Submitter: Russell Johnson

On Behalf Of:

Committee: House Committee On Climate, Energy, and Environment

Measure: HB2215

OPPOSE 2215

Dear House Committee on Energy and and Environment, Nuclear Energy creates radioactive material.

It is not safe or responsible to leave this for our posterity. What is the definition of "finding that an adequate repository for the disposal of the high-level radioactive waste?"

The half life of this radioactivity reminds me of our national debt. It is irresponsible to leave this for future generation.

"During the fission process, two things happen to the uranium in the fuel. First, uranium atoms split, creating energy that is used to produce electricity. The fission creates radioactive isotopes of lighter elements such as cesium-137 and strontium-90. These isotopes, called "fission products," account for most of the heat and penetrating radiation in high-level waste. Second, some uranium atoms capture neutrons produced during fission. These atoms form heavier elements such as plutonium. These heavier-than-uranium, or "transuranic," elements do not produce nearly the amount of heat or penetrating radiation that fission products do, but they take much longer to decay. Transuranic wastes, sometimes called TRU, account for most of the radioactive hazard remaining in high-level waste after 1,000 years." US NCR

"Radioactive isotopes eventually decay, or disintegrate, to harmless materials. Some isotopes decay in hours or even minutes, but others decay very slowly. Strontium-90 and cesium-137 have half-lives of about 30 years (half the radioactivity will decay in 30 years). Plutonium-239 has a half-life of 24,000 years" US NCR

HB 2215 is referring to Nuclear Fission, not Nuclear Fusion.

"Fusion is often promoted as the green energy source of the future, generating carbon-free power by fusing together hydrogen isotopes in the same way as the Sun. Getting the isotopes to meld requires extreme temperatures and every fusion reactor built so far has consumed more heat than it produces. ITER is designed to show net energy output can be achieved, but it comes at a high cost—estimates start at about \$25 billion for its construction—because of the complexity of the reactor and the huge superconducting magnets required to keep the hot gases in place. A partnership between the United States, Europe, Russia, India, Japan, China, and South Korea, ITER is scheduled to start operations in 2025, although it won't be fueled with the

power-producing isotope tritium until 2035." Science Insider/ Physics

As a young family with 2 small children, when Chernobyl melted down almost 40 years ago it was terrifying for us to learn that the milk that we were buying at the store for our children was unsafe because of the radioactive fallout that came over Oregon.

We had to search for milk to give our children to drink that was safe.

Please Oppose 2215