February 5, 2022

To: Chairman Stephens, Vice Chair Stewart, Ranking Member Weinstein and members of the Energy and Natural Resources Committee

Re: Opponent Testimony on Ohio House Bill 434

I am concerned that the authorization of potentially unlimited taxpayer funds mainly benefits a single company. The bill does not specify the operating costs incurred by DAS for the new administrative and operational costs to support the Ohio Development Authority (ODNA) and the Nominating Council or address the source for this new funding. Nor does the bill address how or how much government funding will be given to this new entity, nor how it will be raised or appropriated.

Because the bill allows ONDA to assume any regulatory powers delegated from the U.S. Nuclear Regulatory Commission (USNRC), the U.S. Department of Energy (USDOE), any U.S. military branch, or similar federal agencies or programs governing the construction and operation of noncommercial power-producing nuclear reactors and the handling of radioactive materials, I believe that this will result in a dangerous lack of safeguards to public health and safety and make Ohioans pay for all costs of associated with the ONDA including reactor decommissioning, dismantling and disposal of waste and damages from spills and accidents.

The nuclear energy industry is touting new nuclear reactor designs called small modular reactors, specifically including molten salt reactors (MSRs). Experts believe that molten salt reactors are unlikely to be successfully deployed anytime soon. MSRs face difficult technical problems and cannot be counted on to produce electricity consistently.

Processes used to make the fuel for these reactors are intimately linked to the potential to make fissile materials used in nuclear weapons which raises the concern for nuclear proliferation. (1)

Experience with MSRs is not encouraging either. Of the two MSRs ever built, the 1954 Aircraft Reactor Experiment that ran for just 100 hours and the Molten Salt Reactor Experiment that operated intermittently from 1965 to 1969. Over those four years, the latter reactor's operations were interrupted 225 times; of these, only 58 were planned. The remaining were due to various unanticipated technical problems. In other words, the reactor had to be shut down at least once every four out of five weeks — that is not what one would expect of a reliable power plant. (1)

It is unprecedented for a state to fund nuclear research and development and would make taxpayers assume all associated liabilities with no public oversight.

According to an analysis by the Union of Concerned Scientists stated, "Given the urgency of the climate crisis, rigorous evaluation is needed to avoid wasting time or resources in the pursuit of high-risk energy concepts." (2) A better use of our taxpayer dollars would be more investment in efficiency and renewable energy that would be safer and produce more jobs.

1) Nuclear power: Why molten salt reactors are problematic and Canada investing in them is a waste. September 14, 2021. https://theconversation.com/nuclear-power-why-molten-salt-reactors-are-problematic-and-canada-investing-in-them-is-a-waste-167019.

2) “Advanced” Isn’t Always Better Assessing the Safety, Security, and Environmental Impacts of Non-Light-Water Nuclear Reactors. Union of Concerned Scientists. March, 2021. https://ucsusa.org/sites/default/files/2021-03/advanced-isnt-always-better-full.pdf.