



NUCLEAR ENERGY INSTITUTE

Ralph L. Andersen
CHIEF HEALTH PHYSICIST
PLANT SUPPORT
NUCLEAR GENERATION DIVISION

May 14, 2003

5/14/03
68 FR 9708
69

Rules and Directives
Plant Support
Telephone

2003 OCT 27 PM 4:17

RECEIVED

Mr. Michael T. Lesar, Chief
Rules & Directives Branch
Division of Administrative Services
Office of Administration, Mail Stop T-6D59
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

SUBJECT: U.S. NRC Request for Public Comments on the *Draft Environmental Impact Statement on the Construction and Operation of a Mixed Oxide Fuel Fabrication Facility at the Savannah River Site, South Carolina* (68 Fed. Reg. 9728, February 28, 2003)

Dear Mr. Lesar:

This letter provides comments of the Nuclear Energy Institute (NEI) on the subject Draft Environmental Impact Statement (DEIS). These comments are focused on the DEIS analysis of radiological consequences for postulated accidents and its application in regard to the Nuclear Regulatory Commission (NRC) policy on environmental justice.

The DEIS does not provide an assessment of reasonably foreseeable impacts as required by the National Environmental policy act. The DEIS only provides a bounding analysis of accident consequences and associated potential impacts. NRC implies that the analysis represents a "worst-case" assessment, which is contrary to NEPA requirements.

The bounding analysis provided in the DEIS is unnecessarily conservative, employs unreasonable assumptions, and applies inconsistent and inappropriate methodology.

Template = ADM-013

F-RTDS = ADM-03
Call = T. Harris (TEH)
A. Lester (ACL)

Mr. Michael T. Lesar, Chief
May 14, 2003
Page 2

1. The analysis utilizes the GENII computer code, rather than the MACCS2 code that was used in the applicant's environmental statement (ES) and is consistently utilized by the NRC in other accident consequence analyses. The NRC does not offer a rationale for the selection and use of this atypical model in this application. This is of particular concern because the GENII model has been found to be not appropriate for application to accident analysis, specifically in regard to the types of accidents, releases, and population dose assessments considered in the DEIS.¹
2. The DEIS accident consequence analysis consistently employs the most conservative assumptions, in some cases to the extent that the assumptions are not reasonable. For example, the assumption is made that following a postulated accident and radiological release, no protective actions would be taken by authorities over the next year to quarantine contaminated food supplies.
3. In calculating latent cancer fatalities that hypothetically might occur as a result of the analyzed accident consequences, the DEIS multiplies the collective radiation doses (determined using ICRP 26/30 dose methodology) by the Federal Guidance Report (FGR) 13 health risk conversion factor (roughly determined using ICRP 60 dose methodology). The two dose methodologies are not compatible. Further, the NRC provides no rationale for the *ad hoc* use of the FGR 13 health risk conversion factor that is not consistent with the scientific basis underlying current NRC guidance and regulation.

Finally, the DEIS inappropriately applies these results under the rubric of environmental justice. As NEI brought to the Commission's attention in a letter dated December 20, 2002, the NRC's evaluation of environmental impacts in licensing actions are not consistent with the terms of Executive Order 12898. By letter dated February 10, 2003, the Commission advised NEI that it intended to reconsider its policy concerning the application of Executive Order 12898.

In summary, we are concerned that the DEIS approach to assessing environmental impacts sets an undesirable and inappropriate precedent that does not conform to NEPA requirements or NRC policy.

¹ See, for example, the Review of the ORIA's Use and Adaptation of the GENII Version 2 Environmental Radiation System by the EPA Science Advisory Board, EPA-SAB-RAC-ADV-01-002, dated June 26, 2001.