Good morning, Chairman and Committee members. My name is Chris Trepal. I am here to Oppose HB 434.

I was surprised when hearing Proponent testimony last week. Complex issues like safety, security, research, building new reactors in rural Ohio (Pheil & Amerineareas of lower population density), using taxpayer monies and eminent domain, waste management, reprocessing and reusing high-level nuclear waste, medical treatments (Gascoyne), taking over administrative procedures provided by the Nuclear Regulatory Commission (NRC), the Dept of Energy, the US Military and unspecified others, and even space travel (Pheil) issues and concerns will ALL BE ADDRESSED by the 14-page HB 434. But the scope of the proposed bill and Proponent testimony only raises more important questions:

<u>Agreement</u>

The proposed non-profit wants to take over administrative procedures and authority provided by federal government agencies. **3748.03 (A)**

Ohio already has agreement state status with the NRC (since 1999) to license and regulate "materials in quantities not sufficient to form a critical mass" - critical mass is the smallest amount of fissile material needed for a sustained nuclear chain reaction. (*Ohio's Agreement attached*)

Does Ohio really want to take responsibility for new nuclear reactors and the reprocessing and reuse of high-level nuclear waste. When things go wrong Ohio will be responsible - not a mere non-profit. Why would Ohio want to take on this future environmental and economic disaster? No other state has done this – Ohio would be first to dive into these dangerous uncharted waters!

The Authority would also be authorized to negotiate with federal agencies. **3748.03 (B)** How can a non-profit with no experience negotiate with numerous federal regulators?

The bill will also revise the Ohio Revised Code to be a model for future legislation for research and development for ANY industry. **4164.02**

<u>Funding</u>

Why would Ohio want to create a non-profit that has unspecified access to the Ohio treasury and contains no proposed budgets, sources, or requirements other than saying "public moneys may be spent, and private property acquired." **4164.04** Does the legislature really want to create a non-profit to take unidentified amounts of tax monies and use eminent domain?

How will the public know how much, how long, how often, and who and what exactly is being funded by our tax dollars?

Starting a New Non-Profit

I don't see much about important issues like ethics, accountability, transparency, fundraising details, etc. in the bill.

How will the proposed Authority be subject to Ohio Open Records Act, Ohio ethics laws, the Sunshine Act, the Ohio Administrative Procedure Act, and other accountability requirements?

How can a non-profit entity be empowered to act for Ohio in a regulatory role?

There is no COI policy statement in the bill. The National Council of Non-profits says: "A policy governing conflicts of interests is perhaps the MOST IMPORTANT policy a non-profit board can adopt." Will Authority members be prohibited from deriving financial and other benefits from actions or decisions made in their official capacity? The eGeneration Foundation seems to be the primary Proponent of this bill – will they be a Proponent, regulator, AND a major financial beneficiary?

Build New Reactors and Reprocessing Nuclear Wastes What the Authority wants to do: 4164.10

1) Develop and construct new nuclear reactors

Only Molten Salt Reactors were discussed and promoted by Proponents. Why would anyone want to promote an old-fashioned, unreliable technology that was abandoned 50 years ago.

Proponents say they are planning to construct and operate a 10 MW molten salt reactor at the DOE's Portsmouth, OH site. Proponents also testified that the 10 MW reactors could be easily sized up to 1,200 MW (Pheil).

The Proponent testimony that it is 'inevitable' that nuclear energy will become 'too cheap to meter' (around since 1954) is laughable given the industry's continuing record of inability to control costs, lengthly construction and license periods, large-scale and smaller nuclear accidents, releases of radioactive materials, and the ultimate long-lived problems of nuclear waste.

2) The Authority is interested in commercial production of isotopes Medical isotopes for cancer treatments were discussed by the sponsor and Proponents. More about some of that in a moment.

3) The Authority also want to Research and Develop high-level nuclear waste reduction and storage techniques.

Proponents imagine and testify that nuclear waste will NOT be 'reprocessed.' Reprocessing is a process or treatment in preparation for reuse. Reprocessing nuclear fuel has been a tremendous economic and environmental disaster everywhere it has been tried.

Each reactor produces about 2,000 metric tons per year. These wastes will not go away, even with reprocessing. Is the proposed reuse and reprocessing only from Davis-Besse and Perry? What about other states wastes?

Authority also wants to do: 4164.11

Develop educational programs for Ohio's isotope industry;

Assume regulatory powers for construction and operation of noncommercial nuclear power reactors and the handling of radioactive materials;

And **act in place of the Governor** for agreements with NRC, DOE, DOD, or any other agency.

Mo-99/Cancer drugs – A Bit More About Isotopes

The bill proposes to be a leader in isotope research and production. **4164.10** A Proponent testified that 80% of 40 million nuclear diagnostic and therapeutic procedures use Tc-99 (technetium-99) with a 6-hour half-life. Tc-99 comes from Mo-99 (mo-lyb-denum). A statement was made that "Mo-99 cannot be made without a reactor."

However, the Department of Energy's National Nuclear Security Administration's Office of Material Management and Minimization manages the Mo-99 Program as part of its "mission to MINIMIZE the use of highly enriched uranium (HEU) in civilian applications. HEU is a proliferation- sensitive material that, if diverted or stolen, could be used as a component of a nuclear weapon" (*Attached: "NNSA's Molybdenum-99 Program: Establishing a Reliable Domestic Supply of Mo-99 Produced Without Highly Enriched Uranium"*)

In conclusion, Proponents testified that Opponents are misinformed, disingenuous, lack common sense, and are fearful.

But there is no doubt that there are legitimate unanswered HB 434 concerns. The pie-in-the-sky stated goals of reducing costs, eliminating waste, minimizing proliferation, and ensuring safety can't be built on the tragic economic and environmental history of nuclear power and nuclear weapons in Ohio. In the past 40+ years we have seen three major reactor accidents (the Three Mile Island partial meltdown in 1979, the Chernobyl nuclear meltdown, explosion, and reactor core fire in 1986, and the Fukushima earthquake and tsunami nuclear disaster in 2011) and numerous somewhat smaller-scale, closer-to-home incidents like the Davis-Besse football-sized hole in the reactor vessel head, and the Perry Plant's fire, safety and security risk incidents, leaking fuel rods and so on.

Perry and Davis–Besse were expected to close in 2020-2021 because they were no longer profitable, which helped set in motion HB 6 (passed by the Ohio Legislature and signed by Governor DeWine), Ohio's infamous nuclear bribery scandal, called the worst energy bill of the 21st century, and the largest bribery, money-laundering scheme ever perpetrated against the people of the state of Ohio. Please don't let it happen again.

We need strategic future energy planning and sustainable development that guarantees public oversight and will not create dangerous, risky economic and environmental problems for taxpayers. HB 434 is not the answer, and I am asking for your NO vote.

More Information Attached:

Ohio's Agreement with the Nuclear Regulatory Commission, 1999

DOE's National Nuclear Security Administration: NNSA's Molybdenum-99 Program: "Establishing a Reliable Domestic Supply of Mo-99 Produced Without Highly Enriched Uranium

May 10, 2022, Energy News Network article: "Ohio bill would open door to subsidize next-generation nu-clear power work"

ONFN Flier: Ohio House Bill 434

Waste Not Alliance flier: "Unknown – What we Don't know and should know about Ohio HB434"

Witness Information Form