



Friends of the Earth

Comments to the Blue Ribbon Commission

Tom Clements

Atlanta, Georgia

October 18, 2011

I would like to focus on two things in my comments – the recommendations on “consolidated interim storage” and “consent-based approach to siting.”

But, I would first like to be clear that I believe that the draft recommendations by the Blue Ribbon Commission do not place appropriate emphasis on the removal of spent fuel from cooling pools for placement of such fuel into dry cask storage. The vulnerability of spent fuel in pools - especially in boiling water reactors - to station blackout, seismic events or terrorist attacks mandates a top focus on getting the fuel out of the pools and into on-site facilities with increased protection and security.

Second, I would like to applaud the BRC for using the legally defined “spent nuclear fuel,” in keeping with both the law and use by other agencies such as the Nuclear Regulatory Commission and the Environmental Protection Agency. DOE stands apart in its use of the extra-legal term “used nuclear fuel,” which is not defined in the Nuclear Waste Policy Act and which is being used for political reasons as part of advocacy of reprocessing. I submit for the record an August 29, 2011 letter from DOE’s Office of General Counsel in which it is admitted that the term “used nuclear fuel” is not legally defined and is being used to make a claim that it can be reprocessed.

Consolidated Interim Storage

We oppose “consolidated interim storage” and believe that the emphasis must remain on securing spent fuel and high-level waste at operating reactors and DOE sites and that spent fuel should be moved only once. “Interim” sites will result in more worker exposure risk during spent fuel handling and transfer, an unnecessary increase in transportation risk, an increase in the number of storage sites as long as reactors are operating, a multiplication of risk via concentrating radioactive materials at one or more sites and increased handling and storage costs.

The draft report overlooks a critical aspect of potential motivation by special interest groups to site an “interim” facility – that such a facility could well be a foot in the door for locating a reprocessing facility in the future. This issue is of concern regarding DOE sites such as the Savannah River Site. A recently released SRS “strategic plan” clearly indicates a long-term interest in the reprocessing (or processing) of spent nuclear fuel and it is clear that some will try to leverage spent fuel storage at SRS into a reprocessing facility. As reprocessing yields separated plutonium and associated elements and results in a host of radioactive waste

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streams, including release of radioactive gases into the atmosphere, there is little interest in South Carolina to receive yet more radioactive waste which would present public health and environmental risks and which would result in large amounts of waste being dumped or indefinitely stored on site. The BRC recommendations must not end up being the vehicle for full-scale reprocessing when that is not the intention and care must be taken in the BRC's final recommendations to make sure communities and states are protected from the back-door way of siting a reprocessing facility.

Siting Requirements

When discussing the criteria for siting a radioactive storage facility, the draft report seems to focus only on the requirements for siting a geologic repository. Criteria also must be put in place concerning any "interim" facilities lest the situation be exploited by special interests,

Given that an "interim" site could well be the vehicle to later locate a reprocessing plant and that the National Environmental Policy Act does not allow "segmentation" of important decisions such as on reprocessing, the BRC must take into account the ramifications of locating an "interim" site at a facility where interest has already been expressed in reprocessing and in reactors which could theoretically use a small amount of the materials contained in irradiated fuel. Thus, the siting of an "interim" facility simply cannot be separated from plans related to reprocessing, as reflected by the SRS strategic plan, for example. The criteria for selection of any interim sites should exclude sites which have expressed interest in reprocessing.

The criteria of a local community having a strong voice in the location of a storage facility has validity, but this requirement is subject to abuse given the power of contractors and special interests. No local community should be able to call the determining shot on a siting decision negatively affecting those in the area and region. A community group or a group claiming to represent a community must not be allowed to dictate decisions concerning an interim storage or geologic facility and this must be reflected in the BRC recommendations.

Part of the criteria for siting of any "interim" facility must be the guarantee that all of the waste will leave the interim site, which would preclude reprocessing of fuel taken in for an "interim" facility.

Sites with existing high-level waste for which a disposal facility is being sought and which were never intended for long-term storage should be excluded for receipt of more high-level waste of any sort, including spent fuel and DOE HLW. This would mean that DOE sites which are on a clean-up track would not be made subject to taking on an additional radioactive waste burden.

Finally, public interest group participation in siting decisions must be assured and such "stakeholder" groups must represent those who do not have a financial stake in any siting decision. Environmental groups involved in DOE and nuclear issues must be a formal part of any decision-making process and not sidelined as DOE often attempts to do.

Nuclear waste threat looms for S.C.

In 2007, the Legislature closed the Barnwell low-level radioactive-waste facility to unconstrained national access. The hard-fought victory seemed to have ended indiscriminate nuclear dumping in our state, but it may have only been a lull in the fight.

A much larger nuclear waste threat is looming. Much of the nation's 65,000 metric tons of radioactive spent fuel now stored at reactor sites across the country could be brought to South Carolina for "interim" storage and reprocessing. The prospect of becoming the new Yucca Mountain spent-fuel dump surely will be rejected by many South Carolinians, but the federal government's plans threaten to leave us holding the nuclear waste bag nonetheless.

A blue ribbon commission, established by President Obama in January 2010 after the unraveling of plans for a geologic repository at Yucca Mountain, is charged with recommending the fate of spent fuel. Those recommendations, expected to be issued today, also will address the deadly high-level waste at the Department of Energy's Savannah River Site near Aiken.

Draft subcommittee reports were issued in June, and a central recommendation, certain to be embraced by the full commission, is to "establish one or more consolidated interim storage facilities" for spent fuel. Given its uncertain future as federal funding decreases, SRS is now squarely in the nuclear crosshairs to become an "interim" site, with special interests poised to exploit this situation.

Gov. Dick Riley warned back in 1982 during debates over nuclear waste policy: "There is a basic law of political physics that waste tends to stay where it is first put." Despite plenty of evidence to support Riley's Law, some South Carolinians support the "interim" storage option at SRS. Their motivation derives from financial incentives, with contractors earning payment from the Nuclear Waste Fund established for spent fuel disposal. An official with Savannah River Nuclear Solutions, which manages SRS, confirmed in April that interim storage at SRS was being studied, and the idea was pitched by a federal Energy Department official as early as 2009 to the SRS Citizens Advisory Board.

Worse, "interim" spent fuel

storage at SRS could be exploited by proponents of government-financed reprocessing, a dirty, dangerous and costly chemical process designed to remove plutonium from spent fuel — about 1 percent of the content. Reprocessing magnifies the waste problem by turning intact spent fuel into a host of hard-to-manage radioactive waste streams, including contaminated uranium.

During the Cold War, reprocessing of fuel for weapons-grade plutonium at SRS produced 37 million gallons of liquid high-level waste stored in 51 aging underground tanks. An SRS official told the National Academies of Science in 2008 that "Radioactive waste stored in SRS tanks poses the single greatest environmental risk in the state of South Carolina."

It costs nearly \$1 billion per year to immobilize SRS waste in robust containers, and the job won't be finished for two decades. Reprocessing of commercial spent fuel would produce waste of higher radioactivity and larger volume. We can ill afford to manage more such unstable radioactive material at the site.

Reprocessing reuses the small amount of separated plutonium in reactors as mixed uranium-plutonium fuel, or MOX — hence the misleading green-washing claim that reprocessing is "recycling." Huge cost overruns and serious problems in the on-going SRS program to make MOX from surplus weapons are fueling speculation that the program could collapse due to technical, scheduling, cost and nuclear proliferation concerns. With no reactors lined up to use MOX, it's clear that there is no market for this dangerous fuel, yet politicians claiming to be fiscal conservatives protect the \$10 billion program.

It is time to vigorously pursue cheaper and safer options. First, place spent fuel in dry casks at reactor sites; it's the best option now before us and would reduce dangerous storage in pools of water. Second, immobilize the plutonium in existing high-level waste at SRS with the goal of removing it to a geologic repository along with spent fuel.

As the public likely will realize the risks, now is the time for politicians to step forward and demonstrate leadership in defending our state from nuclear dumpers.

Mr. Clements, the 2010 Green Party candidate for the U.S. Senate seat in South Carolina, is Southeastern nuclear campaign coordinator for Friends of the Earth. Reach him at tomclements329@cs.com.



Tom Clements

Guest Columnist



Department of Energy
Washington, DC 20585

August 29, 2011

Mr. Tom Clements
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Dear Mr. Clements:

Thank you for your letter requesting clarification of the Department of Energy's position regarding use of the term "used nuclear fuel" in lieu of "spent nuclear fuel" in certain Departmental communications.

While I appreciate your concerns, use of the term "used nuclear fuel" is a matter of preference on the part of the Department and does not affect the legal definition of "spent nuclear fuel" as provided in the Nuclear Waste Policy Act of 1982 (NWPA). The terms "used nuclear fuel" and "spent nuclear fuel" are at times used interchangeably to describe fuel that has been withdrawn from a nuclear reactor following irradiation, the constituent elements of which have not been separated by reprocessing. Use of the alternative term "used fuel" is one way of representing the potential that such fuel may have value in the future. Regardless of the terminology, the underlying material is the same and will be managed consistent with U.S. law.

Sincerely,

A handwritten signature in black ink that reads "Ben McRae".

Ben McRae
Assistant General Counsel
for Civilian Nuclear Programs

