

Report on Residential Green Electricity Compliance Costs

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Summary

Residential electric bills have continued to soar since deregulation, despite the collapse of natural gas prices. Bills have increased less in other states that have deregulated; some deregulated states have even decreased rates.

Renewable energy and energy efficiency goals, part of the deregulation legislation, have been met at very low cost. In fact energy efficiency has saved more money than it has cost.

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Background

Ohio passed an electricity-deregulation law (127-SB221) in 2008. At that time it was hoped that the competition would lower monthly bills. The collapse of natural gas prices in the second half of 2008 reinforced this hope. Unfortunately, this has not happened. Electric bills have risen just as fast after deregulation as before deregulation (Figure 1). Furthermore, the rate increase in Ohio is greater than that for any other state that has deregulated (Figure 2). Clearly Ohio's deregulation has not been as effective as it could be.

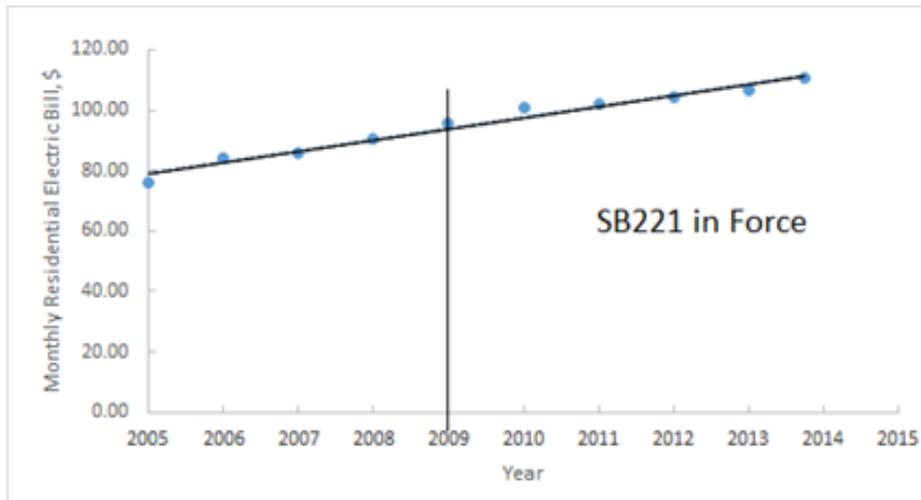


Figure 1. History of Monthly Ohio Residential Electricity Bills⁽¹⁾

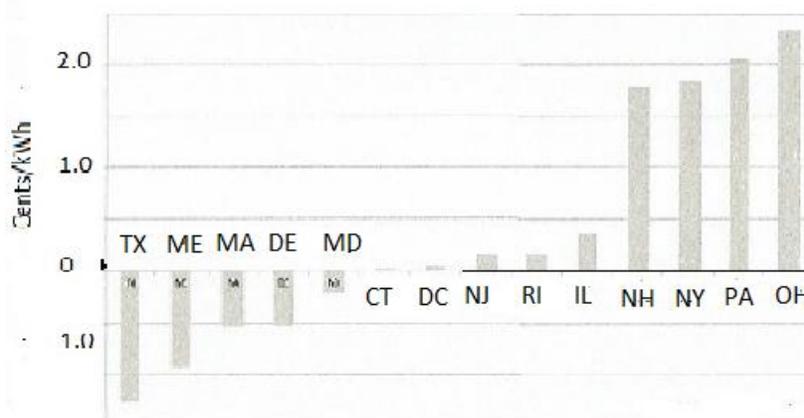


Figure 2. Residential Electric Price Changes for Restructured States, 2008-2014⁽²⁾

Ohio’s deregulation legislation also included green electricity goals. It is reasonable to ask whether the costs associated with these goals are responsible for our skyrocketing electric bills. It would seem unlikely since all of the states in Figure 2 also have green electricity goals.⁽³⁾ Even so, the costs of Ohio’s goals need to be put into perspective.

There are several reports demonstrating that the energy efficiency goals of 127-SB221 have led to large net overall savings in Ohio and will continue to do so if the freeze enacted in 2014 (130-SB310) is terminated⁽⁴⁾. Realized and future savings amount to hundreds of millions of dollars, more than enough to cover the entire cost of the program. However, there have been discussions that the costs and benefits of energy efficiency need to be distributed more equitably, and this issue should be resolved.

Renewable energy is at its 2014 freeze level of 2.5 percent. As a result of this small percentage, consumer costs of renewable energy are expected to be very small. This expectation has been fulfilled, as shown in the balance of this report.

Consumer Electric Bills

Customers are charged for the basic costs of electricity – generation, transmission, and distribution. And they are taxed. In addition, there are many charges that are not all listed separately on consumer bills. These are called ‘riders’. Table 1 shows some of the riders charged on a typical Central Ohio bill.⁽⁵⁾ Since the total bill is \$104, both energy efficiency and renewable energy (\$3.76) are a very small part of it. It is clear that charges due to green electricity are only a very small part of the price rise since deregulation.

Table 1. Partial List of Columbus & Southern Ohio Electric Riders (Ref. 5)			
\$13.71 - Base Delivery Charge	\$3.99 – Retail Stability Rider	\$3.42 – Energy Efficiency Rider	\$1.01 – GridSMART Rider
\$8.40 – Customer Charge	\$3.71 – Universal Service Fund	\$1.68 – Deferred Assets Phase-in Rider	45¢ - Economic Development Rider
\$4.98 – Distribution Investment Rider	\$3.49 - Taxes	\$1.45 – Additional Tree Trimming Rider	34¢ - Alternative Energy Rider

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Costs to Consumers

Statewide, green electricity costs to consumers are comparable to Columbus. Table 2 summarizes the average costs for the 'Big Four' utilities. Table 2 is incomplete; Municipal utilities and rural cooperatives are not covered by the law. In addition, independent service providers have captured a significant part of the market and recent data are not available for them.

The table also does not report how much of the hundreds of millions of dollars of efficiency savings have been obtained by residential customers. For example, someone receiving a free CFL light bulb from an electric company will save enough electricity to cover the energy efficiency rider for over two years.

Table 2. Costs of Residential Compliance to 130-SB310 Charged by Utilities

	4 Dec. 2014 ⁽⁶⁾	1 July 2015 ⁽⁷⁾	Change
Alternative Energy	\$ 0.86	\$ 0.38	- 56%
Energy Efficiency and Peak Demand Reduction	\$ 2.85	\$ 2.21	- 22%
Total	\$ 3.71	\$ 2.59	- 30 %

Table 2 shows a decrease in costs over a six-month period. This is unusual, but the decrease in alternative-energy rider costs is symptomatic of the rapid fall in renewable energy costs. ⁽⁸⁾ It is also likely that the decreases in both riders are associated with the freeze in 130-SB310.

Concluding Remarks

The Energy Mandates Study Committee was established to evaluate Ohio's green electricity law. This report, as well as testimony presented to the Committee, clearly shows that 127-SB221 contributes virtually nothing to the skyrocketing electric rates since deregulation. It is also important to recognize that, while the word 'mandates' implies mandates on electric companies, the very small costs from the legislation are borne by consumers.

References

- (1) Energy Information Administration, [*Electric Power Monthly*](#); annual data are reported in the March issue each year.
- (2) Graph generated by Gene Krebs, Board Chairman of the Ohio Consumers Counsel
- (3) NCSL: [*State Renewable Portfolio Standards and Goals*](#), 19 Feb. 2015
- (4) NRDC: [*Energy Productivity: Efficiency Benefits to Power Ohio Jobs and the Economy*](#), May 2012; Max Neubauer, et al.: [*Ohio's Energy Efficiency Resource Standard: Impacts on the Ohio Wholesale Electricity Market and Benefits to the State*](#), April 2013; Ohio State University: [*Economic Analysis of Ohio's Renewable and Energy Efficiency Standards*](#), 18 November, 2013; Environment Ohio: [*Progress on Hold, The Freeze on Ohio's Clean Energy Law Could Mean Big Costs and Dirtier Air*](#), March 2015; Ned Ford: [*Costs and Benefits of Ohio Electric Utility Efficiency Programs*](#), 1 June 2015; NRDC: [*Ohio and the Clean Power Plan: Affordable, Reliable, Achievable*](#), June 2015
- (5) [*AEP's recent rate declines follow years of steep climbs*](#), Columbus Dispatch, June 29, 2015.
- (6) [*Thomas W. Johnson: Testimony to the Energy Mandates Study Committee*](#), December 8, 2014
- (7) [*IEU-Ohio; Mandate Cost Calculator*](#)
- (8) [*Lazard's Levelized Cost of Energy Analysis-Version 8.0*](#), September 2014