Testimony for the Record

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Good morning. I would like to thank Chairman Stein and the Energy Generation Subcommittee for giving me the opportunity to speak today. I am Maria Korsnick, president of the Nuclear Energy Institute. I am proud to represent this industry and excited about the indispensable role nuclear power plays in Ohio and the nation. I have spent my entire career in the nuclear industry operating and managing these plants. I have lived in the communities that proudly support them. 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 – 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 Energy and Natural Resources Committee for your consideration of the Ohio Clean Air Program, H.B. 6. You have an opportunity to preserve these valuable assets for the benefit of their towns – and the entire state.

Ohio's nuclear plants are economic engines for their communities and the entire state. They provide baseload power that runs 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 employ more than 1,300 Ohioans. The plants contribute more than $500 million in economic value every year to the state, concentrated in these communities. This economic activity supports almost 3,000 additional jobs in Ohio.

Losing a nuclear plant can have devastating impacts on its community. When the Kewaunee plant in Wisconsin closed in 2013, the host town of Carlton 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 more than 30 percent. The tax revenue generated by Perry and Davis-Besse is also a vital source of funding for their local education systems.

If these plants close, the downstream consequences are dire and irrevocable. Electricity prices will 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. The Brattle Group estimates that this would cost Ohio consumers an additional $400 million in higher electricity bills. Mr. Chairman, I would ask to submit the Brattle Group report for the record. This is consistent with what we have seen in other parts of the country. California consumers paid $350 million more for their electricity after the San Onofre Nuclear Generating Station closed. Estimates for losing nuclear plants in Illinois, New York, New Jersey and Pennsylvania show costs increasing by hundreds of millions of dollars for consumers in those states.

Maintaining nuclear as a major contributor to the nation's electric generation capacity enhances fuel diversity. This provides important economic benefits and protects the grid from becoming too dependent on any one fuel source. A diverse portfolio of fuels and technologies serves as a hedge against price volatility and supply disruptions, and is critical to resilience.

When nuclear plants close, their generation is immediately replaced by fossil fuel plants that have excess capacity. When Vermont Yankee closed in 2014, 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 more than 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.

Replacing Ohio's nuclear plants with other non-emitting generation would be prohibitively expensive. Producing the same amount of electricity with wind turbines would require around 6,200 megawatts of new wind capacity, which would cost more than $11 billion to build. Replacing nuclear with utility-scale solar power would require around 12,800 megawatts of new solar capacity, which would cost more than $34 billion to build.

Ohio's nuclear plants, much 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 more than $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 the prudent allocation of human and material resources that support their long-term operation. These investments bolster security as threats evolve. They go toward preserving system backups that support safety and reliability, and to replace major components that will maintain and improve plant performance.

This improvement is showing up in our costs. The nuclear industry has come together to share best practices and seek opportunities for improving our efficiency without sacrificing safety or reliability. We call it Delivering the Nuclear Promise. Our investment in new equipment combined with the ingenuity of our skilled workforce has led to notable cost savings. The average cost to generate a megawatt-hour of nuclear electricity was $31.83 in 2018. This is a 25-

percent reduction since 2012. These savings have been seen across our capital, fuel and operational costs.

The economic challenges facing nuclear plants tell us more about the flaws in the markets in which they operate than they do about the performance of the plants. These market challenges are being felt beyond Ohio. Over the last six years, seven reactors have closed before the end of their useful life and nine more are slated do so in the coming years, in addition to Perry and Davis-Besse. These closures 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. Nuclear plants in Ohio 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, and environmental protection, the market will not provide these attributes.

Beyond the state level, others are seeking solutions but they take much longer. 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 has drawn attention to the cold fact that closing nuclear and coal plants will lead to increasing reliance on a natural gas pipeline system that may bear risks for energy security. 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 on a single fuel can leave us vulnerable to attacks or other disruptions. A robust nuclear fleet also 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 help provide jobs for Ohioans, and it doesn't support our energy security and national security. Ohio's nuclear capacity makes her a clean energy leader and a healthier place to live. Ohio has the opportunity to preserve these plants and I encourage you to do so.

Thank you.