February \*\*, 2021

By email to: VTR.EIS@nuclear.energy.gov

Mr. James Lovejoy, Document Manager

U.S. Department of Energy

Idaho Operations Office

1955 Fremont Avenue, MS 1235

Idaho Falls, Idaho 83415

Re: Public Comments for draft Versatile Test Reactor Environmental Impact Statement (EIS-0542)

Dear Mr. Lovejoy:

The need for a $3 to $6 billion Versatile Test Reactor (VTR) is ill defined and seems to rest primarily on Department of Energy (DOE) assertions. DOE claims to need a fast-neutron reactor for experimentation, but this need is merely asserted, not demonstrated. DOE suggests the only way to satisfy the unproven need is to construct and operate this particular reactor. If DOE ever establishes a need, an alternative would be to modify existing facilities – not build new ones.

While fuel for all nuclear reactors is dangerous, the proposed use of uranium and plutonium is especially concerning. The proposed use of plutonium fuel presents typical risks of contamination and hazardous waste, but also the additional danger of nuclear proliferation and the threat of terrorism. Plutonium is a key component of nuclear bombs, and its proposed use as fuel for the VTR will set a dangerous precedent for the nuclear energy industry in the future.

The massive amount of fuel that would be used over the lifetime of the VTR is also of concern. Based on the draft EIS, an estimated 34 metric tons of plutonium would be fabricated into fuel over the 60-year lifespan of the reactor. Processing this much plutonium will lead to an elevated risk of worker exposure and increased environmental impacts, and could result in plutonium being stranded at the fuel fabrication site at the Idaho National Laboratory (INL) or the Savannah River Site (SRS) if the project were halted.

The transportation of fuel (uranium and plutonium) is a massive risk to public safety. If the fuel were sourced domestically, thousands of miles of overland transportation would be required to deliver it to either SRS or INL for fabrication, and (if produced at SRS) from there to the VTR site at INL.

If the VTR were to be constructed and operated at INL, the burden of all waste produced from operations would fall on the shoulders of current and future Idahoans. An estimated 34 metric tons of plutonium, and 120 metric tons of uranium would be needed to fuel the VTR over its lifespan.

The amount of transuranic waste (TRU) produced as a result of fuel fabrication and operation of the VTR could be as much as 24,000 cubic meters. Disposal of this waste in the Waste Isolation Pilot Plant (WIPP) in New Mexico will unnecessarily challenge the legal volume cap of WIPP and could negatively impact TRU disposal plans by DOE.

As DOE has not clearly demonstrated the need for the Versatile Test Reactor as required by the National Environmental Policy Act (NEPA), this proposal must be stopped.

Thank you for your careful consideration of my comments.

Sincerely,