

February 20, 2020

Secretary of Energy Dan Brouillette
Senior Advisor for Environmental Management William White
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, SC 20585

Time to End "Work for Others" Cooperation between the Savannah River Site and JEN (in Germany) on Plan to Import Highly Radioactive German Experimental Reactor Spent Fuel to SRS, for Reprocessing and Possible Disposal in the U.S.

Dear Secretary Brouillette & Senior Advisor White;

I am writing to you to request that the U.S. Department of Energy, via the Office of Environmental Management, terminate technical cooperation between the Savannah River Site and the Jülicher Entsorgungsgesellschaft für Nuklearanlagen (JEN), in Germany, on highly radioactive graphite spent fuel import, reprocessing and disposal.

The Work for Others agreement between SRS and JEN - earlier between SRS and Forschungszentrum Jülich, FZJ - has been extended a number of times and modification number 6 expires on February 29, 2020. We obtained modification number 6 via a Freedom of Information Act request and along with that document we obtained documents indicating interest in importing 33 unirradiated graphite balls and some irradiated graphite material to SRS. According to German contacts, neither of these proposals have the necessary export permits from German authorities.

The option in Germany to export the graphite spent fuel from the Arbeitsgemeinschaft Versuchsreaktor (AVR) reactor, an experimental reactor (not a research reactor) which operated from 1966-1988 and was connected to the electricity grid, is rhetorically still on the table. Construction of a new storage facility at the Jülich site - which I have visited, where I entered the cask storage facility - is garnering increasing scrutiny. As we monitor the matter closely, we are aware that the plan to export 152 large CASTOR casks with the AVR spent fuel has run into strong headwinds in Germany. Any export, likely via the port of Nordenham, would be illegal under German law and if JEN was to move to obtain an export permit, further legal action would be likely and political and public opposition would be significant.



It continues to remain unclear why SRS, via Savannah River Nuclear Solutions and the Savannah River National Laboratory, has interest in reprocessing the graphite material to remove HEU and LEU materials. There are indications SRNL or other contractors want to apply any new reprocessing technique to other graphite fuel around the world but no need for that has been established.

DOE's National Nuclear Security Administration has determined there is no security risk for the material to stay in Germany, which has long planned for the geologic disposal of the stable graphite form. Environmental Management officials initially pitched the proposed import as being considered for nuclear non-proliferation reasons but then shifted to waste disposal as the motivation when the proliferation argument evaporated. It is telling that this isn't a NNSA project.

It appears that neither EM nor NNSA have prepared a nuclear proliferation impact assessment of the risks associated with development of a new reprocessing technique for removal of HEU and LEU from the graphite spent fuel. Failure to prepare this document reveals a serious lapse in DOE's review of projects that hold potential proliferation impacts.

In addition to the AVR spent fuel, SRS has also eyed import of a larger amount of graphite balls from the Thorium Hoch-Temperatur Reaktor (THTR-300 reactor), contained in 305 CASTOR casks in interim storage at a facility in Ahaus, Germany. It's clear that the THTR spent fuel will remain in in storage.

While German law would require a return of any separated highly radioactive graphite, it appears that some want to dump that material and any separated, downblended uranium in the US. The last thing South Carolina needs is more radioactive waste shipped into SRS with no exit path and no estimate of costs to the U.S. taxpayer for of long-term storage and disposal costs.

In conclusion, I request that the US-Germany cooperation on reprocessing the highly radioactive AVR graphite spent fuel be terminated and that DOE work with German authorities, if requested, for secure storage and disposal in Germany of the irradiated material in question.

Sincerely,

Tom Clements

Director, SRS Watch

Jon Clement

Cc: Mr. Michael D. Budney, Manager, SRS

Dr. Vahid Majidi, Director, Savannah River National Laboratory

Various German officials, including members of Bundestag and North Rhine-Westphalia government