Testimony by Charles E. Jones, President and CEO, FirstEnergy Ohio Senate Public Utilities Committee S.B. 128: Zero-Emissions Nuclear Resource (ZEN) Legislation May 18, 2017

Chairman Beagle and members of the Ohio Senate Public Utilities Committee, I'm Chuck Jones, President and CEO of FirstEnergy. I appreciate this opportunity to appear before you and express my strong support for Senate Bill 128 – the Zero-Emissions Nuclear Resource legislation sponsored by Senators John Eklund and Frank LaRose, with a companion bill in the House sponsored by Representative Anthony DeVitis.

Ohio, like other states that restructured the generation of electricity, is facing serious and very complex energy policy problems that need the immediate attention of the Ohio General Assembly. The problems this legislation is designed to address are complicated. They are difficult to explain, and difficult to fix. But the consequences of ignoring them are real.

Let me start with some facts about why we are here today:

- 1. The current wholesale electricity market construct does not value certain attributes that these plants provide to Ohio, including economic, environmental, fuel diversity and other benefits.
- 2. The states have full authority to provide value to the environmental, fuel diversity and other benefits that nuclear power plants provide.
- 3. Nuclear power plants in Ohio are losing money. Why are they losing money? It's not because they can't compete in a competitive market. They are losing money because there is no competitive market and I'll touch on that issue shortly. Across the country, a number of nuclear plants are prematurely closing. I announced last November that FirstEnergy's competitive generation assets, including Ohio's two nuclear plants, will either be placed in a regulated-like construct, sold or closed.

I'll discuss the challenges facing Ohio's two nuclear facilities – Davis-Besse and Perry – and many others throughout this region before I cover the key features of this bill. However, before I do, I think it's important to start with a little history.

In 1999, Ohio joined 19 other states in restructuring state-regulated electricity. At the time, the state's electricity prices were ranked the 22<sup>nd</sup> highest in the nation. Today, nearly 20 years after the General Assembly passed Ohio's restructuring law, our electricity prices remain ranked in about the same

position within the U.S. And who could have envisioned that Duke Energy, Dayton Power & Light and AEP would be effectively out of the generation business, utilities would no longer risk investing in generation, and FirstEnergy Solutions – our competitive generation subsidiary – would be at risk of bankruptcy?

At its core, the Ohio electric restructuring law unbundled retail electric service and, among other things, transferred the authority over dispatch and pricing of electric generation from state to federal regulators. I should point out that, contrary to popular belief, FirstEnergy's predecessor company, Ohio Edison, opposed Ohio's move to restructure electric generation and warned of the long-term risks that today are a reality. But once Ohio's restructuring bill was passed, FirstEnergy followed the letter and spirit of the law and began participating in the federally regulated markets.

ZEN legislation is not designed to address or resolve any issues regarding wholesale power markets, and the relative strengths or weaknesses of those markets are not the main focus of my testimony. Simply put, today's federal construct does not value the key, non-power attributes that nuclear plants provide and are important to Ohio.

Obviously, lower prices for customers not only in the short term, but also over the long term is a desired outcome, both for our company and our industry. But that shouldn't be Ohio's only goal. It is important to continually balance affordability with other priorities, such as environmental benefits, fuel diversity and other attributes. For example, in states that did not restructure electric generation, integrated resource planning requires a comprehensive look at key priorities such as fuel diversity, fuel security, the ability to run 24/7, plant proximity to customers, transmission infrastructure and costs, environmental attributes, resiliency and jobs. In fact, we followed this basic formula for nearly a century in Ohio, and customers consistently benefited from the results.

The facts speak for themselves: Nuclear plants have begun to prematurely close, undermining state efforts to create jobs, protect the environment and maintain their energy security and independence. Nuclear facilities in Wisconsin, Vermont and Nebraska have already shut down prematurely — eliminating approximately 2,000 highly skilled jobs as well as millions of dollars in tax revenues supporting schools and other basic services — and at least seven other nuclear plants across this region are expected to follow suit. When the town of Vernon lost its biggest taxpayer, the Vermont Yankee plant, local officials responded by eliminating the town's entire police department. Also, the number of local houses on the market increased — and the median sales price for those homes dropped to \$35,000 below the state median. So, there's much more at stake here than just electricity prices. A January

report from the National Conference of State Legislatures noted that "Since 2013, six nuclear reactors in the U.S. have permanently closed, another 12 reactors have been scheduled to shut down, and operators at several more plants have warned of other possible reactor closures in the coming years."

The long-standing commitment of Ohio's utilities and regulators is to maintain adequate supplies of clean, diverse electricity here in our state. It's also important to consider that fewer homegrown energy resources means more electricity imports from neighboring states. According to the Energy Information Administration, of the 15 states with the lowest average electricity price, 14 are exporters of power. Of the 14 states with the highest average electricity price, 10 are importers of power. On any given day, Ohio imports about one-fifth of the electricity we need to power our homes, businesses and industries. In fact, only the state of California imports more electricity than we do today. For a manufacturing-intensive state like Ohio, importing this much power is out of balance. It is worth remembering Gov. Kasich's words of just a few months ago when he noted, "Job creators have attributed their reasons for expanding, growing and creating jobs in Ohio to ... our state's wide range of energy generation options." And added that, "limiting Ohio's energy generation options amounts to self-inflicted damage to both our state's near- and long-term economic competitiveness."

There are also other costs to closing these units well ahead of their useful lives. In Ohio, to offset the closure of power plants located along Lake Erie, the region's grid operator required nearly \$1 billion in transmission projects, paid for by customers, to build what are essentially extension cords to import power from out-of-state power plants.

ZEN legislation would enable Ohio to take control of a critical component of its energy future by ensuring our nuclear plants are compensated for the many benefits they provide. And, by providing adequate value for key nuclear attributes such as fuel diversity and the ability to operate emissions-free 24/7, this legislation would play a key role in our ongoing efforts to provide Ohio customers with the safe, resilient, clean and affordable electricity they expect and deserve.

ZEN would compensate nuclear plants on a per-megawatt-hour basis for these attributes – similar to actions taken in New York and Illinois to value their nuclear power resources. In fact, five nuclear plants will continue to operate as the result of state programs enacted in New York and Illinois. Other states, like Connecticut, are discussing legislation that considers the environmental, fuel diversity and other benefits these resources provide to their own states. Conversations about similar nuclear legislation are also occurring in Pennsylvania and New Jersey.

Although ZEN could increase a typical residential customer's bill about \$5 per month if the cap in the legislation is reached, total bills are still expected to be on average about \$3 per month lower than they were in June 2015. Also, customers would retain the right to shop for their generation supplier.

By helping to appropriately value Ohio's nuclear plants, ZEN will assure they continue to support well-paying jobs, economic growth, environmental progress and, of course, reliable and affordable electricity. And that should be welcome news to anyone who values a strong local economy, clean environment and a more secure energy future for Ohio.

I believe it's important to understand what's at stake, so let me share just a few of the many benefits that Ohio's two nuclear facilities – Davis-Besse and Perry – bring to our customers, communities and the environment:

- As emissions-free, baseload energy resources, these two plants generate nearly 2,200 megawatts of electricity enough to power 2.8 million homes. They produce approximately 90 percent of our state's carbon-free electricity, and 14 percent of the power generated in Ohio each year.
- Unlike intermittent energy sources such as wind and solar, Davis-Besse and Perry have the
  ability to operate around the clock providing customers with the power they need, when they
  need it. They are also nearly twice as efficient as natural gas-fired plants, and can securely
  operate for 24 months without refueling.
- These two facilities are economic engines, with more than 4,300 jobs connected to the
  operation of the plants. And the "ripple effect" of these facilities is significant: Every dollar
  spent to operate a typical nuclear power plant creates an additional dollar in the local
  community through vendor purchases, employee spending and property ownership.
- Combined, Davis-Besse and Perry contributed nearly \$25 million last year in state and local tax revenues to support schools, police, fire departments and other vital public services.
- I also should mention that our employees contribute to a wide range of community-based charities and organizations. Over the past 10 years, support provided by Davis-Besse and Perry

employees and the FirstEnergy Foundation totaled more than \$24 million to local United Way chapters and more than \$2.1 million to the Harvest for Hunger campaign.

Since there are some misconceptions out there about this legislation, let me address a few of them by clearly stating what the ZEN program is, and what it is not.

First, passage of ZEN is not about creating big profits for FirstEnergy. The purpose of ZEN is to fairly compensate Davis-Besse and Perry for the valuable attributes they provide. Furthermore, if the plants are sold and any net proceeds are available, the legislation requires that customers share in the benefit. We believe the plants are important to Ohio, which is why we want to make sure they continue to run throughout their useful lives.

More important, this legislation would enable the state of Ohio – much like New York and Illinois – to maintain the key environmental, fuel diversity and other benefits of zero-carbon-emitting power, regardless of who owns and operates Davis-Besse and Perry in the future. States such as New York and Illinois are basically saying these benefits matter to us and have taken action to preserve them.

By helping maintain these essential benefits, ZEN legislation is good for Ohio, not just our company — and not just the communities in which our plants are located. Although I serve as CEO of FirstEnergy, I was trained as an electrical engineer and worked for 37 years in Operations before becoming CEO — so I have a strong, working knowledge of what it takes to maintain a system that's capable of producing and delivering the electricity that customers need, around the clock. In Ohio, we're fortunate to have clean, dependable, baseload resources such as Davis-Besse and Perry that help ensure the integrity of our region's grid. And my four decades of experience in this business tell me that it's in the absolute best interest of our customers and the state to ensure that these plants are valued for the unique environmental and fuel-diversity benefits that they provide to Ohio.

Some legislators have referred to statements made about five years ago by FirstEnergy executives in support of competitive markets for electricity. I'll simply point out that, although our company initially supported the evolving markets, it soon became clear those markets and the related capacity auctions weren't working as intended. As a result, we made the decision to move away from competitive markets and transition to the regulated model. All of us understand the benefits of free markets, which by definition means without government intervention. But that's not how anyone truly close to our business would describe markets for electric generation. As energy expert Richard Myers points out in an article titled America's Hidden Energy Crisis, "to call these electricity markets 'competitive markets' or 'free markets' is to flirt with fantasy." In Ohio, a large portion of our generating assets simply moved

from state to federal regulation, with numerous regulatory rules regarding power bidding. Today, the markets only consider the cheapest price – with no consideration for fuel diversity, resiliency and a more secure energy future for Ohio.

It's also important to point out that the playing field is far from level in these markets. Myers notes that, in New England, more than 70 percent of the revenues for wind and solar units over the past two years were from federal and state subsidies such as production tax credits and renewable energy credits. Also, nearly 30 percent of the installed generation in the 13-state footprint overseen by our regional grid operator, PJM, comes from regulated sources — either states such as West Virginia and Virginia that have rejected competition, or regulated municipal and co-op electric systems. So you could view the participation of regulated generation suppliers in competitive markets as another form of subsidization.

These and other facts demonstrate why there is so much debate about the future of wholesale markets for electricity. But whatever the future may bring to those markets, let me reiterate that ZEN legislation is not related to how the markets operate, and is certainly not intended to replace or supplement them. It's also not an attempt to subvert natural gas, renewables and other forms of generation in Ohio. Once again, ZEN legislation is intended to provide compensation for the key attributes that nuclear generation provides to our state, and ensure customers continue to benefit from a diverse mix of energy resources in the years ahead.

Some have suggested that the price tag is too steep. I couldn't disagree more. According to a report issued in April by The Brattle Group, over the next ten years, Ohio's nuclear plants will contribute \$510 million annually to the state gross domestic product and provide for nearly 4,300 full-time jobs in Ohio. Ohio's nuclear power plants help keep electricity prices low: Ohio consumers would pay \$177 million more for electricity annually, and almost \$1.3 billion more in present value over the next 10 years, without these two plants. Shouldn't lawmakers be exploring every opportunity to capture these considerable benefits for Ohioans? New York and Illinois lawmakers did.

If I can leave you with one final argument for ZEN, it's this: Ohio cannot afford to continue heading down a path that could lead to less fuel-diverse and fewer homegrown energy resources, more energy imports, fewer jobs and less economic growth – not to mention more volatile electricity prices for our customers and your constituents. Only the state of Ohio can meaningfully address this problem in a timely manner. Once again, thank you for allowing me to testify today on behalf of ZEN legislation that can play a key role in helping us meet the future energy needs of all Ohioans.