

Savannah River Site Watch (SRS Watch) Meeting of 21 July 2015, Bonn, with the Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit (*BMUB*) & Ministerium für Wirtschaft, Energie, Industrie, Mittelstand und Handwerk des Landes Nordrhein-Westfalen (*MWEIMH*)

Problems Facing the Proposal to Ship AVR Spent Fuel from the Forschungszentrum Jülich (FZJ) to the U.S.

Department of Energy's Savannah River Site (SRS) in South Carolina

The Savannah River Site (SRS), 800-square kilometers in size, was created in the early 1950s to produce tritium and plutonium for U.S. nuclear weapons. During the Cold War, SRS produced all the tritium and 36.1 metric tonnes of weapon-grade plutonium in five non-power heavy water reactors, all of which have been closed since the late 1980s.

SRS originally had two reprocessing plants and one of those, the aging H-Canyon, continues to operate. Reprocessing at SRS resulted in hundreds of millions of liters of liquid high-level nuclear waste, stored in 51 large tanks. Six of those tanks are now "closed" (filled with concrete). About 4000 large containers of vitrified (glassified) high-level waste have been created, with a final goal of about 8500 containers.

Under U.S. law – the Nuclear Waste Policy Act of 1982 – all commercial and DOE high-level waste is required to go to a geologic repository. This includes the 8500 canister mentioned above and all research reactor spent fuel stored at the site, some of which is being reprocessed.

Thus, <u>SRS is not a disposal site for high-level nuclear waste or spent fuel</u>. AVR spent taken to SRS for reprocessing or storage could not by law remain at SRS. As the U.S. has no geologic repository, any AVR spent fuel taken to the site or any HLW waste streams associated with reprocessing of the AVR spent fuel would "temporarily" remain at the site. The public and the SRS Citizens Advisory Board (SRS CAB) a federal advisory committee, is concerned about nuclear materials being brought into SRS with no exit strategy. The CAB thus opposes the import of commercial spent fuel to SRS.

Key points of U.S. concern regarding the proposal to transport AVR spent fuel to SRS

- 1. DOE kept the AVR and THTR spent fuel import proposal secret over a year after the public was informed about it by public interest groups. The public should have been informed about discussion with FZJ long before any "Memorandum of Understanding" was signed between DOE and FZJ.
- 2. If AVR spent fuel was taken to SRS, there would be no exit of the material from the site as the U.S. has no geologic repository. As SRS is not a high-level waste disposal site, it is totally inaccurate to inform FZJ and German entities that the AVR spent fuel would be disposed of at SRS.
- 3. Addition of the AVR graphite material into the aging HLW tanks at SRS would only slow the urgent clean-up of the site and divert attention from management of waste already at the site. Who will pay for geologic disposal of the AVR spent fuel or any constituents from it?

- 4. Savannah River Site, like all DOE facilities, is not regulated by the U.S. Nuclear Regulatory Commission (NRC). The H-Canyon reprocessing plant and other processing activities would not be monitored by the International Atomic Energy Agency (IAEA). Are German entities aware of this?
- 5. After three Freedom of Information Act (FOIA) requests, DOE reluctantly released a August 2013 memo that clearly determines that the AVR spent fuel in Germany "is not of a proliferation concern." If DOE secretly determined that there is no proliferation concern, why was that kept secret and why has the proposal been presented as a part of a non-proliferation effort?
- 6. Both the U.S. Department of Energy's Office of Environmental Management (EM), the office proposing the import, and the DOE's National Nuclear Security Administration (NNSA) have revealed that they have failed to prepare a "nuclear non-proliferation impact assessment" (NPIA) on the new reprocessing technique being developed by the Savannah River National Lab (SRNL) for the AVR graphite spent fuel. This new reprocessing method may pose a proliferation risk that DOE is refusing to analyze. Why was it only in 2012 that proliferation concerns were raised about the spent fuel?
- 7. DOE has admitted that it has not conducted its own legal analysis of import of the AVR spent fuel and it is unclear if DOE has received truthful legal analysis from the German government. In any event, DOE may be impacted by legal processes before the EU and in Germany.
- 8. Public opinion is against the proposal and at least five newspapers in the states of Georgia and South Carolina have written editorials against the idea. At a public meeting near SRS in July 2014, the majority of the public spoke against the proposal and most of those in favor were affiliated with SRS or contractors at the site, seeking to profit from the deal.
- 9. If FZJ or other German entities are interested in the reprocessing of the AVR spent fuel then Germany could develop that capability domestically, with no assistance from the U.S. Department of Energy.
- 10. If NRW, the BMUB, or the BMBF wants help from DOE about how to manage the AVR and THTR spent fuel in Germany that is certainly acceptable. Likewise, the U.S. could use assistance in its own management of spent fuel and in overcoming the great difficulties it faces in siting a geologic repository.

Conclusion: South Carolina ist kein Entsorgungsplatz für deutschen Atommüll

Tom Clements
Director, Savannah River Site Watch
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