SRS Citizen's Advisory Board

Recommendation No. 73

November 17, 1998

National Academy of Sciences Study of Treatment Options

Background:

DOE requested the National Academy of Sciences to conduct an independent evaluation of the options being considered for the treatment for disposal of the aluminum clad spent nuclear fuel. In September, members of the CAB were given a review of the Academy's report by its principal investigator, Dr Milton Levenson. The objective of the presentation was to assist the CAB in addressing the forthcoming draft EIS on spent fuel management at SRS. This presentation was extremely interesting and informative. The experience and competence of Dr. Levenson as well as the entire review process were most impressive.

The report was comprehensive in its consideration of the many aspects of the treatment options. Certain observations by the Academy are particularly relevant to the upcoming decision process and are noted below:

1. Proliferation concerns would be adequately addressed if conventional processing were to be directly followed by a dilution step.
2. It is questionable whether NRC will accept direct co-disposal because the waste acceptance criteria for a geologic repository have not been established and will not be for several years.
3. The melt and dilute option is based on well-established technologies and should be expected to be successful on these fuels. However, it has yet to be proved for this specific application.
4. A phased strategy for selecting and implementing treatment options is desirable because of many uncertainties such as the quantity and characteristics of all the fuels destined for SRS.

The SRS CAB recommends that DOE give its most careful consideration to the entire NAS report and the above points in particular during the review process of the upcoming draft EIS.

We also request that DOE provide a detailed explanation regarding its consideration of the NAS findings and report back to the SRS CAB.

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Agency Responses

Department of Energy-SR