

Nuclear Energy Institute Testimony for the Record
Senate Public Utilities Committee
State of Ohio
June 8, 2017

Good afternoon. I would like to thank Chairman Beagle and the Public Utilities Committee for giving me the opportunity to speak today. I am Maria Korsnick, president of the Nuclear Energy Institute. I have spent my entire career in the nuclear industry operating and managing nuclear plants. I began as an engineer at the Calvert Cliffs nuclear plant in Maryland, where I worked for 17 years.

I have been a senior reactor operator, site vice president, chief nuclear officer of Constellation Energy Nuclear Group responsible for five reactors across New York and Maryland and, before I joined NEI in 2015, I was senior vice president of Exelon's northeast operations. I am proud to represent this industry and excited about the role nuclear power can play in Ohio and nation.

I may be visiting Ohio, but I am speaking to you as someone who lived in the communities much like yours, around these plants. For three years, I was the site vice president for the Ginna plant in upstate New York. Ginna is a single-unit plant located on a Great Lake – a lot like Davis-Besse and Perry here in Ohio. I know these plants are vital parts of their communities and the region's infrastructure. I applaud the Public Utilities Committee for your consideration of Senate Bill 128. This legislature has an opportunity to preserve these valuable assets for the benefit of these towns and the entire state.

Nuclear plants provide baseload power to the state. They run around the clock, every day, under all weather conditions to provide reliable electricity to the state's homes and businesses. Their continued operation will keep electricity prices low.

The Davis-Besse Nuclear Power Station in Oak Harbor and the Perry Nuclear Generating Station in North Perry together employ over 2,300 Ohioans. The

plants generate \$510 million each year in economic value to the state, concentrated in these communities. This economic activity supports almost 3,000 additional Ohio jobs. Just last month, the Benton-Carol-Salem School District adopted a resolution recognizing that “Davis-Besse employs more than 700 workers who earn good wages, who in turn support our local economy in many ways.”

Losing a nuclear plant has a devastating impact on the community. When the Kewaunee plant closed in 2013, the host town of Carlton, Wisconsin, lost 70 percent of its operating budget. Following the closure of the Crystal River plant in Florida, Citrus County laid off 100 workers and raised property taxes by over 30 percent. In the face of the potential closure of a plant in Michigan, Covert Township is no longer sure if it can afford a new fire truck. These impacts are already being foreshadowed in Ohio as Oak Harbor has canceled plans to build a new elementary school that was to serve 1,000 students. The superintendent of the Perry school district testified that losing the plant would be catastrophic since the plant provides 85 percent of the school’s budget. This is tough for me to hear. My children attend schools, just like these.

If these plants close, the downstream consequences of premature plant closures are dire and irrevocable. The electricity produced by these plants will need to be replaced and most of that generation will be produced outside of the state. Ohio would have to import even more electricity, increasing reliance on the regional market and sending Ohio jobs to neighboring states. Even if new natural gas plants were built in Ohio to replace the state’s nuclear generation, hundreds of jobs will be lost in the process. Replacing a nuclear plant with natural gas plants will require several hundred fewer employees.

When nuclear plants close, electricity prices rise. This is a consequence of how electricity prices are set in competitive wholesale markets such as the PJM market that covers Ohio. After lining up all of the plants from lowest to highest bid, the market price is set by the most expensive plant needed to meet demand. If nuclear plants close, the replacement power will come from plants that were

previously too expensive to be called to service. The Brattle Group estimates that this would cost Ohio consumers an additional \$177 million in higher electricity bills. This is consistent with what we have seen in other parts of the country. California consumers in the state paid \$350 million more for their electricity after the San Onofre Nuclear Generating Station shut down. Estimates for losing nuclear plants in Illinois, New York and Pennsylvania show costs increasing by hundreds of millions of dollars for consumers in those states.

When nuclear plants close, their generation is immediately replaced by fossil fuel plants that have excess capacity. When Vermont Yankee closed in 2014, all of its electricity was replaced by natural gas and, as a result, New England's emissions increased for the first time in over a decade. Ohio's nuclear plants provide over 90 percent of the state's clean electricity. They do not emit air pollutants such as sulfur dioxide and nitrogen oxides which lead to acid rain, smog, and asthma.

Ohio's nuclear plants, like the U.S. nuclear fleet as a whole, continue to show strong performance. Nuclear plants operate more than 90 percent of the hours in the year, much more than any other generation technology. The nuclear industry invests over \$5 billion each year to ensure that the plants run efficiently, securely and safely and that they can do so for decades to come. As a manager of these plants, I oversaw how these funds would be used to support their long-term operation. The investments bolstered security as threats evolved. They went into preserving system backups that support safety and reliability. And they were to replace major components that will maintain and improve plant performance.

The investments that we make in our plants are with an eye toward the long-term operation of these facilities. Almost all of the U.S. nuclear fleet has received a license renewal that will enable them to run for up to 60 years of service. Some of our plants are in the process of seeking a second license renewal that would allow for 80 years of operation. America's nuclear plants are part of the nation's long-term infrastructure that supports economic growth.

The economic challenges facing nuclear plants say more about the flaws in the markets in which they operate than it does about the performance of the plants. These market challenges are being felt beyond Ohio. Over the last four years, five plants have closed before the end of their useful lives and five more will do so in the next few years. Eight of these ten are the result of markets that only price short-term costs without public policies in place that would broaden the scope of what is valuable to the electricity system. Other nuclear plants in Connecticut, New Jersey and Pennsylvania are operating in these markets and are facing the same economic pressures. Unless the markets are reformed – or policies are enacted by governments – to value diversity, resilience or environmental protection, the market will not provide these attributes.

We have seen state governments provide this leadership in the last year. New York and Illinois have put policies in place to value important attributes provided by nuclear generators that were not being recognized by the market. Due to this action, five plants that were facing early closure will instead operate for at least another decade. This will preserve nuclear generation as the largest source of clean electricity in those states and the thousands of people who work and support their continued operation.

Beyond the state level, others are seeking solutions but they take much longer to implement. Regional market operators, state and federal regulators are all working to figure out how to ensure that markets are structured to produce the generation mix we need today and into the future. Energy Secretary Rick Perry is undertaking a study to understand why baseload generation such as coal and nuclear plants are at risk of closure and what can be done to prevent it. The challenges are being recognized and analyzed in Washington, but it is the states that have shown the ability to lead on this issue.

Getting this right is important for our country. An electricity system that is overly-reliant upon a single fuel can leave us vulnerable to attacks or other disruptions. A robust nuclear fleet allows the U.S. to maintain international leadership on nuclear issues. Allowing well-run nuclear plants to close doesn't help the

communities that have grown up around them, it doesn't make electricity more affordable for consumers, it doesn't provide jobs for Ohioans, and it doesn't support our energy and national security.

Ohio has the opportunity to preserve these plants, and I urge you to do so.

Thank you.