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Testimony before the Ohio House Energy and Natural Resources Committee
In opposition to Ohio HB 6

Chair Vitale and members of the Committee,

First I would like to say that the manner in which HB 6 is being rushed through this process does not give the public enough time to read, to digest and then respond to it. Outcomes of this bill need to be evaluated in a logical and factual manner. In this case it is impossible to determine much of the outcome, because much of the decision-making would be done by an unelected body, the Ohio Air Quality Development Authority. This is disturbing, as it removes important decisions one step farther away from public oversight. Nothing is more vital than public input and oversight when it comes to maintaining a democracy.

That is two strikes that this bill directly makes against the democratic process.

Ohio needs an energy policy. "All of the Above" is the farthest thing imaginable from an energy policy. Well, perhaps bailouts of expensive, dangerous and outdated technologies are even farther out. Yet we hear members of both major political parties saying they want all of the above. All of the above means that we plod along in the same old manner doing nothing, or guessing, or waiting as various winds buffet the process about. And it is dangerous to not be proactive. Not many people use horses and buggies any longer, nor typewriters, not even fax machines.

The Sierra Club stands ready to organize a legislative briefing for Ohio's senators and representatives interested in learning more about energy sources, their strengths and weaknesses, what needs to be phased out and what must be promoted, costs, jobs, safety, the grid, the impact on public health and much more. Developing an energy policy takes time, energy, effort and dedication. Ohio is at the bottom of the rung of US states in air quality, and that can be greatly improved through energy policy. Ohio does not have to reinvent the wheel. We can see successes in other states.

Most of the members of this committee have heard the term "sustainability." And most understand what it means. But few people go a step further to see the brick wall at the end of the tunnel that is going to be hit through unsustainable practices. The only thing that will be sustained from nuclear power is its waste, which will remain deadly essentially forever.

In my previous testimony to the Energy Generation Subcommittee, I talked about the cracking cement in the shield building at Davis-Besse. Chair Stein said the cracking was or is being repaired. I would like to address those repairs here. First, it is not easy to repair cracked concrete, particularly when it is continuing to crack, and when it is in a tall building with a rounded dome. Second, what is being done at the building is not what the Sierra Club would call repairs. They are drilling holes into the concrete and installing relative humidity probes. This is unproven technology. And it is hard to determine how drilling holes might not create as many problems as it solves.

[FIRSTENERGY CORP Executive Salaries & Other Compensation ...](#) Charles Jones \$8,751,603 in FY 2017. One could argue the usefulness of Jones' leadership, since the company has continued on a downward spiral. Other execs did OK, too. [Lobbying Spending Database - FirstEnergy Corp, 2018 | OpenSecrets](#) Total Lobbying Expenditures: \$3,100,000 in 2018. FirstEnergy does not own facilities all over the country. Much of this money was concentrated in Ohio.

Besides creating an energy policy, this is what the legislature needs to do:

- 1) **Give communities aid, not utilities.** Ohio must not give billions to a utility that could not see a need to modernize and change course, therefore has failed to compete, and worst of all cannot afford to make critical safety upgrades. So much more could be done if money went directly to communities. *Electric rate increases double the unfairness because they hurt poor families most.* Ohio can and should support reactor communities. FirstEnergy is also asking for a bailout in Pennsylvania. David Hughes, president of Citizen Power in that state, said, and I quote, “I have dealt with many utilities over many years, but this outfit (FirstEnergy) out of Akron is the worst!”
- 2) **Promote immediate decommissioning upon plant closure. Jobs can be saved.** Rehiring the current experienced workers to begin immediate decommissioning is cost effective and efficient and decreases safety risks. FirstEnergy wants their reactors to be put into Safstor, which amounts to doing nothing for 60 years while conditions deteriorate. Waiting and hiring new workers unfamiliar with these plants would pose significant cost increases and safety concerns.

In my previous testimony to the Energy Generation Subcommittee, Chair Stein said that France had been successful in reprocessing. But as a reprocessing facility chops and dissolves used fuel rods, it releases thousands of times more radioactivity into the environment than nuclear reactors and generates several dangerous waste streams. Waste was once a solid is now a liquid. Denmark, Norway, and Ireland have sought the closure of reprocessing plants in France and Great Britain because of radioactive waste washing up on their shores. Reprocessing does not significantly reduce the amount of radioactive waste that has to be kept isolated. The cost of nuclear recycling in the US rivals the bailout of Wall Street investment banks. For three decades, we’ve been trying to clean up the results of Cold War-era reprocessing in West Valley, N.Y. Tens of millions of gallons of high-level radioactive wastes from the recycling of plutonium and uranium for nuclear weapons remain in gigantic, aging, leaky tanks.

Terming nuclear power as “zero emissions,” as “clean energy” and equating it with clean air is a reversal of reality.

What clean air? Nuclear is an immense industry that uses lots of carbon-emitting energy. Uranium mining, milling, refining, conversion and enrichment; nuclear fuel fabrication, transportation throughout the industry, and building reactors and these many other facilities emits lots of carbon. Energy use is ongoing, including making more canisters for waste. And does not take into account the amount of energy needed to keep nuclear waste isolated for hundreds of thousands of years.

What zero emissions? Nuclear power plants are allowed to, and all do, have regular radioactive releases into the air and water. They all leak tritium. Uranium mining, milling and refining all produce dangerous waste piles and emissions of radioactive and other hazardous materials, including radon gas. Groundwater, surface water and community drinking water systems have been contaminated. Radioactive contamination occurs all throughout the industrial facilities that make nuclear fuel.

What clean energy? One thing that FirstEnergy does not talk about is radioactive waste. After searching for 70 years, the U.S. has yet to find a permanent location for a waste repository. The reality is that there is no real “disposal” solution for nuclear waste. Moving it around the country with no final plan can only cause more problems. It is currently being stored in dangerously overcrowded cooling pools and in thin dry canisters that are welded shut and cannot be monitored or repaired. This waste is going to remain in its current locations for a long time, if not indefinitely. More waste will compound this problem. A 1000-MW nuclear plant produces about **27 tons of spent nuclear fuel** every year. Immediate steps must be taken to store this waste more safely than currently – a large, expensive but critically important undertaking. It defies credibility that federal regulatory agencies could be compromised on issues of safety. But look at the Federal Aviation Administration letting Boeing do its own safety checks. Similar things have been going on with the Nuclear Regulatory Commission for decades. Both agencies have been captured by the industries they were designed to regulate,

putting the public at risk. I list hyperlinked references in your electronic copies: [Spent Nuclear Fuel Pools in the U.S.: Reducing the Deadly Risks of Storage. Nuclear Regulatory Commission \(NRC\) states the waste may need to be stored at current sites indefinitely.](#) NRC documents provide data that indicate thin storage containers can fail [16 years after a crack initiates.](#)

Maintenance, repairs and upgrades are being deferred. Longer periods between inspections. Emergency plans not updated. Flooding and other recommendations from Fukushima Lessons Learned not implemented. Davis-Besse's shield building continues to crack. Our committee has submitted a 4-page paper with hyperlinked references to problems at Davis-Besse and Perry and maintenance deferrals and exemptions given by the NRC. NBC NEWS/AP 3-15-19: [Nuclear industry pushing for fewer inspections at plants.](#)

FirstEnergy is dishonest. Strong legal objections to FirstEnergy Solutions' restructuring plan were filed by the U.S. Securities and Exchange Commission, the NRC, FERC, U.S. EPA, the federal bankruptcy court's U.S. Trustee, Ohio Consumers' Counsel, and the Environmental Law and Policy Center. The court has rejected the plan. The court also denied FirstEnergy a bonus plan that excluded union members. The Environmental Law and Policy Center challenged FirstEnergy Solution's plan to not fully fund its Decommissioning Trust. FirstEnergy "competes" by pushing legislation for a wind setback, then wants a bailout due to their failure to modernize like other utilities have done.

How long can you drive an old car? Davis-Besse is operating past its 40-year engineered lifespan. Nuclear reactors have a problem that old cars don't – weakening of concrete and steel by continuous radioactive bombardment. Lake Erie is a critical resource for drinking water, recreation and livelihoods for millions of people. Even a "small" accident could wreak billions of dollars in property damage, with life-altering health consequences for tens of thousands. FirstEnergy's Beaver Valley reactors sit only 4 miles east of the Ohio border in Pennsylvania. In HB 6 proponent testimony, it was noted that the Bennett Carroll Salem School District superintendent could not be at the hearing because he was attending an evacuation drill at Perry. No evacuation drills or potassium iodide tablets are needed for solar and wind. Nor are they terrorist targets, like the Indian Point nuclear reactor that the 9-11 terrorists flew over and had considered targeting.

FirstEnergy is already getting a \$200 million per year bailout from the PUCO. This has caused a 5% increase in FirstEnergy electric bills. PJM, the regional authority over electricity capacity, says nuclear is not needed to ensure electric supply in Ohio and surrounding states. Forbes also says the same in an April 20 article, ["State Nuclear Subsidies Not Needed."](#)

SO WHAT SHOULD THE OHIO LEGISLATURE DO?

Develop an energy policy. "All of the above" is not an energy policy. Bailouts put off the inevitable, while delaying the solution.

Promote sustainable energy. The Ohio legislature must remove obstacles to wind and solar. **This will lower electric bills.** Wind is available in Ohio for less than 3 cents per KWh. Utility scale solar is available in Ohio for less than 4 cents per KWh. Efficiency saves electricity at about 1.7 cents per KWh. Nuclear's cost before profit is estimated to be between 6-7 cents. Wind and solar generation distributed around Ohio will distribute tax revenues more fairly than the current central generators.

Create jobs by advancing renewables. There are now more jobs in solar and wind than in nuclear or coal. Jobs in solar energy are growing all across Ohio. Wind was booming across Ohio until 2014 when Ohio legislators gave wind the harshest setback regulations in the nation. Ohio Power Siting Board applications for new solar in 2018 were 7 times the total existing solar in Ohio.

Thank you to the committee for listening to me here today.