

**Blue Ribbon Commission on America's Nuclear Future
Reactor and Fuel Cycle Technologies Subcommittee
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Washington, DC**

**Testimony by
Clint Wolfe, Citizens for Nuclear Technology Awareness**

Good afternoon:

My name is Clint Wolfe. I am the executive director of Citizens for Nuclear Technology Awareness (CNTA) in Aiken, South Carolina, home to the Department of Energy's Savannah River Site (SRS). CNTA is a citizen based charitable corporation dedicated to educating the public about all things nuclear. I also serve as the Chairman of the Public Policy Task Force for the Carolinas Nuclear Cluster (CNC).

With respect to the two questions that have been posed, specifically,

- 1) What role should communities and governments play, if any, in the development and demonstration of new nuclear technologies?
- 2) With respect to nuclear reactors and fuel cycle facilities, what are the key safety, environmental and security concerns for local communities, and how should these be addressed.

I offer the following observations based on examples from the recent history of Aiken and the SRS.

Many communities are already heavily invested in federal nuclear initiatives either through their historical role in the weapons complex or in the handling of nuclear materials. If these communities want to participate in new nuclear technologies they should be considered because they already provide the nuclear industry with strong community support, and a workforce familiar with nuclear processes. Many of these communities have already put in place infrastructure that would have to be replicated at very high cost in a "green field" setting.

An educated and supportive local citizenry depends upon frequent and effective communication and its importance cannot be underestimated as misinformation is often used to thwart new nuclear initiatives. There are, however, some caveats about community support in former nuclear weapons related communities. We should not expect new missions to be welcomed with open arms if they introduce uncertainty about completing the current missions. Clean up of existing materials at these sites should not be abandoned, postponed or delayed. Also, we cannot expect these experienced communities to support new technology developments without commitments to manage wastes as they are generated.

SRS has a Citizens Advisory Board which is very effective in maintaining good communication between the site and potentially affected communities and on a state level, frequent presentations are made to the Governor's Nuclear Advisory Council about matters at SRS. CNTA often provides letters to the editor and opinion editorials related to matters at SRS and the nuclear industry in general.

The degree to which local communities and their governments play a role in the future will depend to some extent on the models used to develop new nuclear technologies. For example, a pure federal government program would entail a different sort of participation by locals than a public/private or a strictly private initiative. An illustration of local government participation in Aiken, SC, is the Center for Hydrogen Research (CHR). Located in a research park developed by the community to allow private companies to benefit from a presence near the Savannah River National Laboratory, the CHR construction was financed by a bond levy by Aiken County. The Department of Energy and private companies can conduct research there in any combination of public/private arrangements.

The educational systems in and around these communities can also be significant players. Again, using Aiken as an example, eight regional nuclear employers participated in a workforce development study financed by the local Community Reuse Organization (CRO). This study pointed out the impending shortfall of nuclear workers in the area as 50% of the workforce would be retirement eligible in the next 5-10 years. Aiken Technical College had already initiated a radiation protection technology program and recently graduated 24 certified personnel with another 150 in the pipeline. Other nuclear training programs at educational institutions on both sides of the Savannah River are under development.

The University of South Carolina-Aiken, recently selected by US NEWS as the number one regional college in the South and among the very best in the country, was also a party to the workforce study and tailors its offerings with the needs of a nuclear workforce in mind. The University of South Carolina-Columbia recently initiated a new graduate program in Nuclear Engineering and South Carolina State University, an HBCU in nearby Orangeburg, SC, has had recent graduates from its new undergraduate nuclear engineering program. This is the only accredited HBCU nuclear engineering program in the country.

From the microcosm of Aiken, let me also emphasize regional commitment to nuclear industries. The South Carolina Department of Commerce has joined forces with North Carolina to create the Carolinas Nuclear Cluster. This organization is promoting workforce development, small business opportunities, and is supporting education initiatives to provide the workforce of the nuclear future. An economic impact study for the Carolinas was commissioned by the Cluster and performed by Clemson University which illuminated the huge economic impacts of the nuclear industry on the Carolinas. The Carolinas and Georgia represent much of the focus of the nuclear renaissance and these three states intend to pursue the development of new nuclear technology. This is a natural consequence of resources such as the SRS, the Savannah River

National Laboratory, the Institute for Nuclear Power Operations (INPO) in Atlanta, GA, the Electric Power Research Institute (EPRI) in Charlotte, NC, and the nuclear fuel division of Westinghouse Electric Corporation in Columbia, SC. The engineering, operations and maintenance expertise existing at SRS and 16 (soon to be 20) nuclear power plants in the three states is truly impressive. The aforementioned educational institutions in SC as well as those in NC and GA bring strong educational resources to the region.

SC obtains more than 50% of its electricity from 7 nuclear plants operated by SCANA, Duke, and Progress Energy companies. In GA, Georgia Power (Southern Company) is building two new units at Plant Vogtle just across the Savannah River from SRS. Vogtle units 1&2 have been operating there since the 1980's. In addition, Georgia has two other operating units and North Carolina has a total of five.

At the risk of "tooting our own horn," I think that the experience in and around Aiken and the region is illustrative of how communities and local governments can and should play roles in the development of new nuclear technologies.

In particular, there is considerable community interest in the creation of an Energy Park at the Savannah River Site which could be exceptionally well suited to development and demonstration of new reactor designs, flow-sheets for recycling used fuel and fabrication of new fuel systems. The Mixed Oxide (MOX) Fuel Fabrication Facility is already under construction there. The talent, the workforce, the know-how and the community support are unmatched.

Environmental and security concerns with new initiatives are going to be very similar to what they have been in the past at SRS and they should be dealt with in a similar manner. Safety is the hallmark of work in DOE and in particular at SRS. Our community is familiar with the safety roles played by DOE, NRC and INPO and is therefore, comfortable living amongst so many nuclear facilities. We know that working in the nuclear industry is safer than working in banking, real estate, or staying at home. The attitude that safety is always number one maintains that trust in our communities. Having said that, there are no apparently unique safety issues with these technologies that we have not encountered before, but, if that view is too optimistic, remember that we are never satisfied that we have arrived when it comes to safety. We are always checking and double checking when making changes that can affect safety.

Environmentally, SRS is one of the best characterized sites in the world. Beginning 60 years ago baseline environmental data were obtained and subsequently monitored to fully understand the environmental impacts of operations on the environment. This information has been shared openly with the employees and the surrounding communities, and has contributed to the communities' acceptance of SRS. Nuclear industries and environmental protection are not mutually exclusive. In fact, nuclear industries which require buffer zones to meet their safety and security requirements provide opportunities to enhance the environment, as has happened at SRS. The transformation of the land that was appropriated to build SRS from worn out farmland

back in the early 1950's to an emerald green wildlife sanctuary today is truly amazing. Environmental impacts should be positive ones-not negative ones.

Security at SRS has been effective and we wouldn't expect that to change for any of these new missions. New security challenges may accompany the business model chosen for the work, i.e., public, private, or some combination of the two, but if handled as well as has been done at SRS there will be no security issues that can't be successfully resolved.

In closing, let me say that the precedent that you are establishing by welcoming citizens' input is greatly appreciated and it is our sincere belief that illustrations of successful community involvement such as in the Carolinas and Georgia can beneficially inform your ultimate recommendations.

Two final thoughts:

First, if new nuclear initiatives are sited in communities that are comfortable with nuclear issues, there will be many examples of beneficial participation by the communities and local and regional governments.

Second, early, open and frequent communication between the nuclear industry and the host communities will ensure acceptance of the industry by the community.

Please accept our invitation to visit Aiken and experience the local community and governmental involvement first hand.

We are at your service. Thank you for the opportunity to express our views.