/443697/>.
41. Michael Giberson and Lynne Kiesling, "Vision for a clean, cheap, cutting-edge, customer-focused electric power business," Draft Working Paper, Nov. 1, 2016, 3. <https://static1.squarespace.com/static/53c4b06fe4b03a89bfc573b3/t/5818e2108419c21ac8d34e5a/1478025745336/Vision+for+a+clean%2C+cheap%2C+cutting-edge%2C+customer-focused+electric+power+business+%28Nov+1+2016+Draft%29.pdf>.