

15 May 2019

Thank you to the chairman and members of the committee for having me here today and allowing me to voice my support for HB 6.

I am David Gerren and am a Senior Consulting engineer at the Davis-Besse plant where I have worked for the past 29 years.

I originally grew up in North Canton Ohio and graduated from Hoover Highschool.

As early as the 5th grade (1971), I was aware of the developing discovery of carbon dioxide gas initiated global warming. My English teacher had her students write a college level term paper. My chosen topic was on the science, progress and projections of global warming/ or climate change resulting from greenhouse gasses. An issue that has not gone away, and in fact has gotten worse. In 1971 the global average atmospheric CO₂ concentration was approximately 320 ppm. This May atmospheric CO₂ levels reached 415 ppm. This is 10 ppm higher than recorded just 2 years ago and is increasing at an unprecedented pace. We know that this increase is the result of human activity. This is also the only observable atmospheric variable that has been changing besides accumulations of global thermal energy, which is consistent with the predictions based on science I first encountered in 1971.

During my next school year, I developed an understanding of the value of nuclear energy to generate electricity without emitting carbon dioxide. I felt so convicted on the basic science of the topic that I made this a focus of my career. I went on to obtain a BS in Chemical Engineering from the University of Akron and Joined US Navy as a submarine nuclear propulsion officer for a 5-year tour and equipped me to start a career in commercial nuclear power. Exiting the Navy, I accepted an engineering position at the Davis-Besse plant in 1990. After 7 years of employment I also completed a MS in Environmental Management from the University of Findlay.

There are many highly qualified, dedicated individuals who work at the Davis Besse and Perry plants who have similar stories and backgrounds to me.

In my 29-year career working at the Davis-Besse Nuclear Power Station as an engineer I have pushed for and have participated in the completion of many updates and improvements to the plant including a reactor vessel head replacement, steam generator replacement, control rod drive control system replacement as well as plant license renewal activities to safely support extending the life of the plant to year 2037.

In addition to these recent plant upgrades, the station performed additional upgrades following the Fukushima event. These upgrades added additional equipment and training to address issues that are beyond any expected event for the plant as outlined in recent Nuclear Regulatory Commission Orders. I currently oversee the Stations Fukushima response program as one of my assignments.

The Davis-Besse and Perry Facilities are among the highest performing nuclear plants in the entire country, having improved their combined industry standard Institute of Nuclear Power plant performance index by 18 percent. Combined, that's the second-highest increase in the country. We have also improved capacity to the grid by nearly 10 percent in the past 10 years, all while reducing refueling outage durations by more than 35 percent without impacting performance, therefore improving efficiency, maintaining reliability while producing more carbon-free electricity.

These plants are built and ready to continue providing in-state reliable carbon-free power well into the future.

I could have entered a career that was more profitable, however as an engineer, I have a responsibility to improve the condition of society, I have not wavered from the conviction that Nuclear Energy is a clean stable source of power that is of great value to society.

Once a nuclear plant is shutdown, it will not be recovered. I am seeking your help in having the state recognize the importance of maintaining the in-state nuclear plants as a **bridge** to a greener energy future. Without these plants, the state would have to immediately replace the lost electric production primarily with out-of-state generators using fossil fuels. This would result in more atmospheric emissions, less stable electric rates due to fuel supply variations and less competition as well as loss of significant income and property tax revenues to the state and local governments that result from these facilities.

Loss of the Ohio nuclear plants would more than reverse the emissions benefits of all the renewable generation in PJM distribution system installed over the past 25 years.

Additionally, the Davis-Besse and Perry facilities employ roughly 7 or 8 hundred jobs each. Our industry also supports thousands of other Ohio jobs across all economic sectors. Ohio's nuclear fleet helps power a strong manufacturing industry in particular, spending over \$45 million with local vendors and supplier across the state. These benefits would be severely impacted should the plants be retired.

This loss would result in an increase of over 9 million metric tons of CO2 emissions annually. Although this could be heard as just a number, I have a responsibility to my children to do what I can to improve their future and all of us here have a responsibility to put aside personal agendas and politics to help protect our families, our neighbors and the public at whole.

Please keep these points in mind as you consider this important bill and vote YES on HB

Sincerely,

Dave Gerren, Senior Consulting Engineer- Nuclear

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