

Oppose the Acceptance and Processing of Spent Nuclear Fuel (SNF) Containing US-Origin Highly Enriched Uranium from the Federal Republic of Germany

BACKGROUND

In early 2016, the Department of Energy (DOE) issued a draft Environmental Assessment on a proposal to receive spent nuclear fuel containing US-origin highly enriched uranium from the Republic of Germany for processing and disposition in Environmental Management (EM) facilities at the Savannah River Site. While the CAB has been generally supportive of EM involvement in the non-proliferation and risk reduction goals of the foreign research reactor spent nuclear fuel return program, the German SNF proposal (and the EA) falls short in several key areas of which the CAB has concerns:

1. DOE has not established an adequate and compelling purpose and need for the proposal.
    - A formal memorandum by DOE clearly states that the German Spent Nuclear Fuel “is not a proliferation concern.”<sup>ii</sup> Therefore, bringing it to the US for safeguarding is unnecessary.
    - Processing the German SNF is unnecessary because the current physical state of the German SNF is very stable and substantially proliferation resistant.
    - Germany is a wealthy and stable first-world ally capable of safely and securely managing this SNF without US assistance.
  2. DOE has not identified nor evaluated all reasonable technological and siting alternatives <sup>iii</sup>, if the SNF is brought to the US.
    - Not processing the German SNF is a reasonable technological alternative because the current physical form of the SNF is stable and amenable to long-term storage and disposal as is.
    - Processing the German SNF at SRS would actually invite more environmental impacts and risk than not processing; therefore, the alternative of bringing it to the U.S. but not processing must be assessed.<sup>iv</sup>
    - If constructing a processing facility in L-Area is considered a reasonable alternative (rather than processing the SNF in H-Canyon), then clearly there are other reasonable processing location alternatives than only at SRS.
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DISCUSSION:

While evaluating the German SNF proposal, it is appropriate for the CAB to consider the backdrop of other overriding environmental issues facing the SRS which are linked to management of this SNF. While the Savannah River Operations Office and its contractors have done their best to keep commitments for cleanup and disposition of SRS materials and wastes, this cannot also be said of the support received from DOE Headquarters. DOE has (a) failed in timely establishment of a geologic repository for disposal of EM high-level radioactive wastes and spent nuclear fuel, as required by the Nuclear Waste Policy Act (so the German SNF and associated waste would have no established path to disposal); (b) consistently failed to provide sufficient resources for timely disposition of the large existing inventory of SRS spent nuclear fuel; and (c) since 2014, continued to underfund and thus delay its legal

SRS EM cleanup commitments, especially regarding treatment of liquid radioactive waste and closure of tanks. Such DOE failures undermine the CAB's confidence in DOE's timely disposition of the German SNF and associated processing wastes outside of South Carolina.

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#### CONCLUSIONS:

- 1) U.S. receipt and processing of the German SNF is not needed for US nuclear nonproliferation and risk reduction goals, therefore the purpose and need for the proposal is lacking.
- 2) All reasonable technological and siting alternatives have not been evaluated.
- 3) Even if predicted environmental effects may be small, they still represent an unwarranted additional environmental risk to citizens in the Central Savannah River Area.
- 4) The proposal will unnecessarily add to an already large burden of indefinite SNF and high-level radioactive waste storage at SRS with no established path for disposal.
- 5) DOE failures to faithfully keep pace with its SRS cleanup commitments impede the acceptability of this deficient proposal by the citizens of South Carolina and Georgia.

#### RRECOMMENDATION:

The SRS Citizens Advisory Board recommends that DOE:

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- 1) Revise the draft Environmental Assessment to address the deficiencies described in the Background section, above.
  - 2) Prefer and select the "No Action" alternative in the Environmental Assessment.
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<sup>i</sup> The President's Council on Environmental Quality (CEQ) National Environmental Policy Act (NEPA) Regulations require that federal agencies shall "...specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action." 40 CFR 1502.13

<sup>ii</sup> Memorandum from J. Crocker, NNSA, to K. Picha, DOE-EM, Subject: Proliferation Attractiveness of Jülich Graphite Spheres, August 1, 2013

<sup>iii</sup> NEPA Regulations require that federal agencies "... Rigorously explore and objectively evaluate all reasonable alternatives..." 40 CFR 1502.14(a)

<sup>iv</sup> NEPA Regulations require that federal agencies "...Use the NEPA process to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment." 40 CFR 1500.1(e)