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Opposed to HB 6 in ANY Form

Mr Chairman, Senators thank you for this opportunity to address the topic of HB6.

My name is John Perry. I am former military, having served in the US Navy aboard the nuclear fast attack submarine USS Finback. I have a Bachelor of Science in physics from Duke University.

I want to speak today to those legislators who support HB 6. Will you go down in history as having ushered in one of the most destructive bills ever?

Make no mistake: this bill is about bailouts, not clean energy. And while it is obvious that coal is fundamentally dirty, it may not be as clear that nuclear is, also. Don't take my word for it. I will quote a former member of the Nuclear Regulatory Commission. As member from 2005 to 2012, and the Commission's chair for three years, Gregory Jaczko, PhD, had a front row view of the industry. He recently wrote, "Before the Fukushima accident, it was easier to accept the industry's potential risks, because nuclear power plants had kept many coal and gas plants from spewing air pollutants and greenhouse gases into the air. After the accident, the falling cost of renewable power changed the calculus. Despite working in the industry for more than a decade, I now believe that nuclear power's benefits are no longer enough to risk the welfare of people living near these plants."

One thing which makes nuclear dirty is the threat of catastrophic failure, a threat which grows as a plant ages. Make no mistake. Neutron embrittlement is real. It led to the cracking which led to the corrosion which led to the infamous hole in the head of the Davis-Besse reactor near Toledo. In addition, all operating nuclear plants require power from outside the plant to operate safely. This Achilles Heel was made evident by the events at Fukushima Daiichi when three reactors melted down and a fourth suffered a spent fuel fire. Here in Ohio, Davis-Besse lost outside power in 1998 when a tornado took down lines. Fortunately, only one of its backup generators failed, or cooling would have been lost in the core.

Another thing which makes nuclear dirty is the waste it produces. Over seventy-five years after the dawn of the nuclear age, humanity has not found a place to put this waste, waste which will remain lethal for hundreds of thousands of years. Waste generated at nuclear plants in Ohio remains at those plants indefinitely, even after the plant shuts down. That is the policy. After decades of effort and billions spent, that is the policy.

Compounding the risk of accidents is the risk of poor management. The dangers of First Energy's operation of nuclear plants are very clear. On March 5th, 2002, workers at Davis-Besse discovered a problem. I quote here from Dr Jaczko's book, Confessions of a Rogue Nuclear Regulator. "Before Fukushima, the most prominent nuclear incident in recent times took place at the Davis-Besse nuclear power plant near Toledo, Ohio."

In a nutshell, a metal used in some reactor vessel parts was found to crack and leak. The NRC asked First Energy to investigate at Davis-Besse. The company delayed so long that the NRC finally ordered the plant shut. After it shut in February 2002 it was discovered that the company had allowed a leak of highly corrosive liquid to go un-investigated for years, so long that the steel wall of the nuclear reactor pressure vessel was corroded clear through. The only thing holding back over a thousand pounds per square inch was an interior lining made of stainless steel. The size of the hole was described as being like a football. The thickness of the reactor's steel wall is 6 inches. And 3/8th of an inch is the thickness of the stainless steel lining.

Now, the hole was near the top of the reactor, where the control rods pass into the reactor vessel. These rods are vital pieces of safety equipment. To quote Dr Jaczko, "Had [the reactor remained] in operation, a significant accident would likely have occurred. [Had the thin steel liner failed,] pressurized water from the reactor vessel would have shot out through the hole, damaging the safety systems nearby. There would have been no easy remedy, no matter what the operators did."

The NRC levied its largest fine ever as a result of this event. The following year, First Energy mistakes triggered the Northeast Blackout of 2003 which put 55 million people in the dark. This is the company that wants us to trust them to safely operate nuclear power plants which are already well past their 40-year design life. Given the history, I urge you to do your duty to safeguard Ohioans by insisting on thorough, independent inspection of the plants before committing any funds to keep them operating.

So, nuclear can make huge swathes of land uninhabitable if it is mishandled. Is there a viable alternative? There absolutely is. Solar is no longer the future, it's here now. The largest solar project in the state's history recently got Siting Board approval. The costs are known and will remain fixed for 20 years. AEP estimates this single, 300 megawatt facility will save customers \$218 Million over the 20-year life of the project.

The economics of energy have been changed by new technology. It's cheaper to generate with wind and solar than with nuclear or even coal. So the owners of the obsolete plants want a bailout; they want to lock Ohioans into paying what is essentially a new tax, \$190 million dollars a year, which will ensure that we are saddled with expensive, dirty power from obsolete plants, indefinitely. I cannot think of a more certain way to cripple Ohio's economy and to prevent investment here. First Energy has promised to shut down its nuclear reactors if it does not get its bailout. I say thank you for that promise.

Republicans have long railed against policy which picks winners and losers, and yet that is exactly what HB6 backers would have you do. The winners would be some of the worst operators in the energy industry. The losers would be every Ohio ratepayer, Ohio's environment and Ohio's business climate.

I am sensitive to the predicament of the union workers at these plants. Their plants are obsolete and uneconomic. Let's open training centers at the affected plants to put union people from these plants to work training the next generation of trades people. This would help not only the affected workers, but also the overall Ohio economy.

A final thought. How would you tell an Ohio family they must leave the family farm, forever? How would you tell a neighborhood to evacuate in 10 minutes? How would you tell an entire community they can never return? A typical Ohio county is only half the size of the Chernobyl exclusion zone. Let's keep Ohio safe for ourselves and our posterity.

Please don't be that legislator who trashes his state to help a group of crony capitalists. Please consider how your family and your community will remember you.