

Testimony – SB 177, Micronuclear Reactors Pamela Miller, Executive Director and Senior Scientist, and Courtney Owen, Civic Engagement Coordinator, Alaska Community Action on Toxics

Thank you Chair and Members of the Senate Resources Committee for considering our perspective on SB 177. Alaska Community Action on Toxics (ACAT) is a statewide non-profit environmental health and justice research and advocacy organization based in Anchorage. We oppose SB 177 because it allows that so-called micronuclear reactors are not subject to certain nuclear reactor siting and permitting regulations in Alaska and may be constructed "on land that has not been designated by the legislature."

There are serious health and safety concerns with micronuclear reactors, and they are a false solution for our energy needs and the climate crisis. Nuclear power is destructive throughout its life cycle from the mining of uranium which is done predominately on Indigenous lands through the enrichment process to the untenable problems of disposal of radioactive waste.

On Jan. 6, 2022 the Nuclear Regulatory Commission determined that Oklo failed to provide sufficient information on topics such as potential accidents and certain safety systems. Microreactor vendors are pushing to reduce (or even eliminate entirely) personnel such as operators and security officers. In a report about the safety of advanced nuclear reactors, the Union of Concerned Scientists (UCS) determined that leaving the microreactors without human guards is not safe. Even a very small reactor contains enough radioactive material to cause a big problem if it is sabotaged, and none of these reactors have demonstrated they are so safe that they can function without operators. **A single Oklo micro-reactor core would contain about 10 nuclear weapons' worth of nuclear and radioactive material.** According to the UCS report: "Nuclear technology has fundamental safety and security disadvantages compared with other low-carbon (renewable) sources. Nuclear reactors and their associated facilities for fuel production and waste handling are vulnerable to catastrophic accidents and sabotage, and they can be misused to produce materials for nuclear weapons."

It is disturbing that the primary proponents of this are representatives from the nuclear power industry who have a vested interest. Opening the door to nuclear power again in Alaska is unwise and dangerous. We are still addressing the radioactive legacy of massive radioactive contamination from the "experimental" SM1A nuclear reactor at Fort Greely that was a colossal failure. As the Union of Concerned Scientists noted in their recent report evaluating modern nuclear technologies, including micronuclear reactors: "Advanced" Isn't Always Better.