

Chairman McColley, Vice Chair Schuring, Ranking Member Martin, and members of the committee,

My name is Patricia Marida and I am a volunteer coordinator with the Ohio Nuclear Free Network. I have been working on nuclear issues since 1981 when I joined the Ohio Nuclear Weapons Freeze Campaign. The [Ohio Nuclear Free Network has listed 30 concise points](#) about the problems with HB 434 that are linked in my written testimony and can be found on the Ohio legislature's website under HB 434.

I am not a nuclear engineer, but I have studied physics. I am a pharmacist by profession, so my background is in the biological sciences. I understand the effects of ionizing radiation on living tissues. Radioactivity is not compatible with living cells. An airplane ride or an X-ray is a moment in time. But when a person inhales or ingests radioactive particles, our bodies store most types of them where they can remain for many years. Radioactive disintegrations release tiny subatomic particles. These are alpha particles, beta particles, and neutrons. They also put out gamma rays that travel through your body at the speed of light. Rays and particles kill, damage and mutate cells and DNA. This is why certain cancers and birth defects are termed by the medical profession to be linked to radioactive exposure. However, radioactivity can also cause common problems such as high blood pressure and kidney and heart disease, which are difficult to attribute to any source.

Last week one of the proponents of HB 434 testified saying that no one has died from nuclear power. At the Portsmouth Nuclear Site, called the A-plant, at Piketon, Ohio, the U.S. Dept. of Labor: Office of Workers' Compensation [has so far paid out \\$1.1 Billion](#) to sick and injured workers. Many if not most of these were illnesses caused by radioactivity, and we can presume that some have died from these illnesses. Nearly half of those applying were denied benefits. Two massive class action lawsuits for illnesses and deaths claimed to be caused by the A-plant are in progress.

The Ohio Nuclear Free Network recently commissioned a report which gathered statistics from the Ohio Department of Health. There is a link to this report in my online testimony. [HEALTH RISK TO LOCAL RESIDENTS FROM THE PORTSMOUTH GASEOUS DIFFUSION PLANT](#). Before the start of uranium enrichment procedures at the Portsmouth Nuclear Site, the premature death rate was below the national average. The report shows that the current Pike County premature death rate is nearly double that of the U.S. In the 1950s and 1960s, county cancer mortality was 12% below the U.S. The county's cancer incidence in 2010-2019 was 15% higher than the U.S., the highest rate of all 88 Ohio counties.

The main point I want to make today is that research and development of what HB 434 terms an advanced nuclear reactor is not going to get off the ground. Wall Street will not support nuclear power. Banks will not lend money for any kind of nuclear power. Why not? Because there is no profit in it. Everything nuclear is going to be subsidized by the public in one convoluted way or another.

I want to point out that in both the Ohio house and senate, only 8 people have testified in favor of this bill. Six of those 8 are potential beneficiaries of Ohio's largesse. Except for talk about molten salt reactors, every industry or idea mentioned by proponents was speculation or a secondary industry that would have to come AFTER a nuclear reactor was built and operating. This includes not just medical isotopes that are mentioned 7 times in HB 434, but last week proponents touted such things as space travel, peace and security, and nuclear weapons – weapons perhaps needed to enforce that peace and security. Converting spent nuclear fuel from a solid to a liquid was touted as a plus. This creates a greater volume and is far harder to contain. The reason for a liquid is reprocessing which has been a disaster wherever it has been tried: [West Valley](#) NY; [Sellafield](#) England; [Rokkasho](#) Japan; [La Hague](#) France; [Kyshtym](#) Russia.

Proponents were not familiar with the bill itself. Incorrect answers were given about nuclear waste and JobsOhio. HB 434 has been put under the auspices of the Ohio Department of Development, which writes contracts for JobsOhio. JobsOhio is beyond the reach of accountability requirements like the Ohio Open

Records Act, Ohio ethics laws, the Sunshine Act, and the Ohio Administrative Procedure Act. The Ohio Legislature will not have to appropriate money for nuclear activities. Does anyone remember Intel?

Once nuclear waste has been generated, it remains essentially forever. Atoms decay into other radioactive elements, each disintegration giving off rays and particles and creating new elements having their own half-lives. Nuclear waste is the gift that gives on giving. Everything it touches becomes radioactive. This includes reactor steel containments which become weakened by bombardment. The official term for this is called embrittlement. A strong blow can shatter embrittled metal. Nuclear waste will never be fissioned away.

The needy welfare king Bill Gates is getting public subsidies for his proposed TerraPower nuclear reactors. Cost estimates for building the NuScale Utah nuclear reactor have nearly doubled [from \\$58/MWh to as much as \\$100/MWh](#). At the Portsmouth Nuclear Site, there is already a Memorandum of Understanding with a consortium to explore a High Temperature Gas Cooled Reactor (HTGR). These mega corporations will likely be able to outcompete the ever-morphing eGeneration, Energy from Thorium, Elysium Industries, Exodys Energy, or Fisonic Energy Solutions to which proponents are or have been connected.

Lastly, there is a name for a government that is out of the reach of public oversight. Where people no longer have a say in what their government does or how it spends their money. It is called an Authoritarian State. By state I am not just referring to Ohio. I am also referring to nation-states. And the state of democracy or lack thereof under which we live.

Thank you.
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