Briefing Note:

West Virginia Bailout Emboldens FirstEnergy and AEP in Ohio

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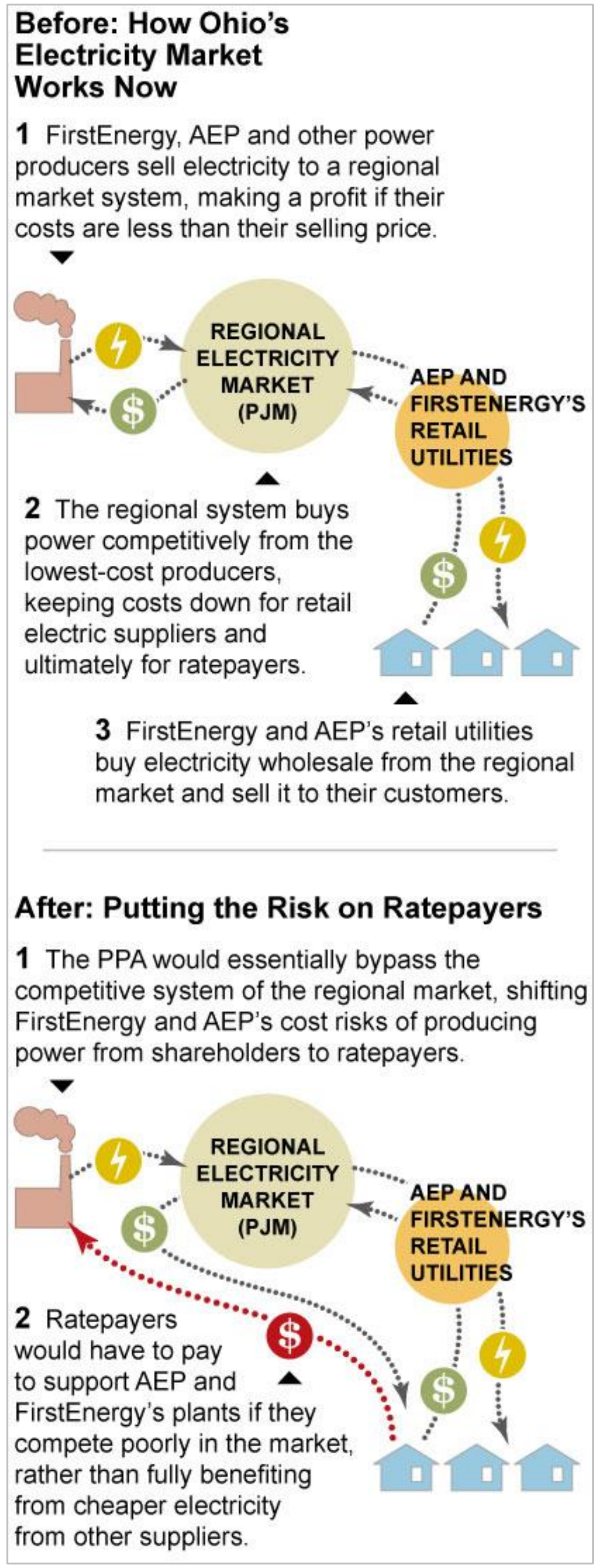
Introduction

In two current cases before the Public Utilities Commission of Ohio, Columbus-based American Electric Power and Cleveland-based FirstEnergy Corp. are seeking approval of a re-regulation scheme that would ensure ratepayer subsidies for several of their aging Ohio power plants.

The strategy has worked to good effect elsewhere, specifically in West Virginia, where FirstEnergy two years ago got the Public Service Commission of West Virginia to sign off on an arrangement that has shifted the cost risks of a plant it owns and operates from shareholders to ratepayers. As a result of that deal, ratepayers in West Virginia are currently facing a 12.5 percent increase in electricity rates.

This briefing note explains the similarities between what happened in West Virginia in 2013 and what is occurring now in Ohio, where ratepayers are at similar risk. The Ohio proposals stand to affect about 20 percent of all electric generation capacity in the state.

The Ohio proposals are part of a broader electricity industry strategy of shifting risks from owners of uncompetitive power plants onto ratepayers, who in turn would bear the risk of low wholesale energy market prices.



The FirstEnergy Proposal in Ohio

FirstEnergy is asking the Public Utilities Commission of Ohio (PUCO) to allow its Ohio distribution companies (Ohio Edison, Toledo Edison and the Cleveland Electric Illuminating Company) to subsidize the company's Sammis coal-fired plant, its Davis-Besse nuclear plant and its share of the Kyger Creek and Clifty Creek coal-fired plants.

In total, the FirstEnergy proposal, which would be formalized in a 15-year power purchase agreement (PPA), would cover about 3,300 megawatts of generation, roughly 10 percent of all electricity generated in Ohio.

Today—because Ohio's electricity system is deregulated—FirstEnergy's distribution companies buy and sell electricity to and from PJM Interconnection, the regional wholesaler. FirstEnergy makes a profit only if its costs to generate electricity are lower than PJM's prices.

The change FirstEnergy is proposing would have customers pay the cost of generating electricity from the plants in question *independent of wholesale market prices*. Revenues from sales to PJM will be passed back to customers. If wholesale prices were higher than the cost of generating power at those plants, ratepayers would benefit. But if wholesale prices are lower than the cost of generating power—which is the more likely possibility—ratepayers would lose.

The risks associated with lower market prices, in other words, would shift from FirstEnergy shareholders onto the customers of Ohio Edison, Toledo Edison and The Cleveland Electric Illuminating Company.

The AEP Proposal in Ohio

American Electric Power (AEP) is requesting a similar PPA affecting approximately 3,100 megawatts of generation, or an additional 10 percent of all electric generation capacity in Ohio.

In 2013, AEP requested approval of a PPA for its share of the Kyger Creek and Clifty Creek coal plants. In 2014, it requested approval of an additional proposal to pass through the net costs or benefits of a PPA that would include Cardinal Unit 1, Conesville Units 4-6, Stuart Units 1-4 and Zimmer Unit 1, all of which are coal-fired plants.

In February of this year, PUCO rejected the PPA for the Kyger Creek and Clifty Creek plants, finding that it would not benefit AEP Ohio ratepayers, but PUCO left the door open for reconsidering other PPA arrangements.

AEP has since supplemented its request for a PPA for the Cardinal, Conesville, Stuart and Zimmer units, requesting that the proposed PPA for the Kyger Creek and Clifty Creek units be added to the proposal. The case is still pending before PUCO.

If the proposal is approved, the net costs (the cost of generating power less the revenues from sales to PJM) would be passed through to customers on a quarterly basis without any sort of rate proceeding. The staff of the PUCO will review costs on an annual basis to make sure they have been calculated properly, but there will be no opportunity for other parties to challenge the costs through a formal proceeding.

The West Virginia Example

In 2013, the Public Service Commission of West Virginia approved a long-term deal that, in retrospect, bears stark similarities to the PPAs that FirstEnergy and AEP are putting forth in Ohio.

West Virginia has a regulated electricity system, which means that—unlike in Ohio—ratepayers pay for the cost to generate electricity from the plants owned by the state's electric utilities. In 2012, FirstEnergy proposed selling 80 percent of its Harrison power plant (located south of Morgantown), moving ownership of the plant from one of its deregulated generation companies (Pennsylvania-based Allegheny Energy Supply) to its regulated West Virginia utility, Mon Power, which already owned the other 20 percent of the plant. Adding the full generation from the Harrison power plant to Mon Power's generation mix would mean that Mon Power would produce 20-35 percent more energy than its West Virginia customers will need for at least a decade.[1] Under FirstEnergy's proposal, this excess electricity would be sold into the PJM market and ratepayers would be credited for the revenues.

Harrison is a 2,000 megawatt power plant, and the portion FirstEnergy sought to re-regulate totals about 11 percent of all power plant capacity in West Virginia.

The three-member West Virginia Public Service Commission approved the transfer in October 2013. One member issued a dissenting opinion against the transfer.

FirstEnergy effectively moved Harrison from a deregulated market—where the risk of low market prices is borne by company shareholders—to a regulated market where that risk is borne by West Virginia electricity customers. Under the new deal, ratepayers in West Virginia now pay the full cost of generating electricity at the Harrison plant. They stand to benefit only if the price of electricity on the wholesale market is greater than the cost of generating electricity at Harrison. After the transaction closed, FirstEnergy's CEO characterized it as an exemplary piece of a larger corporate strategy to focus more on regulated rather than unregulated business because of the risk to shareholders of low wholesale market prices.[2]

To justify the transfer, FirstEnergy argued that it would be the lowest cost option for West Virginia ratepayers. FirstEnergy, to make its case, presented an analysis that Commissioner

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[1] Direct Testimony of David A. Schlissel on behalf of West Virginia Citizen Action Group and the Sierra Club, West Virginia Public Service Commission Case No. 12-1571-E-PC, April 26, 2013.

[2] "Our competitive operations have been challenged … by capacity and energy markets that do not support investment in, or in some instances, the operation of generating units. While we can debate for reasons this is occurring, the fact is, power prices have been weak for the last couple of quarters and we may be facing continued soft power prices for at least the next several years. As a result, we began to reposition our competitive business in 2012 and now through a series of even more aggressive actions have better positioned this business for the future.
For example, we completed the Harrison and Pleasants transfer this quarter." (Q3 2013 Earnings Call, November 5, 2013).

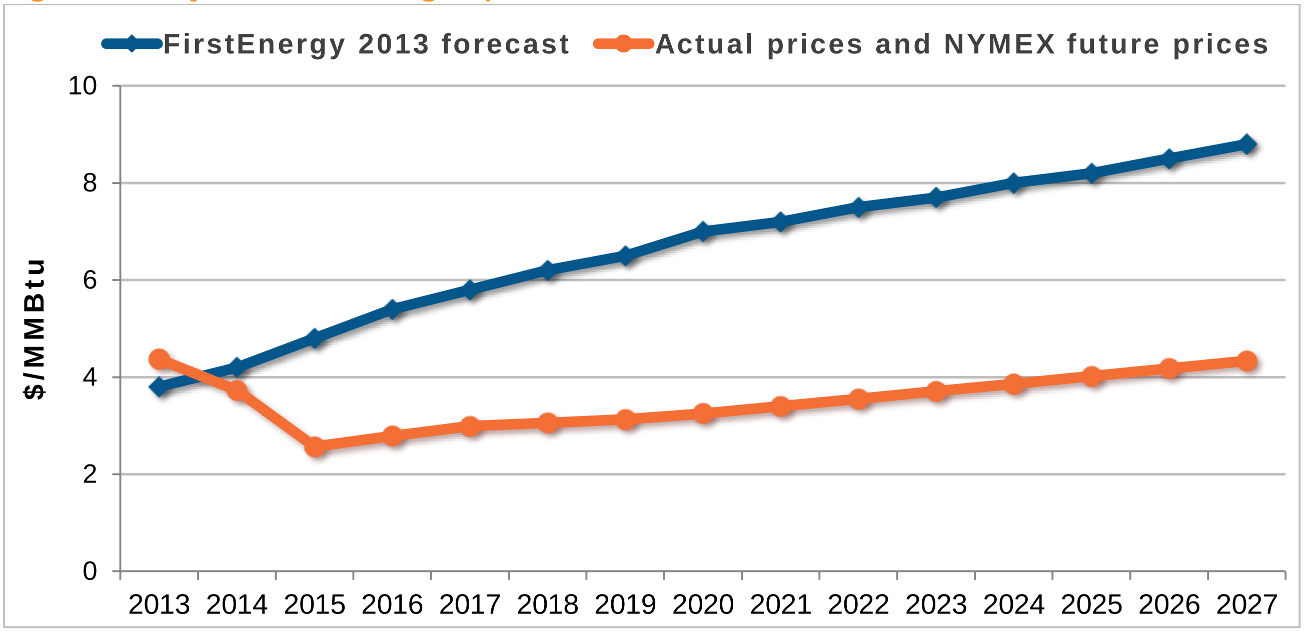
Ryan Palmer in his dissenting opinion described as "flawed and results-driven."[3] The company in its analysis compared the cost of Harrison to the cost of continuing to rely on purchases from the regional PJM electricity market, to the cost of building a new natural gas plant, to the cost of retrofitting an existing coal plant to gas, and to other new-build options.

FirstEnergy presented an average ("levelized") cost figure that showed that running Harrison as a fully Mon Power-owned plant came out as the least-cost option over the next twenty years. But the analysis masked actual year-to-year cash flows—which showed negative cash flows for the first 8 years of the deal. Indeed, the company's analysis acknowledges that the Harrison plant will not start producing a net benefit for ratepayers before 2033.[4]

However, the company's analysis was based on an unrealistically high forecast for PJM energy market prices and natural gas prices. FirstEnergy in its analysis also failed to evaluate the possibilities for energy efficiency gains and the potential for demand response to meet a portion of its long-term energy needs.

Figure 1 shows a natural gas price forecast developed by a FirstEnergy consultant, Judah Rose, that was used by First Energy to support its narrative around the Harrison transaction,[5] a forecast that has been proven vastly inflated relative to market realities.

Figure 1: Projected natural gas prices



[3] Dissenting Opinion of Commissioner Ryan Palmer, West Virginia Public Service Commission Case No. 12-1571-E-PC, October 7, 2013.

[4] Direct Testimony of David A. Schlissel on behalf of West Virginia Citizen Action Group and the Sierra Club, West Virginia Public Service Commission Case No. 12-1571-E-PC, April 26, 2013.

[5] Rebuttal Testimony of Judah Rose on behalf of Monongahela Power Company and the Potomac Edison Company, West Virginia Public Service Commission Case No. 12-1571-E-PC, May 17, 2013. NYMEX natural gas futures prices retrieved October 7, 2015. Both forecasts show natural gas prices at the Henry Hub.

West Virginia ratepayers are now seeing the effects of the Harrison deal. PJM market prices, driven by low natural gas prices, have continued to lag the company's forecasts, and in August, FirstEnergy filed for a 12.5 percent rate increase that, according to the company's testimony, is largely a result of "lower than forecasted energy market prices."[6] While ratepayers throughout the mid-Atlantic region are benefitting from historically low wholesale energy market prices, West Virginia customers face having their rates go up.

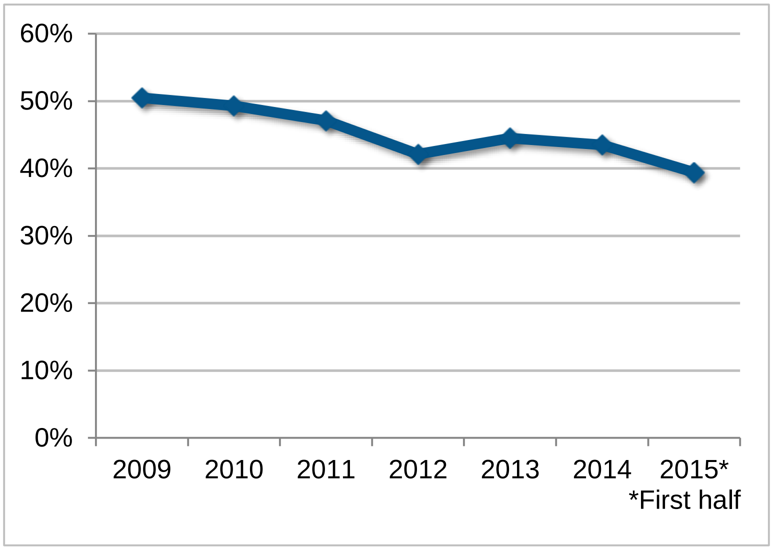
If Mon Power had not purchased the Harrison plant, it would be a net purchaser of power from PJM, and West Virginia ratepayers would now be benefitting from the low cost of electricity. Instead, as a result of the Harrison purchase, Mon Power owns more generating capacity than it needs, and the excess electricity is sold on the PJM wholesale market for less than it costs to generate.

Ratepayers are saddled with the difference, thus the pending 12.5 percent increase.

Economic Context for the Harrison Transfer and the Ohio PPAs

Both the Harrison transaction and the proposed Ohio PPAs come at a time when competitive markets do not favor coal-fired generation. Coal-fired power generation faces increasing competition from low natural gas prices and from renewable energy. Coal-fired power generation across PJM—a region that stretches across parts of 13 states plus D.C.—fell to 39.4 percent in the first half of 2015 (Figure 2).

Figure 2: Percentage of Electricity from Coal in PJM



The current futures prices for electricity in Ohio show prices rising by less than 1 percent per year.[7] Meantime, the long-term outlook for coal-fired power generation faces considerable uncertainty. Environmental regulations, particularly climate change regulations, may impose significant costs on coal-fired units. At the same time, the depletion of less costly coal deposits (which increases mining production costs) and international coal market volatility will probably create

[6] Direct Testimony of Raymond Valdes on behalf of Monongahela Power Company and the Potomac Edison Company, West Virginia Public Service Commission Case No. 15-1351-E-P, August 14, 2015 at p. 8.
[7] Futures prices reflect current market expectations of what prices will be. (Source: OTC Global Holdings futures prices for the ATSI and AEP-Dayton zones, retrieved October 7, 2015.)

additional uncertainty around domestic coal prices.

These market dynamics have given utilities that own coal plants in deregulated markets a powerful incentive to eliminate risks tied to price uncertainties. This trend is evident across the industry. Duke Energy has divested from of its Ohio coal plants, for example, and Ameren has divested from its power plants in Illinois.

In recent earnings calls with investors, both AEP and FirstEnergy have acknowledged their pursuit of strategies that emphasize regulated operations. The PPA proposals in Ohio, which would essentially reregulate power plants by ensuring that ratepayers will cover their costs, are part of these overall financial strategies.[8]

Potential Ratepayer Impacts in Ohio

Efforts by FirstEnergy and AEP to re-regulate power plants in Ohio have been justifiably characterized as bailouts because the plants—by the companies' own admissions—are financially unviable without additional ratepayer support. FirstEnergy has acknowledged that the Davis-Besse and Sammis plants are not currently profitable and may have to be closed if ratepayers do not subsidize them.[9] Similarly, AEP has cited the risk of early retirement of its coal plants unless they are subsidize by the PPAs they propose.[10]

FirstEnergy is using the same playbook it used in West Virginia. Its case in Ohio—like its case in West Virginia—is built on the argument that ratepayers will benefit because wholesale energy market prices and natural gas prices will rise. But during hearings in September 2015, FirstEnergy expert witness Judah Rose—who provided the long-term natural gas and energy market price forecasts underpinning FirstEnergy's case in Ohio—acknowledged that his forecast for high prices have not yet begun to materialize. Rose acknowledged specifically that wholesale electricity prices today are 8 to 10 percent lower and natural gas prices 30 percent lower than what he forecast just one year ago. He also stated that he now expects wholesale prices to remain at today's levels through 2019, although Rose conceded that his price forecast had not taken into account the impact of energy efficiency, which reduces

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[8] In Q3 2014, the first earnings call after it proposed its PPA in Ohio, AEP's CEO stated:
"Keep in mind, we are in the middle of a multiyear plan to reposition our company, focused on infrastructure investments, **particularly in the transmission and regulated utility lines of our business**, improving our customer service through process and technology improvements, transforming our generation resources and defining an employee culture that enables the adaptability, flexibility and entrepreneurship that the future will demand" (Q3 2014 earnings call transcript, emphasis added).
And in Q2 2014, the first earnings call after announcing its proposed PPA, FirstEnergy's CEO stated:
"Since our last earnings call, we have made significant progress on the plans we have outlined to execute a regulated growth strategy, implement additional cost reductions and further reduce risk in our competitive business" (Q2 2014).

[9] "The economic viability of the [Davis-Besse and Sammis] Plants is in doubt. Market-based revenues for energy and capacity have been at historic lows and are insufficient to permit FES to continue operating the Plants and to make the necessary investments. Near-term forecasts for energy and capacity prices are unfavorable… [T]he future of the Plants is in doubt. The Plants are not receiving sufficient revenues to cover the Plants' costs…" (Direct Testimony of Donald Moul on behalf of Ohio Edison, Toledo Edison and The Cleveland Electric Illuminating Company, Public Utilities Commission of Ohio Case No. 14-1297-EL-SSO, August 4, 2014).

[10] "Without the PPA, the PPA Units will be at greater risk of premature retirement …" (Direct Testimony of Pablo Vegas on behalf of AEP Ohio, Public Utilities Commission of Ohio Case No. 14-1693-EL-RDR, May 15, 2015.)

wholesale prices by lowering demand.[11] FirstEnergy also used Rose as an expert witness to testify about future natural gas and wholesale electricity prices before the West Virginia Public Service Commission two years ago as part of its case in favor of the Harrison transaction.

By FirstEnergy's own estimates its PPA would cost Ohio ratepayers $464 million from June 2016 through December 2018.[12] The Ohio Consumers' Counsel, a state agency charged with representing residential ratepayers before the Public Utilities Commission of Ohio has argued that the PPA will cost Ohio ratepayers $3 billion over the next 15 years, relative to continuing to purchase power from PJM.[13]

On the AEP bailout, the Ohio Consumers' Counsel has put the cost to ratepayers at over $1.8 billion over the next 10 years.[14]

Conclusion

FirstEnergy and AEP are proposing to do to consumers in Ohio what has been done to consumers in West Virginia, where a proposed 12.5 percent increase is the result of a re-regulation scheme that was allowed there.

The AEP and FirstEnergy proposals amount to a collective Ohio ratepayer-funded utility-company bailout of at least $4.8 billion over the next 15 years.

Ohio regulators should reject the proposal.

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[11] John Funk, "FirstEnergy consultant's power price forecast too high, PUCO hearing", Cleveland Plain-Dealer, September 8, 2015.

[12] Direct Testimony of Jay A. Ruberto Exhibit JAR-1 on behalf of Ohio Edison, Toledo Edison and the Cleveland Electric Illuminating Company, Public Utilities Commission of Ohio Case No. 14-1297-EL-SSO, August 4, 2014.

[13] Direct Testimony of James Wilson on behalf of the Ohio Consumers Counsel and Northeast Ohio Public Energy Council, Public Utilities Commission of Ohio Case No. 14-1297-EL-SSO, December 22, 2014.

[14] Direct Testimony of James Wilson on behalf of the Ohio Consumers Counsel, Public Utilities Commission of Ohio Case No. 14-1693-EL-RDR, September 11, 2015.