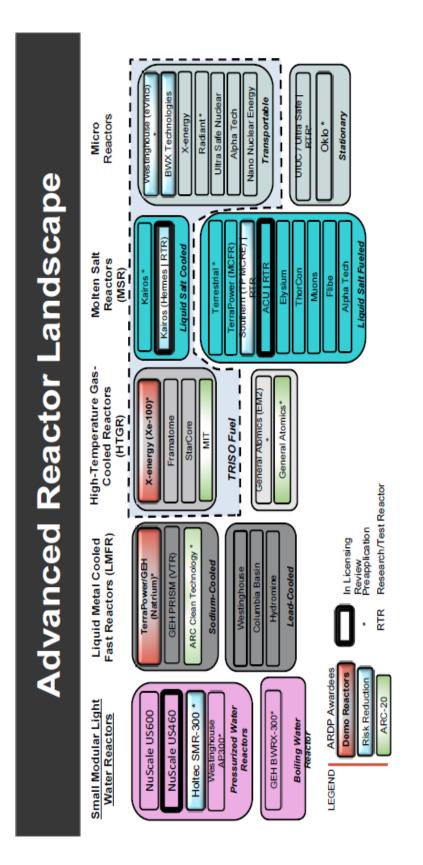


Savannah River Site Watch

Reasons the Anti-Ratepayer SMR section of the H 3309 energy bill should be eliminated

Tom Clements, Director, Savannah River Site Watch, March 28, 2025; Intervenor before SC PSC for Friends of the Earth in VC Summer nuclear reactor construction debacle, 2008-2019. tomclements329@cs.com, cell 803-240-7268

- Small Modular Reactors (SMRs) don't exist and are not licensed by the NRC. SMRs exist only as concepts, and it's unclear when they can, if ever, be licensed or constructed. The first SMR project, by NuScale, failed in November 2023. <u>No action should be taken in South Carolina until SMR licensing, construction and safe and cost-efficient operation elsewhere is proved</u>. At most, a study about SMR status & viability may be appropriate. (See NRC graphic of SMRs on other side or at: https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML25063A278)
- 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. Forcing South Carolina electricity customers to become SMR guinea pigs by placing the risks of an experimental nuclear reactor project on their backs is bad policy.
- 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 by the legislature in 2007 as it potentially puts the ratepayers on the hook for all SMR costs even in the event of project failure. Such a SMR "pilot project" belongs in the hands of the Nuclear Regulatory Commission or U.S. 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.
- 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-nuclearwaste). Highly radioactive spent fuel at the seven commercial reactors 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.
- 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. The NAC 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 projects. The track record for the NAC is abysmal and the council has done a disservice to the people of South Carolina. The NAC supported the waste of billions of dollars on the VC Summer nuclear reactor construction project and the DOE's plutonium fuel (MOX) project at SRS until the bitter end, despite repeated warnings for years before termination of the projects. We can expect a repeat of past behavior if the NAC is officially permitted to be involved in SMR decisions that impact ratepayers.



The U.S. Nuclear Regulatory Commission Approach to Modeling and Simulation of Advanced Non-LWRs; Preparing for Today's Nuclear Renaissance ----- 2025 Update ----MOOSE International Workshop March 10, 2025 https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML25063A278

