March 4, 2025

Ohio Sub. S.B. No. 2
Interested Party Testimony

Chair Chavez, Vice Chair Landis, Ranking Member Smith, and members of the committee,

My name is Patricia Marida and I am a coordinator with the Ohio Nuclear Free Network.

S.B. 2 has its definitions of renewable energy and green energy quite wrong. These new definitions in S.B. 2 are arbitrary and are different from the well-defined and commonly understood meaning of these words. S.B. 2 is attempting to relabel all dirty, expensive, and polluting energy sources as renewable and green. Mr. Orwell wrote a book about this.

The definition of renewable energy is energy from a source that, **once the infrastructure is built, the fuel is free.** These sources include wind, solar, hydropower, geothermal, and tidal. Free fuel means less expense, less intrusion into the environment ***for*** the fuel, and can also mean recyclable infrastructure.

**There is nothing "green" about nuclear power except the subsidies and competitive advantages** that nuclear speculators hope to receive. Nuclear speculators don't have to generate the first watt of electricity in return for this largesse. Coal, oil, gas, and nuclear cannot compete with increasingly lower-cost renewables in a free market. They depend on being propped up with competitive advantages in the form of federal and state taxpayer subsidies, along with higher ratepayer charges and other politically-generated competitive advantages.

**Electricity from new, smaller nuclear reactors will be more expensive** than from large reactors - due to simple advantages of scale. **Nuclear electricity is now, and will continue to be, 3 to 5 times more expensive** than wind and solar. Nuclear costs are going up, while renewables are going down.

**How did nuclear power manage to get a reputation of low or no carbon emissions?** They simply leave out the cost of obtaining nuclear fuel, of building reactors, and of attempting to isolate radioactive nuclear waste for the next million years. Unmentioned is the cost of uranium mining, milling, & enrichment; nuclear fuel fabrication; building of reactors; transportation of materials; cleaning up radioactive spills and accidents, billion$$ in worker injury compensation, uncounted billion$$ in public health tolls, and Superfund cleanup sites are not mentioned when talking about costs, energy used, and carbon generated. Radioactivity lasts forever. Everything it touches becomes radioactive, including you and me.

**New nuclear reactors, dubbed as "small", "modular", or "advanced", don't exist now**, and they won't exist for a decade or more, if ever. **Factories that make modular reactors don't exist.**

**No guards or evacuation zones are needed for wind turbines and solar panels.** With growing climate and political instability, nuclear power is becoming even more dangerous.

**Coal cannot be made "clean"** by: a) failed attempts to capture greenhouse gases as coal burns; b) building expensive new pipes to transport what is captured for long distances; c) attempts to inject carbon dioxide underground where it will not stay for long due to the nature of earth movement and cracks in rocks; and d) not to mention the suffocation of people and animals in undetectable leaks above ground such as the incident in Satartia, Mississippi in 2020.

**Energy efficiency, wind, and solar are cheap, quick, safe, popular, and proven.** Renewables now generate much more power than nuclear reactors. Our energy future is renewable, not radioactive.

***Nuclear is a dirty word:*** *The U.S. Department of Energy (DOE) has dropped the word "nuclear" from all its sites and as much as possible from its language. They refer to new nuclear reactors as Small Modular Reactors (SMRs).*