

Re-regulating Coal Plants in West Virginia: A Boon to FirstEnergy, a Burden to Ratepayers



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Executive Summary

Ohio-based FirstEnergy Corp. has announced plans to seek approval from the West Virginia Public Service Commission to sell all or a portion of its 1,300 megawatt (MW) Pleasants Power Station to FirstEnergy's West Virginia-regulated subsidiary Mon Power. The coal-fired plant is currently owned by a FirstEnergy deregulated subsidiary, Allegheny Energy Supply.

Mon Power made a similar acquisition three years ago when it purchased a 79.46% share of the 1,984 MW coal-fired Harrison Power Station from Allegheny Energy Supply (Mon Power already owned the other 20.54% of the plant). In seeking Public Service Commission approval for that transaction, Mon Power argued that ownership of the additional share of Harrison would provide a net benefit to Mon Power and Potomac Edison's customers (Potomac Edison is another FirstEnergy subsidiary and its rates in West Virginia are set to be identical to Mon Power's). In October 2013, the West Virginia Public Service Commission, in a 2-1 decision, approved the purchase.

FirstEnergy CEO Chuck Jones has described the Harrison transfer as a "model" for what it seeks to do with the Pleasants plant.

IEEFA has evaluated the operating performance of the Harrison plant and found that the transaction thus far has not produced benefits to Mon Power and Potomac Edison electricity customers. Instead, IEEFA estimates that customers have lost more than \$160 million relative to what they would have otherwise paid for electricity. The deal has shielded FirstEnergy from suffering a similar loss had the plant continued to be owned by Allegheny Energy Supply. This analysis only looks at one aspect of the deal, whether the revenues from owning Harrison outweigh the costs, and does not consider other criticisms made at the time of the purchase, such as the failure to diversify Mon Power's fuel mix.

The Pleasants transfer plan is part of a larger strategy by FirstEnergy to re-regulate unprofitable assets in deregulated markets as a way to ensure ratepayer subsidies. The company has pursued similar schemes previously in West Virginia and also in Ohio.

The FirstEnergy/Pleasants scheme will likely cost ratepayers dearly, much as these other deals either have or will if they are allowed to proceed.

Put simply, FirstEnergy is shifting risks from shareholders to ratepayers.

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Background on the Harrison Transaction

FirstEnergy's transfer of the Harrison power plant in 2013 from one subsidiary, Allegheny Energy Supply, to another, Mon Power, appears to have been driven by FirstEnergy's desire to shift the risk of low wholesale electricity prices from FirstEnergy shareholders to Mon Power ratepayers. Under Allegheny Energy Supply ownership, Harrison sold all of its electricity into the energy and capacity markets operated by the regional grid operator, PJM Interconnection. At times of low wholesale electricity prices, Allegheny Energy Supply's profitability suffered. By selling Harrison to the regulated Mon Power, FirstEnergy ensured that Mon Power and Potomac Edison's West Virginia customers would cover Harrison's costs, including a rate of return (i.e. profit), no matter what energy prices happened to be. In addition, Mon Power and Potomac Edison's regulated rates could be raised in the event of a revenue shortfall.

The Harrison transaction came during a period when historically low natural gas prices, combined with stagnating demand for electricity, had driven down wholesale electricity market prices and made it more difficult for coal-fired power plants to compete—market conditions that continue today. A September 2013 report by Fitch Ratings estimated that FirstEnergy's deregulated coal-fired power plants lost 63% of their value from 2008 to 2013 as a result of unfavorable market conditions.¹ A report by UBS Investment Research put FirstEnergy's deregulated subsidiary FirstEnergy Solutions at “zero equity value.”²

In response to these market conditions that were making it harder for deregulated coal and nuclear plants to compete, FirstEnergy management implemented a strategy of “re-regulation”—essentially seeking ratepayer subsidies for its uncompetitive plants. This began with the approval of the Harrison transaction³ in 2013 and continued in 2014 when FirstEnergy applied for approval from the Public Utilities Commission of Ohio for a deal that would require the customers of FirstEnergy's regulated distribution utilities in Ohio pay for the costs of operating FirstEnergy's deregulated, struggling W.H. Sammis coal plant, Davis-Besse nuclear plant, and its stakes in the Clifty Creek and Kyger Creek coal plants.⁴ ([This issue is currently pending before the PUCO](#)).

In implementing its re-regulation strategy, FirstEnergy subsidiary Mon Power needed to persuade the West Virginia Public Service Commission that transferring the Harrison power plant to Mon Power was in the public interest. Mon Power argued to the commission that purchasing Harrison was the best way to meet its customers' future power needs and that the transaction had “the potential to significantly reduce customer rates.”⁵ Opponents

¹ Fitch Ratings, “[The Erosion in Power Plant Valuations](#),” September 25, 2013.

² UBS Investment Research, “FirstEnergy Corp: Competitive Dis-Synergies”, July 30, 2014.

³ The transaction also included the sale of 7.69% of the Pleasants power plant to Allegheny Energy Supply, which already owned the other 92.31% of the plant.

⁴ In testimony, FirstEnergy witness Donald Moul explained, “The economic viability of the Plants [Sammis and Davis-Besse] is in doubt. Market-based revenues for energy and capacity have been at historic lows and are insufficient to permit [deregulated subsidiary] FES to continue operating the Plants and to make the necessary investments.” (Direct testimony of Donald Moul, Public Utilities Commission of Ohio Case No. 14-1297-EL-SSO, August 4, 2014, p. 2 lines 17-19)

⁵ Monongahela Power Company and the Potomac Edison Company, Petition for Approval of a Generation Resource Transaction and Related Relief, West Virginia Public Service Commission Case No. 12-1571-E-PC, November 16, 2012, p. 21.

argued that Mon Power had failed to fairly evaluate other options, instead biasing its analysis in favor of its parent company's preferred solution. Dissenting Commissioner Ryan Palmer described Mon Power's modeling as "flawed and results-driven" and wrote, "[r]ushing into the expensive, long-term commitment proposed ... without a more thorough evaluation of other options ... is unreasonable."⁶

Now, FirstEnergy is planning to transfer all or a portion of another deregulated coal plant, the 1,300 MW Pleasants Power Station, to Mon Power, a move that would result in the re-regulation of the Pleasants plant, ensuring that ratepayers would cover all of the plants' costs, regardless of whether it is competitive in the wholesale market. In December 2015, Mon Power filed an Integrated Resource Plan with the West Virginia Public Service Commission in which it argued that the best option for supplying Mon Power's future capacity needs would be to purchase an existing coal plant to meet a projected 850 MW capacity shortfall. On FirstEnergy's first quarter 2016 earnings call, CEO Chuck Jones provided more specificity on this point:

We filed our integrated resource plan with West Virginia. I think later this year, they'll start taking a look at it seriously, and it's up to the West Virginia Commission to decide would Pleasants be the appropriate solution. Obviously, we have a model in place already with Harrison...

⁶ Dissenting Opinion of Commissioner Palmer, West Virginia Public Service Commission Case No. 12-1571-E-PC, October 7, 2013.

Net Cost of the Harrison Acquisition, October 2013-June 2016

IEEFA has examined whether Mon Power's acquisition of 79% of the Harrison power plant has produced a net benefit or a net cost to ratepayers since it took effect in October 2013. This analysis is based on the cost of owning and operating Harrison, net of the revenues earned from selling Harrison's output into the PJM markets.

Mon Power sells the output of all of its power plants into PJM. It then purchases from PJM the electricity that it needs to meet its customers' demand. Mon Power's rates are set to cover all of Mon Power's costs (including a rate of return, i.e. profit), net of its revenues from power sales. That is, Mon Power's rates are set as follows:

$$\text{Rate} = \text{Cost of owning power plants (Depreciation, Taxes, Maintenance, Interest, Profit on invested funds)} + \text{Cost of operating power plants (fuel, etc.)} + \text{Cost of transmission \& distribution of electricity} + \text{Cost of purchasing power from PJM} - \text{Revenues from power sales into PJM}$$

In purchasing the 79% share of the Harrison power plant, Mon Power was essentially betting customers' money that the cost of owning and operating that additional portion of the plant would be more than offset by the revenues generated by selling that power into the PJM energy and capacity markets.

The bet has not panned out.

IEEFA finds that the acquisition of 79% of the Harrison plant has failed to produce a net benefit to Mon Power and Potomac Edison customers⁷. The rapidly rising natural gas prices projected⁸ by FirstEnergy in its application to the Public Service Commission for approval of the Harrison acquisition (to support its contention that wholesale electricity prices were likely to rise) have failed to materialize (see Figure 1). Instead, wholesale electricity prices have remained low, driven by low wholesale natural gas prices and relatively flat electricity demand. These market conditions are expected to continue for the foreseeable future (see Figure 2).⁹

⁷ This report refers specifically to Potomac Edison's customers in West Virginia. Potomac Edison's customers in Maryland are unaffected by the Harrison transaction.

⁸ Rebuttal Testimony of Judah Rose on behalf of Monongahela Power and the Potomac Edison Company, West Virginia Public Service Commission Case No. 12-1571-E-PC, May 17, 2013.

⁹ PJM's 2016 Load Forecast projects that summer peak demand in PJM will not regain 2006 levels until after 2030. ("PJM Load Forecast Report", January 2016).

Figure 1: Projections of natural gas prices made in 2013 by FirstEnergy witness Judah Rose have greatly exceeded actual natural gas prices.

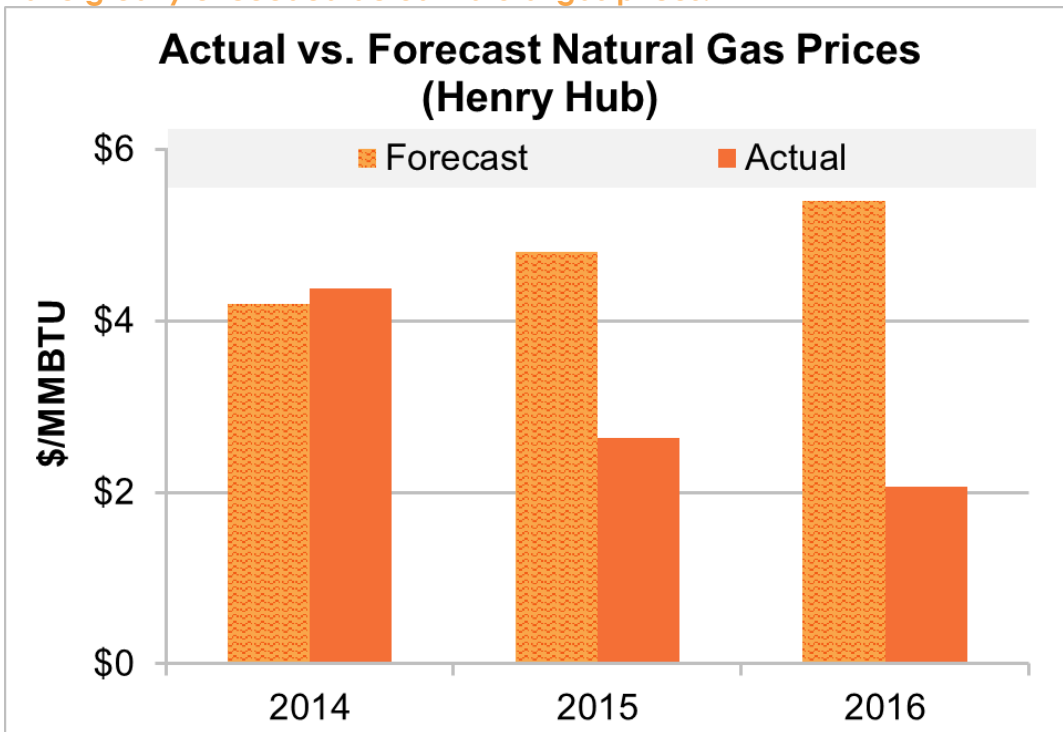
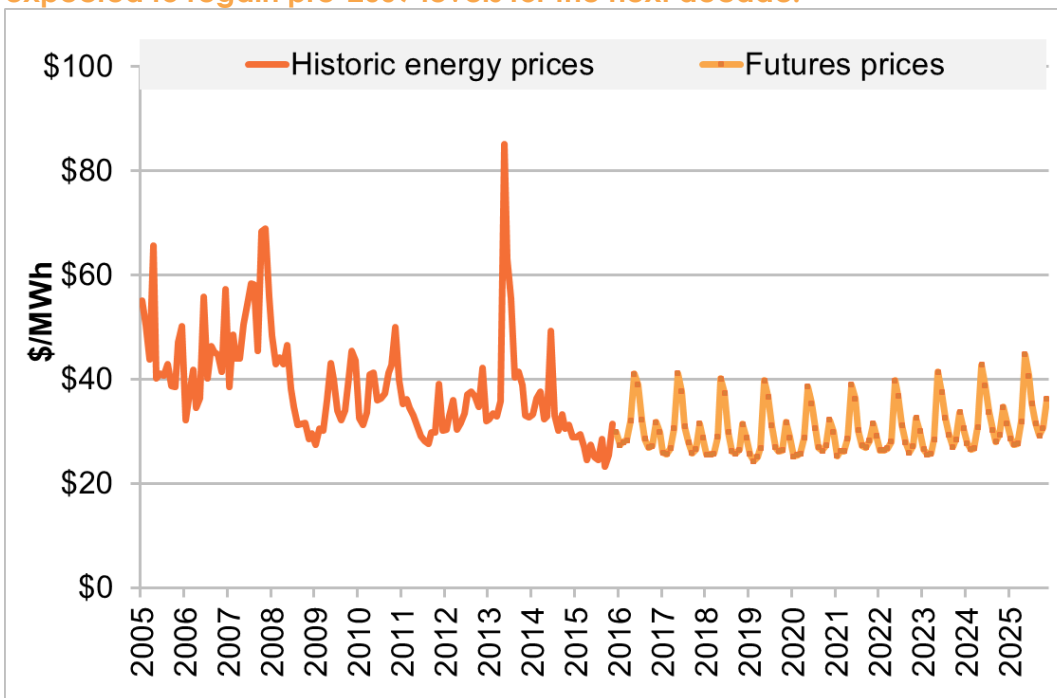


Figure 2. Energy prices (historical and projected) at PJM's AEP-Dayton hub in Ohio are not expected to regain pre-2009 levels for the next decade.¹⁰

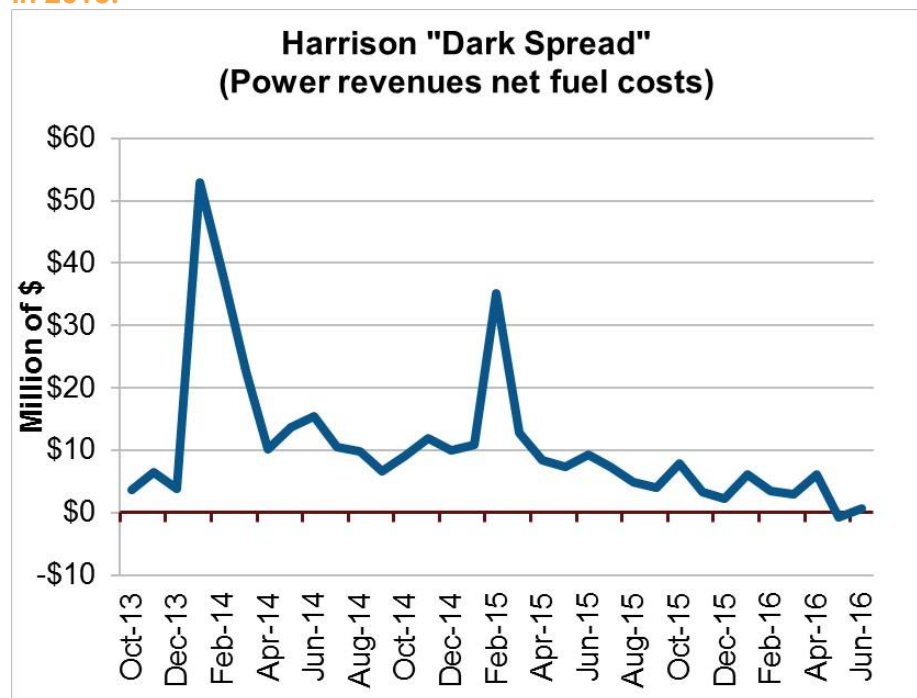


¹⁰ Day-ahead energy prices and OTC Global Holdings futures prices obtained from SNL Financial.

As a result of low wholesale electricity prices, the revenues generated by the Harrison plant have declined since its acquisition by Mon Power. Figure 3 shows the “dark spread”—the revenues earned from power sales net of the plant’s fuel costs—for the share of the Harrison plant Mon Power acquired in October 2013.¹¹ The two spikes in the graph correspond to “polar vortex” cold-weather events in the winters of 2014 and 2015 that drove significant, but short-lived, increases in power prices. Since April 2015, the dark spread has averaged less than \$10 million per month and is trending downward. The plant would be a net benefit to ratepayers only if this were enough money to cover FirstEnergy’s non-fuel costs from owning the plant, including non-fuel operation & maintenance costs, depreciation, amortization, and a return on investment. As shown in Figure 4 (page 7), it is not.

Figure 4 shows the monthly net benefit/cost to FirstEnergy’s West Virginia customers of ownership of 79% of Harrison.¹² This figure is based on detailed monthly data provided by Mon Power, as well as IEEFA’s estimates based on recent plant performance.¹³

Figure 3: The “dark spread” (revenues from power sales less fuel costs) for the share of the Harrison plant acquired by Mon Power in 2013.



¹¹ This figure is based entirely on monthly data provided by Mon Power regarding Harrison’s energy market revenue, capacity market revenue, ancillary market revenue and fuel expense (including allowances), provided in quarterly filings to the West Virginia Public Service Commission in Case No. 14-0702-E-42T.

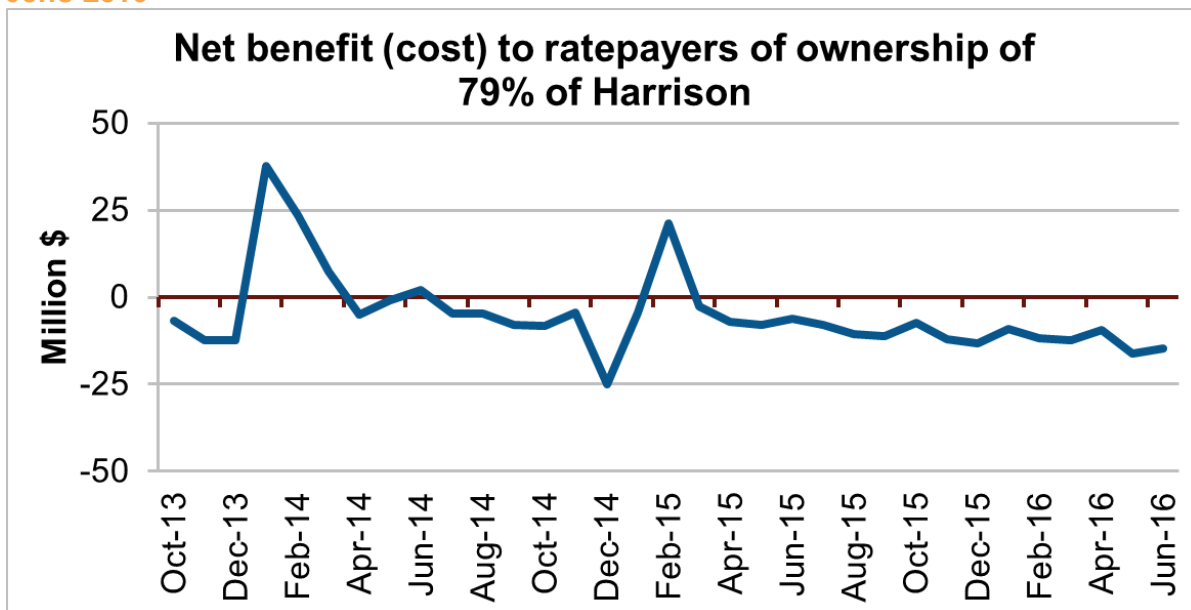
¹² The monthly costs/benefits in Figure 4 reflect the monthly costs to operate 79% of Harrison and the corresponding share of the plant’s monthly revenues. Because of regulatory lags in rate-setting and deferrals of certain costs, this does not reflect the amount charged to ratepayers in any given month. For example, in the Joint Stipulation in Case No. 15-1351-E-P (Paragraph 13a), the company agreed to defer until 2017 recovering part of Harrison’s expenses from the period October 2013 to February 2015. Nevertheless, the total net cost shown in Figure 4 reflects a cost that will ultimately be borne by ratepayers.

¹³ This figure uses data provided by Mon Power for fixed costs of the transferred portion of Harrison for the period October 2013 through February 2015 and for fuel costs and PJM revenues for the entire period October 2013 through June 2016 (See Direct Testimony of Kevin Wise, Case No. 15-1351-E-P, August 14, 2015; and quarterly filings in Case No. 14-0702-E-42T). Monthly non-fuel expenses for March 2015 through June 2016 were estimated based on recent plant performance. Income taxes and the pre-tax return were calculated based on values established in the most recent base rate case (see Exhibit 2a to the Joint Stipulation in Case No. 14-0702-E-42T).

The plant has produced a net cost to ratepayers in 28 of the 33 months from October 2013 through June 2016. Cumulatively, over that period, the plant has cost ratepayers approximately \$164 million. IEEFA estimates, further, that the acquisition has cost every Mon Power and Potomac Edison residential customer roughly \$130, on average, and commercial customers approximately \$600.¹⁴ This estimate does not reflect capital expenditures made by Mon Power since its last rate case that will be included in future rates.¹⁵

“...the acquisition has cost every Mon Power and Potomac Edison residential customer roughly \$130, on average, and commercial customers approximately \$600.”

Figure 4: Harrison has been a net loss to ratepayers over the period October 2013 through June 2016



IEEFA does not anticipate a major turnaround in the Harrison plant's poor financial performance through the next decade. Low natural gas prices, combined with stagnating demand for electricity in PJM, are expected to continue, and wholesale electricity prices are expected to remain low, as shown in Figure 2. The plant will very likely require significant additional capital expenditures in coming years as it ages. Under these conditions, the Harrison plant will continue to cost ratepayers.

¹⁴ This estimate is based on allocating the cost of Harrison on a per MWh basis. Customer counts and MWh sales by customer class were obtained from Mon Power and Potomac Edison's 2015 annual reports to the West Virginia Public Service Commission.

¹⁵ Mon Power's most recent base rate case forecast capital expenditures at Harrison for compliance with the Mercury and Air Toxics Standard (MATS) at \$81 million for 2015-2017, and non-MATS capital expenditure at \$144 million for 2014-2016. (Direct Testimony of Suzanne Paouncic, Case No. 14-0702-E-42T, June 6, 2014; Rule 42T Tariff Filing to Increase Rates and Charges - Statement C, Case No. 14-0702-E-42T, April 30, 2014)

Conclusion

Three years on, the acquisition of 79% of the Harrison power plant by FirstEnergy's Mon Power has yet to produce any financial benefit to Mon Power and Potomac Edison customers.

On the contrary, IEEFA estimates the deal has cost customers more than \$160 million relative to what they would otherwise have paid for electricity while at the same time shielding FirstEnergy from suffering a comparable loss had the plant continued to be owned by Allegheny Energy Supply.

It is highly unlikely that Harrison will provide a benefit to customers for the remainder of the plant's useful life.¹⁶

The poor financial performance of Harrison to date raises serious doubts about whether the Harrison acquisition provides a good "model" for West Virginia to follow in evaluating FirstEnergy's plan to have Mon Power purchase the Pleasants power plant.

¹⁶ See Direct Testimony of David Schlissel (April 26, 2013), Direct Testimony of Richard Hornby (April 26, 2013) and Supplemental Testimony of Catherine Kunkel (September 10, 2013) in Case No. 12-1571-E-PC.

The Institute for Energy Economics and Financial Analysis

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Cathy Kunkel, Energy Analyst, is an independent West Virginia-based consultant focusing on energy efficiency and utility regulation. She has testified on multiple occasions before the West Virginia Public Service Commission for the nonprofit coalition Energy Efficient West Virginia. She has done graduate work for the Energy and Resources Group at the University of California-Berkeley and is a former senior research associate at Lawrence Berkeley National Laboratory. Kunkel has an undergraduate degree in physics from Princeton University and graduate degree in physics from Cambridge University.