

Reasons the SMR sections of the H 3309 energy bill should be eliminated

Tom Clements, Director, Savannah River Site Watch, March 18, 2025, Intervenor for Friends of the Earth in VC Summer nuclear reactor construction debacle, 2008-2019 tomclements329@cs.com, cell 803-240-7268

- The South Carolina Nuclear Advisory Council (NAC) is not a research, economic or environmental entity, rather it is a biased nuclear industry promotional entity that has repeatedly exhibited poor judgement. It should have no role in energy policy decisions. The NAC has no experience in nuclear reactor construction or operation and thus it has no basis for deciding about highly technical, costly Small Modular Reactor (SMR) projects. The track record for the NAC is abysmal and the council done a disservice to the people of South Carolina. The NAC supported the VC Summer nuclear reactor construction project and the DOE's plutonium fuel (MOX) projects until the bitter end, despite repeated warnings for years before termination of the projects. We can expect a repeat of past behavior if they are officially involved in SMR decisions.
- Small Modular Reactors don't exist and are not licensed by the NRC. SMRs exist only as concepts, and unclear when they can, if ever, be licensed or constructed. The first SMR project, by NuScale, failed in November 2023. No action should be taken in South Carolina until SMR licensing, construction and safe and cost-efficient operation elsewhere is proved.
- No valid cost estimates exist for SMRs and there is no schedule for their construction. Claims of SMRs being cheap and quick to build are unsubstantiated and illusory. Jumping into an imaginary SMR project could result in unsustainable cost increases as seen by the VC Summer nuclear reactor construction debacle. Who would make South Carolina a SMR guinea pig while customers are forced to take the risk?
- Indications are that SMRs produce more high-level nuclear waste (spent fuel) per kWh than large nuclear reactors, as determined by researchers at Stanford University in 2022 (https://news.stanford.edu/stories/2022/05/small-modular-reactors-produce-high-levels-nuclear-waste). Spent fuel already at the seven reactors sites in South Carolina already has no place to go as the legally required geologic disposal repository does not exist and a site for such a facility is far from being identified.
- Putting the ratepayers on the hook for a SMR "pilot project" should be rejected as such a R&D project must not be taken on by SC utilities or ratepayers. This part of the bill is actually worse than the Baseload Review Act (BLRA) passed in 2007 as it potentially puts the ratepayers on the hook for all SMR costs. Such a SMR "pilot project" belongs in the hands of the Nuclear Regulatory Commission or US Department of Energy and not with the South Carolina Public Service Commission, Dominion Energy, Duke Energy or Santee Cooper, all of which have zero experience with SMRs.