

Remarks from the State of
South Carolina
to the Blue Ribbon Commission on America's Nuclear Future
October 18, 2011
Atlanta, GA

Members of the Commission, South Carolina appreciates the opportunity to comment on the BRC's draft reports. I am Karen Patterson, a member of the South Carolina Governor's Nuclear Advisory Council, but in this roundtable I will give you an overview of the significant concerns not only of GNAC, but also of the South Carolina Department of Health and Environmental Control, Aiken County government, and the Savannah River Site Community Reuse Organization. Each of these entities will provide written comments that flesh out the topics I can only touch on here. Most of our remarks relate to the immediate need for a high level waste repository and to defense high level waste and research reactor used nuclear fuel at the Savannah River Site (or SRS).

As you may remember from my presentation in January in Augusta, South Carolina has a unique perspective on civilian used nuclear fuel and defense

high-level waste and used nuclear fuel. We have a commercial low-level waste disposal facility, and seven commercial reactors at four sites, each storing their used fuel. In the last month two utilities completed the last step before being issued licenses by NRC to construct and operate 2 additional nuclear reactors just across the Savannah River from Aiken County, and 2 more in central South Carolina.

Defense waste has been generated at the SRS since 1954, resulting in approximately 3,000 canisters of vitrified waste and 36 million gallons of liquid high-level waste awaiting vitrification prior to disposal in a geologic repository. SRS is the location of H Canyon, the only operational reprocessing facility in America.

For years SRS has been receiving and maintaining foreign and domestic research reactor used fuel and the nation's excess plutonium, all brought to the SRS expressly for treatment per DOE's disposition plans. DOE has since abandoned those plans for the treatment of much of this material. We are most concerned about the fate of these nuclear materials that must now remain at SRS until DOE identifies, develops, and funds alternate disposition plans.

Let me preface South Carolina's remarks by first stating that, because of our experience with these orphaned materials, South Carolina is skeptical of the Government's commitment to truly manage nuclear wastes, (as opposed to continuing to kick all decisions down the road). Secondly, while we understand that the consideration of Yucca Mountain as the first national repository is not within the Commission's purview, I must state unequivocally that South Carolina believes that the decision to ignore the Nuclear Waste Policy Act and abandon Yucca Mountain as a repository is illegal. In a separate venue, the State, Aiken County and others are pursuing this conviction.

However, because of that decision, the Commission has been charged with coming up with solutions to manage nuclear wastes absent the repository, and we provide you with these comments on that topic in good faith. We agree with your analysis of where the Nation is today in terms of managing its nuclear wastes. The remainder of my comments relate to the future management of the nuclear materials orphaned at SRS by the abandonment of Yucca Mountain.

Regarding recommendation 1, for consent-based, standards-based, transparent, and science-driven siting decisions for nuclear waste.

We agree in part, and ask that you consider expanding the recommendation to speak directly to the regulatory authority of states. We believe that states need direct decision authority over proposed activities within their state, and that this authority should be in the form of court-enforceable agreements. We suggest that the Commission specifically articulate this as part of Recommendation 1.

Regarding Recommendation 2, for a single-purpose organization to manage the transportation, storage and disposal of nuclear wastes.

Again, we agree in part, but suggest that the Commission also recommend that, because the volume of defense waste is much smaller than that of commercial fuel, the two should be considered separately. We believe that by considering it separately, the DOE waste, which for a variety of reasons is harder to manage in interim storage than commercial fuel, could be dispositioned sooner, reducing risk to citizens of those states hosting the defense waste, and saving taxpayer dollars.

Regarding Recommendation 3, for access to the Nuclear Waste Fund and to revenues generated by nuclear waste management fees.

We agree.

Regarding Recommendation 4, to promptly develop one or more permanent geologic repositories.

We agree in part. More than one repository will be needed, but we must point out that Yucca Mountain has been proven scientifically as an acceptable repository, and its opening should be pursued in parallel with siting a second repository. We respectfully ask the Commission to include the continued pursuit of Yucca Mountain as the first geologic repository in Recommendation 4.

Regarding Recommendation 5, to promptly develop consolidated interim storage facilities.

We agree in part. SRS is a likely candidate for an interim storage facility. It is owned by DOE, already stores defense waste, has a trained nuclear workforce, and is in a nuclear-centric community. However, because of DOE's repeated proven ability to transfer wastes to SRS and proven inability

to remove wastes from SRS, South Carolina cannot support this recommendation without guarantees in the form of court-enforceable penalties for failure to meet interim storage milestones, and without measurable parallel progress on siting permanent disposal facilities. We suggest the Commission link the development of interim storage facilities to court-enforceable penalties, to measurable milestones in the development and operation of permanent disposal repositories, and to removal of wastes from interim storage, particularly those defacto interim storage facilities such as SRS.

Regarding Recommendation 6, for long-term research, development, and demonstration on advanced reactor and fuel cycle technologies, and for the development of a nuclear workforce.

We agree. We suggest that the Commission make a specific recommendation regarding the preservation and use of H Canyon as a necessary part of any RD&D program.

Regarding Recommendation 7, to provide international leadership to address global non-proliferation concerns.

We understand the intent of this recommendation, but do not support it.

DOE has cited the country's leadership in non-proliferation as a reason not to continue to process the defense waste at SRS through H Canyon. The motive is good, but I have to ask, "Realistically, how many nations actually follow our lead?" Much of the currently orphaned material at SRS was brought here specifically for treatment in H Canyon because that is the only existing disposition method.*

We should not abandon the only proven way of dispositioning this material to support a discredited diplomatic policy on non-proliferation. To do so is to favor unrealistic expectations regarding the behavior of other nations over the welfare of citizens of the United States.

DOE has stated that it is awaiting recommendations from the BRC before resuming processing of research reactor used nuclear fuel in H Canyon.

Absent a statement from the BRC that specifically calls for the immediate disposition of this fuel by processing in H Canyon, South Carolina believes that DOE will not act and that the fuel will remain indefinitely in South Carolina. South Carolina urges the BRC to amend Recommendation 7 to acknowledge that H Canyon is a national treasure, and to state clearly that H

Canyon should be used to complete the original plan of dispositioning all nuclear materials brought to SRS for that express reason.

My final comment addresses transportation. Although the BRC does not make a recommendation specific to transportation, the reports explicitly acknowledges that transportation will be a large component of any national disposal plan, and therefore, must be considered from the outset. The radioactive materials under consideration by this Commission have been safely transported across the country for many years. The outstanding safety record provides confidence the system works. In order to reassure the public of the continuation of that excellent safety record we ask the Commission to consider a recommendation for strong state oversight of transportation activities.

Thank you for allowing us the opportunity to give you this overview of South Carolina's concerns regarding the Commission report.

*PUREX is not a proliferation concern for RRUNF: Pu is not separated and HEU is blended down.