FirstEnergy's Bailout Proposals Grow More Audacious and More Onerous for Ohio Ratepayers

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Executive Summary

FirstEnergy Corp has made a series of management decisions over the past decade that have caused its financial condition to deteriorate. Although Ohio's electricity market was deregulated at the turn of the millennium, and although FirstEnergy took advantage of that deregulation, the company is backtracking now and asking that its customers be made to pay for the costs of its uneconomic power plants as if those plants were still subject to regulation.

FirstEnergy has made several attempts over the past two years to get a ratepayer bailout. FirstEnergy succeeded in March 2016 in winning approval from the Public Utilities Commission of Ohio (PUCO) for a bailout that IEEFA calculated would have cost customers $4 billion over eight years. FirstEnergy has proposed modifying that bailout, in hopes of avoiding intervention by the Federal Energy Regulatory Commission (FERC), and PUCO staff have offered a counter proposal that, in turn, has been countered by FirstEnergy.

Three separate bailout proposals are pending before the PUCO:

- FirstEnergy's "Modified Rider RRS," which, using updated market forecasts, IEEFA estimates would cost consumers at least $4.18 billion during the 92-month period from October 1, 2016 through May 31, 2024; [1]
- The PUCO staff's "Distribution Modernization Rider" proposal, which would cost customers from $393 million to $655 million over three to five years; and
- First Energy's alternative "Distribution Modernization Rider" proposal, which would cost consumers from a low of $4.3 billion to a high of $8.6 billion during the 92-month period from Oct. 1, 2016, through May 31, 2024.

FirstEnergy's initial proposal sought to directly bail out certain financially challenged coal and nuclear plants owned by FirstEnergy Corp's merchant affiliate, FirstEnergy Solutions. None of the three proposals now pending make that claim. FirstEnergy says its Modified Rider RRS proposal would not directly bail out the individual plants, but would purportedly provide "rate stabilization." The explicit aim of the Distribution Modernization Rider proposals put forward both by the PUCO staff and FirstEnergy is to bring in enough funds as a subsidy from customers to keep FirstEnergy Corp's credit rating from being downgraded and, in FirstEnergy's proposal, as an incentive to keep the company's corporate headquarters and nexus of operations in Akron. But with no limits on how the revenues collected under any of these three plans could be used, there is nothing stopping FirstEnergy from indirectly using them to bail out FirstEnergy Solutions and its uncompetitive power plants by funneling the revenues through the parent FE Corp.

[1] FirstEnergy proposed that the original Rider RRS ("Retail Rate Stability") would begin on June 1, 2016 and be in effect for eight years. As a June 1, 2016 start date is no longer realistic, we have assumed for the purposes of this Update that each of the three bailout proposals currently before the PUCO, if approved, would begin on October 1, 2016 but still would end on May 31, 2024. Consequently, FirstEnergy's proposed Modified Rider RRS and Rider DMR would have durations of only 92 months, not the full eight years of FirstEnergy's original Rider RRS proposal.

Both of FirstEnergy's new proposals are more expensive for customers than their original Retail RRS plan approved by the PUCO in March.

IEEFA recommends that PUCO reject all three of the bailouts being proposed by FirstEnergy and the PUCO staff for the following reasons:

- All three would prove very expensive to FirstEnergy's captive Ohio customers and would have adverse impacts on the economy of northern Ohio.
- All three would far exceed any demonstrated benefits for customers.
- All three presume that ratepayers should be made to pay for FirstEnergy's own mistakes and mismanagement.
- All three would allow FirstEnergy to use additional funds collected from customers to bail out failing coal and nuclear plants owned by the company's merchant subsidiary.
- FirstEnergy has not demonstrated that it has any long-term plan or strategy for addressing its financial problems beyond relying on bailouts from its captive Ohio customers.

Background

FirstEnergy has found that its aging fleet of coal-fired and nuclear power plants is uncompetitive and uneconomic to operate in Ohio's deregulated utility markets. As a result, the company is pushing for captive customers of Ohio Edison, Cleveland Illuminating Company, and Toledo Edison to either directly or indirectly pay for a bailout of failing assets and to help FirstEnergy climb out of the hole created by years of corporate mistakes and financial mismanagement.

In August 2014, FirstEnergy asked the Public Utilities Commission of Ohio (PUCO) to approve a mechanism whereby FirstEnergy would use a customer-subsidized purchase power agreement (PPA) to support its struggling coal and nuclear plants (the W.H. Sammis coal plant, the Davis-Besse nuclear plant, and FirstEnergy's shares of the Clifty Creek and Kyger Creek coal plants). This plan was named "Rider RRS," which stands for Retail Rate Stability, due to FirstEnergy's assertion that the bailout would provide rate stability for customers. Rider RSS in fact would do quite the opposite. IEEFA noted in a February 2016 report that the plan would cost customers $4 billion more than the market price of power over the eight-year lifespan of the deal (contrary to FirstEnergy's assertion that the plan would save customers $561 million).

FirstEnergy won PUCO approval for the Rider RRS plan in March 2016, but a month later the Federal Energy Regulatory Commission (FERC) blocked it, ordering FirstEnergy to submit the PPA for review under federal rules designed to protect captive customers from abusive affiliate transactions. Probably realizing that the bailout proposal could not survive federal scrutiny, FirstEnergy has yet to submit the PPA to FERC for review. Instead it has proposed to PUCO a modified version of Rider RRS (the "Modified Rider RRS") that the company asserts would fall outside FERC jurisdiction.

In response, PUCO staff offered a counter proposal, a "Distribution Modernization Rider" plan ("Rider DMR"), by which Ohio consumers would provide FirstEnergy with $131 million per year for a period of three to five years. Despite its name, the PUCO staff plan does not require that FirstEnergy actually spend any of the money on modernizing its grid. Rider DMR is described instead as a "credit support" to FirstEnergy and its regulated Ohio utilities. Neither PUCO staff nor FirstEnergy have proposed any restrictions on how FirstEnergy could spend money collected under Rider DMR, which means the funds could be channeled to the parent FirstEnergy Corp to bail out its merchant subsidiary, FirstEnergy Solutions ("FES"), and its failing coal and nuclear assets.

After PUCO staff submitted the counter proposal, FirstEnergy responded by asking for a vast expansion of the proposed Rider DMR by increasing its duration to be the same length as its proposed Modified Rider RRS, and by arguing that it be allowed to collect $558 million annually for "credit support" to FirstEnergy and its Ohio utilities. Under its Rider DMR, FirstEnergy also proposed having customers pay an additional amount not to exceed $568 million a year as an incentive to keep FirstEnergy's company headquarters and nexus of operations in Akron. Thus, the total cost of FirstEnergy's Rider DMR proposal would range between $558 million and $1.126 billion per year and would total between $4.5 billion and $9 billion.

All three of the latest versions of the proposed bailouts for FirstEnergy—the company's Rider RRS plan, and both the PUCO staff's and FirstEnergy's Distribution Modernization Rider plans—remain pending before the PUCO.

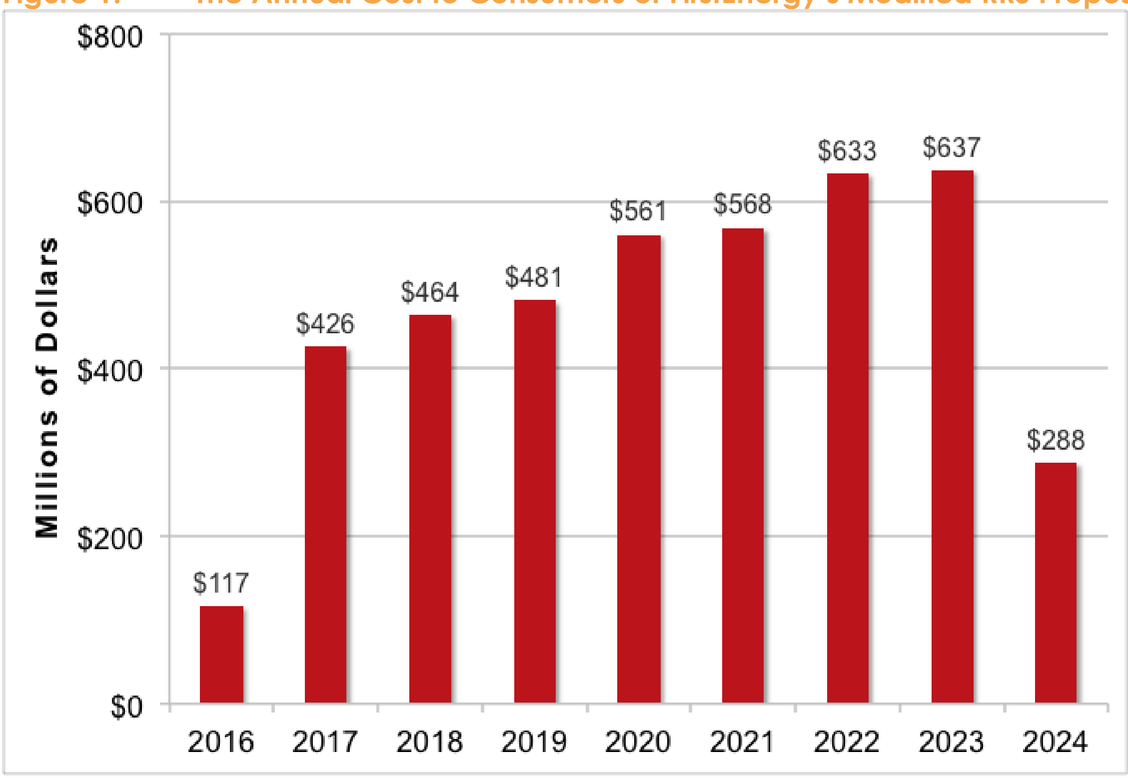
Below is IEEFA's assessment of the flaws and cost of each.

FirstEnergy's Modified RRS Proposal Would Cost Ohio Consumers $4.18 Billion

As with FirstEnergy's original Rider RRS proposal, the Modified Rider RRS would transfer costs and risks to customers and require them to become de facto merchant generators vulnerable to the same difficult economic trends and market conditions that have plagued other merchant power generators in recent years.

Using the methodology we developed for our February 2016 analysis of the original RRS, and using more current information on future energy market prices and capacity market prices (both of which have decreased since February, as shown in Figure A1 and A2 in the Appendix to this Report), IEEFA concludes that FirstEnergy customers would pay an additional $4.18 billion under the Modified Rider RRS proposal.

Figure 1: The Annual Cost to Consumers of FirstEnergy's Modified RRS Proposal



Despite FirstEnergy's claims to the contrary, its Modified RRS proposal is fraught with even more problems than the original RRS proposal because it is not connected to any actual costs of operating and maintaining the plants in question or to the actual amount of power the plants actually generate. Instead, it relies on entirely hypothetical and possibly incorrect estimates of the plants' future operating costs and generation, estimates that were made in 2014.

In fact, customers would not benefit at all if the actual costs of generating power at its Sammis and/or Davis-Besse plants were lower than FirstEnergy has projected. For example, FirstEnergy has recently told investors that it expects to achieve some $80 million of fossil fleet cost reductions annually in 2017 and 2018. However, because the Modified Rider RRS would rely on the company's hypothetical (and outdated) projections from 2014, customers would not benefit from these cost reductions. Customers also would not see any benefit from the cash flow savings that FirstEnergy expects to achieve due to the recently announced decision to retire Sammis Units 1-4. Indeed, FirstEnergy could be significantly overestimating these costs in order to collect more money from ratepayers, and the company's plan offers no way for these costs to be monitored by the PUCO.

Because it would rely on FirstEnergy's projected operating costs and generation from 2014, instead of the plants' actual costs and generation, the company's Modified Rider RRS bailout proposal also would have a number of nonsensical and anti-consumer biases, as identified in testimony submitted by witnesses for the Ohio Consumers' Counsel, the Northwest Ohio Aggregation Coalition, Sierra Club, the PJM Power Providers Group and the Electric Power Supply Association. However, the PUCO hearing examiner refused to allow this testimony into the record in the case before the PUCO.

For example:

- The Modified Rider RRS proposal could result in FirstEnergy collecting plant operating costs that were never incurred. It could allow the company to collect net costs from customers when the plants are actually profitable, and even where, under the original proposal, there would have been a credit to customers.[2]
- The projected plant generation figures assumed in the Modified Rider RRS proposal could at times be inconsistent with actual energy prices and could tend to understate the profitability of plant operations.[3]
- Because the Modified Rider RRS would be trued-up after the fact to actual energy prices, it would not necessarily stabilize customers' bills.[4]

2 Rehearing Direct Testimony of James F. Wilson on Behalf of the Ohio Consumers' Counsel and the Northwest Ohio Aggregation Coalition, PUCO Case No. 14-1297-EL-SSO, at pages 20 and 21.
3 Id., at pages 27 and 28.
4 Id., at pages 32 and 33.

PUCO Staff's Proposed Rider DMR Bailout Would Cost FirstEnergy's Captive Ohio Customers Between $393 and $655 Million. FirstEnergy's Rider DMR Bailout Would Be Even More Expensive, Costing Customers Between $4.3 and $8.6 Billion.

The PUCO staff's "Distribution Modernization," or "Rider DMR" proposal would cost the customers of Ohio Edison, Cleveland Illuminating Company, and Toledo Edison $131 million per year for a period of three to five years, totaling between $393 million and $655 million.

FirstEnergy's vastly more expensive alternative Rider DMR bailout would last for approximately 92 months, from October 1, 2016 through May 31, 2024. It would have an annual cost of $558 million for "credit support," plus an unidentified amount "not to exceed" $568 million a year as an incentive for FirstEnergy Corp to keep its headquarters and nexus of operations in Akron. This plan would cost customers between $4.3 billion and $8.6 billion.

Both the FirstEnergy and the PUCO staff Distribution Modernization Rider plans are based on assumptions that are unreasonable and may not solve FirstEnergy's credit problems.

First, as we noted in a report we published in 2014, "FirstEnergy: A Major Utility Seeks a Subsidized Turnaround," FirstEnergy's strategy is to ensure that captive Ohio customers bear the burden of bailing out FirstEnergy for mistakes that were the responsibility of management and shareholders, not customers:

> The company's strategy has involved heavy reliance on coal generation. FirstEnergy increased its exposure to coal in 2011 with its merger with Allegheny Energy, a company 78% dependent on coal. With an aging coal fleet, low natural gas prices driving down power prices, weak electric demand growth, and increasing penetration of energy efficiency and renewable energy, this has not been a winning strategy. FirstEnergy's merchant power plants, which depend on being able to sell their output for more than their cost of operation, have been hit particularly hard. Indeed, a leading utility analyst has recently estimated that FirstEnergy Solutions, one of FirstEnergy's merchant generation companies, is worth less than $0.
>
> FirstEnergy's financial condition has deteriorated since it merged with Allegheny, and its key financial metrics are on a downward trajectory. Over the past three years, it has experienced declining revenues, declining net income, declining stock price, declining dividends, and rising debt. It has retired 4,769 MW of merchant coal plants and has booked impairments totaling $1.1 billion against the value of its coal plants from 2011 to 2013. To shore up its balance sheet, FirstEnergy has relied heavily on "one-time resources," including proceeds from asset sales and short-term borrowings. FirstEnergy's poor

> financial performance stems from the underlying condition that the company's business – the sale of electricity – is performing poorly and not generating sufficient revenue to cover expenses.
>
> FirstEnergy is burdened by heavy reliance on an underperforming merchant coal fleet in a weak competitive market and a regulated coal plant portfolio that is profitable but unable to carry legacy debt and likely additional environmental retrofit costs.[5]

Second, neither the FirstEnergy nor the PUCO staff Rider DMR proposals requires that FirstEnergy actually spend any of the bailout funds it would receive on grid modernization in Ohio, or, indeed, anywhere else, despite the name of the plan. Instead, the company would be free to transfer via dividends the DMR funds from its Ohio retail companies into the parent FirstEnergy Corp for any use it deems fit, even a bailout of FirstEnergy's failing merchant affiliate FirstEnergy Solutions (FES).

Third, FirstEnergy has not offered any short- or long-term plan for improving its cash flow from operations (or its free cash flow) beyond seeking a long-term bailout from customers. Without such a demonstrated plan, FirstEnergy could very well be back before the PUCO for another bailout in 2019, 2021 or 2024 years, or sooner, even if one of the proposed bailouts is allowed.

Fourth, neither PUCO staff nor FirstEnergy have shown that any bail out will improve or stabilize the company's future credit ratings. In fact, all of the limited "analyses" presented by both PUCO staff and FirstEnergy in support of bailout plans are backward-looking. Staff examined what the company's cash Flow from operations to debt ratios were from 2011 to 2015 while FirstEnergy limited its discussion to 2012-2014.[6] Neither party provided a long-term forward-looking assessment, let alone one for the three to five-year bailout period proposed by PUCO staff or for the eight-year period from October 1, 2016 through May 31, 2024 proposed by the company. Instead of granting a bailout based on past circumstances, the PUCO should require FirstEnergy to present a detailed assessment of its projected financial needs during the duration of whatever bailout it is seeking from its captive Ohio customers.

Fifth, neither the PUCO staff nor FirstEnergy have presented any cost-benefit analysis for the proposed bailouts or a credit downgrade. In other words, no evidence has been presented that the hundreds of millions—or billions—of dollars that would collected from customers would produce equal or larger (or indeed any) benefits for those customers. As Matthew Kahal, witness for the Office of Consumers' Counsel, noted in his Rehearing Rebuttal Testimony: "Neither the FE Ohio Utilities in this docket nor the PUCO Staff have put on a case or made a claim that extraordinary measures are needed to address the FE Corp (or subsidiary) credit ratings."[7]

Mr. Kahal further noted that even "If the Staff proposal succeeds in effecting a credit rating improvement for the FE Ohio Utilities (which seems doubtful), the resulting annual interest

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5 At pages 2 and 3.

6 For example, see the Rehearing Rebuttal and Surrebuttal Testimony of Eileen M. Mikkelsen on Behalf of Ohio Edison Company, the Cleveland Illuminating Company, and the Toledo Edison Company, dated July 25, 2016, at pages 10 and 11.

7 Rehearing Rebuttal Testimony of Matthew I. Kahal on Behalf of the Office of the Ohio Consumers' Counsel (July 15, 2016), at page 6.

expense savings would be modest and would be only a small percentage of the $131 million per year cost to customers."[8]

Sixth, PUCO staff's proposal would have FirstEnergy's captive Ohio customers bear 22 percent of the cost of a bailout to stabilize or improve the company's credit ratings, based on the fact that Ohio customers make up 22 percent of the company's total customer base (it also has operations in West Virginia, Maryland, New Jersey, Pennsylvania, and a small sliver of New York). FirstEnergy, however, says that its Ohio customers should bear 40 percent of the cost of any bailout.[9] However, when the additional funds that FirstEnergy claims it is entitled to for keeping its corporate headquarters in Akron are included, captive Ohio customers could have to pay up to nearly 80 percent of the bailout under the company's proposed Rider DMR bailout. Either way, such an arrangement would be unfair for FirstEnergy's Ohio customers and would amount to consumer subsidies for corporate profits.

Seventh, neither the PUCO staff nor the company have presented any evidence of the damage to ratepayers and businesses in northern Ohio of taking somewhere between $131 million and $1.126 billion out of the local economy each year to pay for the bailout. Not only would this diversion of resources have adverse economic impacts, as noted in the Rebuttal Testimony on Rehearing of Thomas N. Lause on Behalf of the Ohio Manufacturers' Association Energy Group, but it would also likely lead to lower energy demands which, in turn, could well lead Ohio Edison, the Cleveland Illuminating Company, and the Toledo Edison Company to seek additional rate relief from the PUCO.

Last, FirstEnergy's argument for requiring customers to pay "up to" an additional $568 million per year to keep the company from moving its corporate headquarters out of Akron is based apparently on a highly questionable study of the "multiplier" effect of FirstEnergy's presence in Akron. The company offers no concrete evidence of what the unidentified amount "not to exceed" $568 million would be spent for, no disclosure of what it would cost the company to get out of its current lease (which runs until 2025), and no indication of where FirstEnergy would go if it left Ohio.

[8] Id.

[9] Rehearing Rebuttal and Surrebuttal Testimony of Eileen M. Mikkelsen on Behalf of Ohio Edison Company, the Cleveland Illuminating Company, and the Toledo Edison Company, dated July 25, 2016, at page 9, line 22, and page 11, line 15, to page 16, line 22.

Conclusion

The PUCO should reject all three of the bailouts being proposed by FirstEnergy and the PUCO staff for the following reasons:

- All three would prove very expensive to FirstEnergy's captive Ohio customers and would have adverse impacts on the economy of northern Ohio.
- All three would far exceed any demonstrated benefits for customers.
- All three presume that ratepayers should be made to pay for FirstEnergy's own mistakes and mismanagement.
- All three would allow FirstEnergy to use additional funds collected from customers to bail out failing coal and nuclear plants owned by the company's merchant subsidiary.
- FirstEnergy has not demonstrated that it has any long-term plan or strategy for addressing its financial problems beyond relying on bailouts from its captive Ohio customers.

APPENDIX: How IEEFA calculated the cost of FirstEnergy's Modified RRS

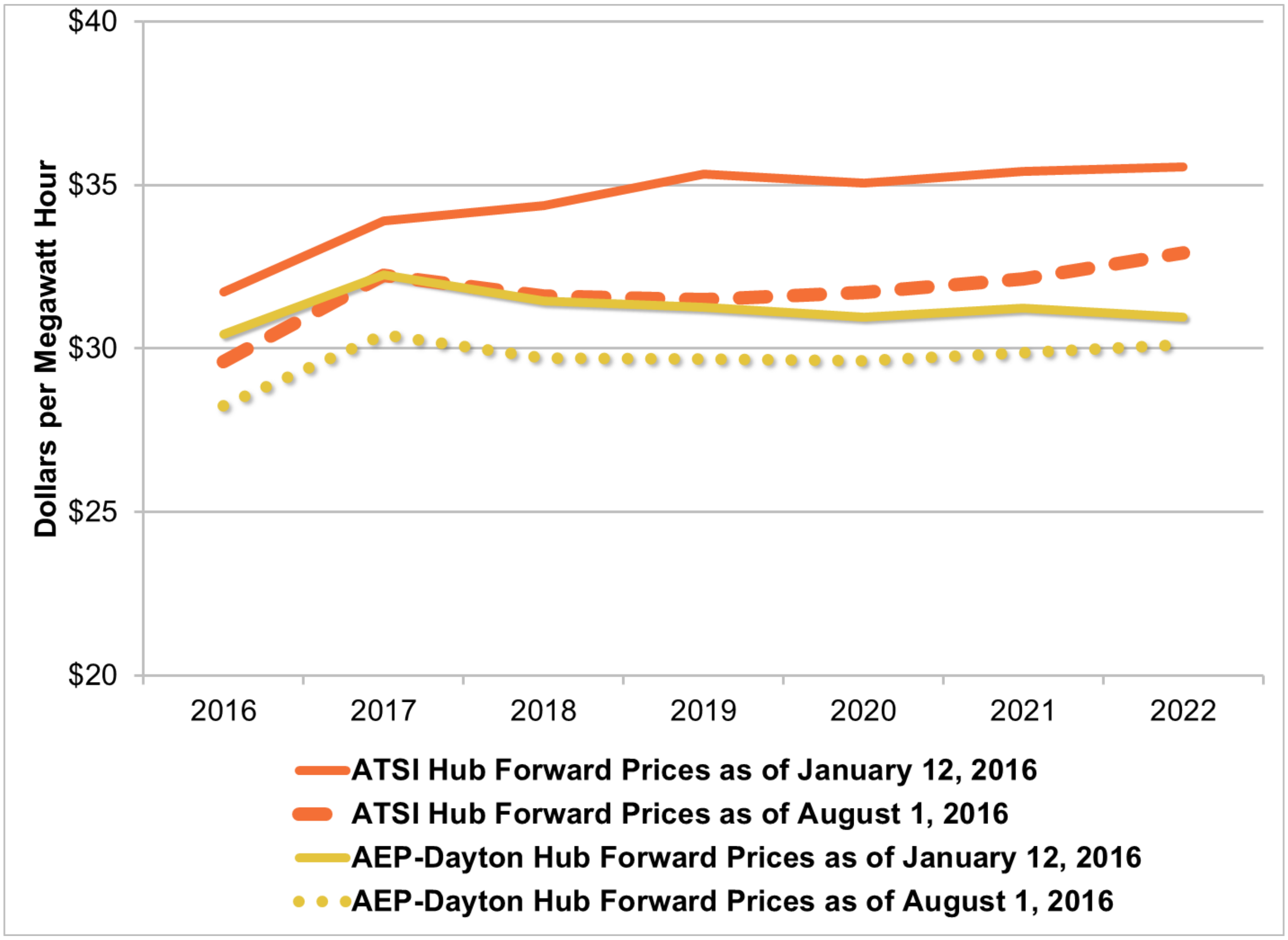
IEEFA has reviewed FirstEnergy's Modified RRS proposal, updating the data used in our February 2016 analysis to reflect more current expectations for future PJM energy market and capacity prices. This updated analysis reveals that FirstEnergy's revised bailout plan is likely to result in a net additional cost to ratepayers of slightly over $4.18 billion, or approximately $300 million more than IEEFA forecast for FirstEnergy's original bailout plan in our February 2016 report. As explained in detail below, these higher costs are due to (1) lower expectations for future energy market prices and (2) the results of PJM's recent capacity auction for the 2019/2020 capacity-year that resulted in prices that were significantly lower than analysts had expected.

Lower Expectations for Future Energy Market Prices

FirstEnergy does business in a regional electricity market known as PJM (whose northern Ohio area is called the ATSI zone and southern Ohio zone is called the AEP-Dayton zone). Power plants sell their generation into energy markets operated by PJM. Forward prices that represent the market's expectation for the future prices in these markets are published daily.

As can be seen in Figure A1, below, the forward prices for energy at the ATSI Hub and the AEP-Dayton Hub have declined during 2016. Energy forward prices at the ATSI hub have declined an average of eight percent for each year in the period 2016 through 2022. Energy forward prices at the AEP-Dayton Hub have declined an average of five percent. These lower forward prices make FirstEnergy's Modified Rider RRS bailout plan even more uneconomic for ratepayers than its original plan had been.

Figure A1: Reductions in Energy Market Forward Prices Between January 12 and August 1, 2016.



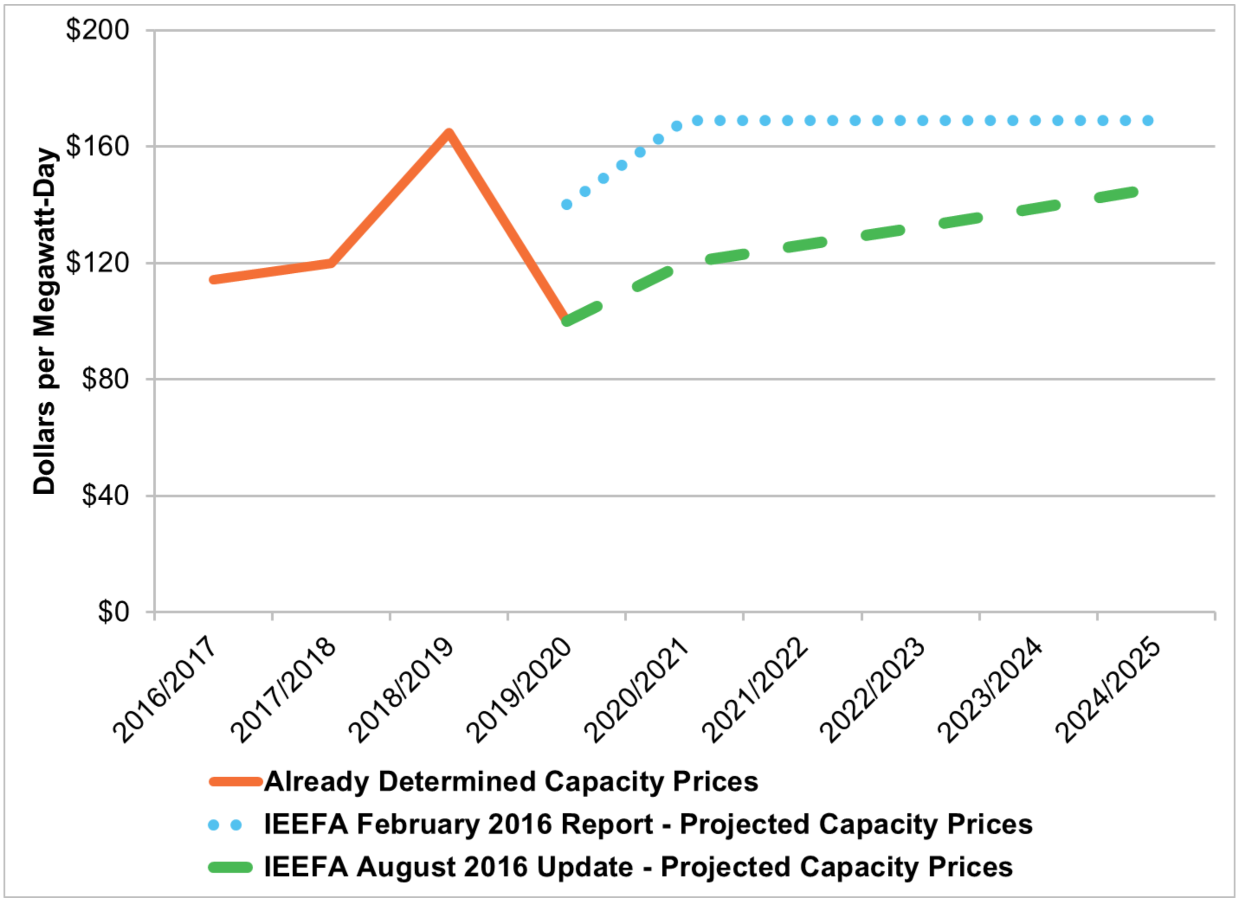
Significantly Lower Capacity Market Prices

In addition to the energy markets, PJM also operates a forward-looking 13-state "capacity market" from the mid-Atlantic to northern Illinois. This market is supposed to assure that enough power-generation reserves are available if some plants unexpectedly go out of service or when grid loads are higher than expected. To do this, PJM holds an annual auction in which power-generation owners bid to provide capacity in a "capacity year" that runs for 12 months—from June 1 to May 31—three years down the road.

Like the energy market prices listed above, PJM's capacity market prices have changed since IEEFA's February 2016 report was published, because an auction for the 2019/2020 capacity-year was conducted in May. Although IEEFA's February report was based on the actual capacity prices that had already been determined for PJM's 2016/2017, 2017/2018, and 2018/2019 capacity-years, it relied on forecasts from UBS Financial for the prices for the 2019/2020 and 2020/2021 capacity years. The actual capacity price determined in PJM's recent auction for the 2019/2020 capacity-year was 29% lower than the forecasts, coming it at only $100 per MW-day.

IEEFA's updated analysis now reflects the reality that the capacity price for the 2019/2020 delivery year that would be used in calculating charges and credits under Modified Rider RRS will only be $100 per MW-day, not the $140 per MW-day we had previously assumed. The new analysis also reflects the $120 per MW-day capacity price that UBS is suggesting will come out of next year's PJM auction for the 2020/2021 capacity-year, rather than the higher $169 per Mw-Day level previously forecast. We then have assumed that capacity prices would increase at a nominal annual rate after 2020/2021.

Figure A2: Lowered Expectations for Future Capacity Prices Between February and June 2016.

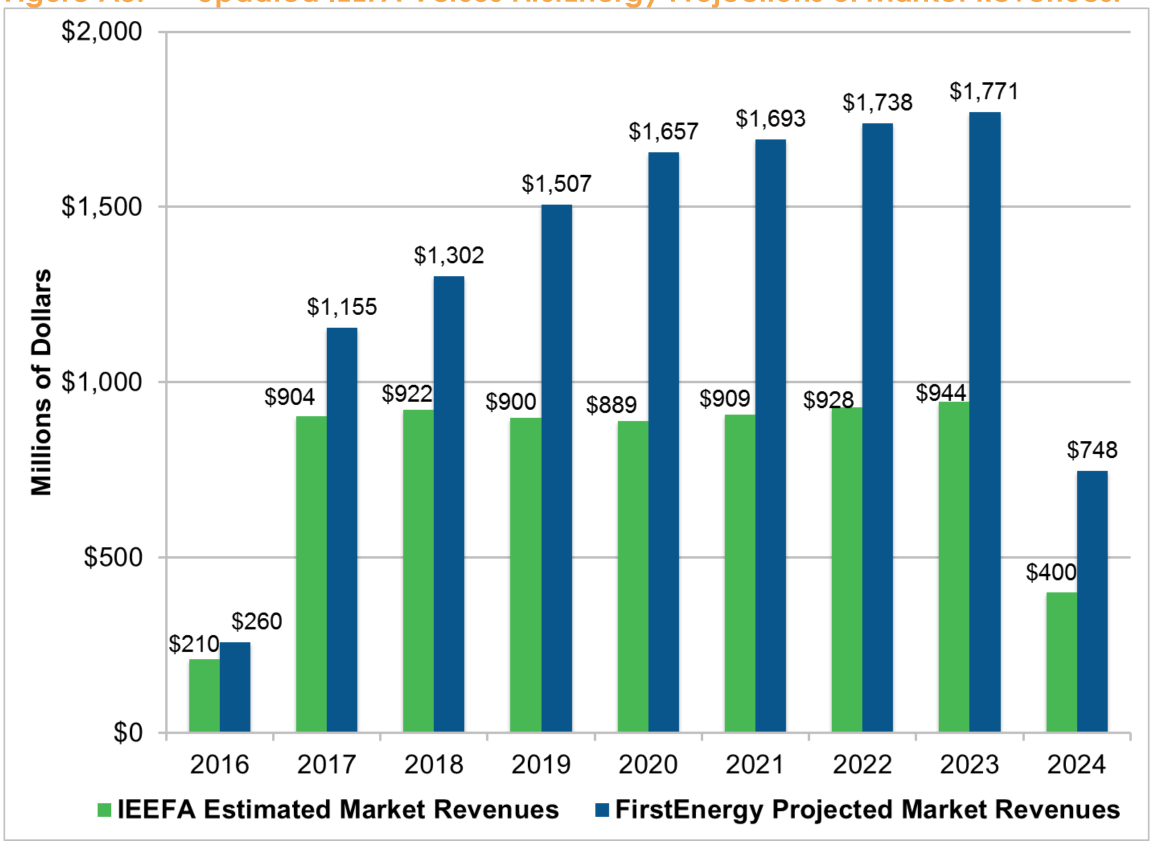


Results of IEEFA's Analysis

Today's lowered expectations for future energy market and capacity market prices, as seen from today's viewpoint, reduce the revenues that FirstEnergy (and therefore, its ratepayers) can expect to earn from selling the energy and capacity from the PPA units into the PJM markets. This makes FirstEnergy's Modified Rider RRS bailout plan even more uneconomic for consumers than we projected based on the calculations our February 2016 report.

First, the results of IEEFA's updated forecast of potential market revenues are presented in Figure A3, below, and compared with FirstEnergy's claimed market revenues for the PPA units.

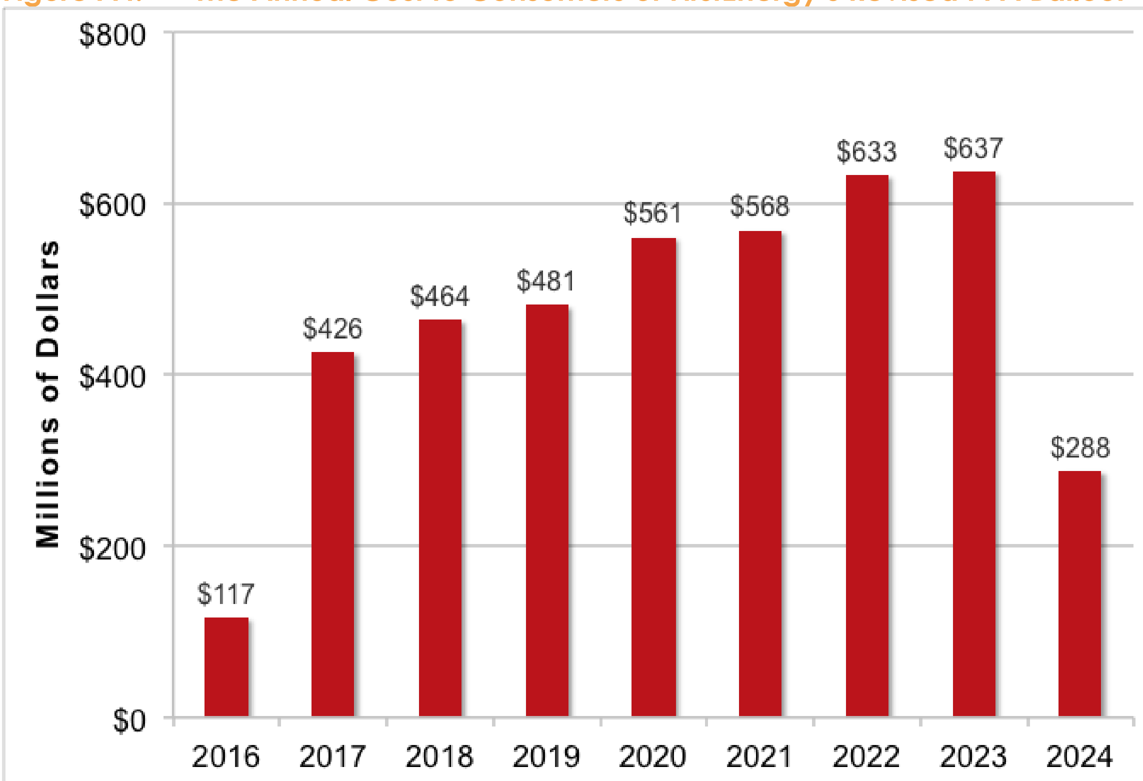
Figure A3: Updated IEEFA Versus FirstEnergy Projections of Market Revenues.



Thus, in total IEEFA estimates that customers could earn only $7 billion in market revenues from selling the energy, capacity, and ancillary services from the three PPA coal units and Davis-Besse during the PPA period. This is approximately $4.8 billion lower than the market revenues claimed by FirstEnergy. And there is a risk that the revenues earned from selling the energy and capacity from the PPA units could be even less than IEEFA has calculated here if future energy market and capacity market prices (after the 2019/2020 capacity-year) are lower than we have assumed.

After FirstEnergy's projected costs of operating the PPA units are deducted from IEEFA's updated projected revenues, the analysis shows that what FirstEnergy claims would be a $561 million savings for customers from Modified Rider RRS turns into an approximate $4.18 billion cost to consumers, as shown in Figure A4, below:

Figure A4: The Annual Cost to Consumers of FirstEnergy's Revised PPA Bailout



It is important to note that FirstEnergy has not made public the annual generation it projects for each of the PPA units during the PPA period. These projected generation figures underlie the company's estimated costs and are important inputs into the calculation of the revenues that would be assumed in the calculation of charges or credits under Modified Rider RRS.

Based on other regulatory filings, IEEFA is assuming that FirstEnergy has used a 75 percent average annual capacity factor for the Sammis 6 and 7 supercritical coal-fired units and 65 percent average annual capacity factors for the remaining PPA coal units. IEEFA also has assumed, based on the operation of other nuclear plants, that FirstEnergy has used a 90 percent average annual capacity factor for the Davis-Besse plant. If FirstEnergy assumed generation/lower capacity factors for any of the PPA units, the annual revenues shown in Figure 3 would be lower, perhaps significantly lower, and the additional annual costs of the bailout for consumers, shown in Figure 4, would be even higher than the $4.18 billion calculated by IEEFA.

Institute for Energy Economics and Financial

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David Schlissel, director of resource planning analysis for IEEFA, has been a regulatory attorney and a consultant on electric utility rate and resource planning issues since 1974. He has testified as an expert witness before regulatory commissions in more than 35 states and before the U.S. Federal Energy Regulatory Commission and Nuclear Regulatory Commission. He also has testified as an expert witness in state and federal court proceedings concerning electric utilities. His clients have included state regulatory commissions in Arkansas, Kansas, Arizona, New Mexico and California. He has also consulted for publicly owned utilities, state governments and attorneys general, state consumer advocates, city governments, and national and local environmental organizations.

Schlissel has undergraduate and graduate engineering degrees from the Massachusetts Institute of Technology and Stanford University. He has a Juris Doctor degree from Stanford University School of Law.