

June 21, 2006

Dr. Michael T. Ryan, Chairman
Advisory Committee on Nuclear Waste
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

SUBJECT: RESPONSE TO THE LETTER OF THE ADVISORY COMMITTEE ON
NUCLEAR WASTE, DATED MAY 2, 2006, REGARDING RISK-INFORMED
DECISION-MAKING FOR NUCLEAR MATERIAL AND WASTE

Dear Dr. Ryan:

I am responding to your letter, dated May 2, 2006, regarding risk-informed decision-making for nuclear material and waste. In your letter you reviewed the guidance document, "Risk-Informed Decision-Making for Nuclear Material and Waste Applications," dated May 11, 2005 (ML042730524), in which three options for quantitative health guidelines for trial use were discussed. You recommended that Option 3 provides the most useful information. The U.S. Nuclear Regulatory Commission (NRC) staff will consider this recommendation carefully when this guidance is next updated.

Your letter also recommended that the staff consider the feasibility of applying the risk-informing guidance to a number of potential NRC activities. When these activities are undertaken, the NRC staff will consider the feasibility, value, and appropriateness of a risk-informed approach to them as trial applications of the guidance. Further information on the status of each of these specific activities follows.

Regarding low-level waste issues, institutional controls, and identifying ways to increase the efficiency of decommissioning, the Division of Waste Management and Environmental Protection will evaluate the draft guidance and, as applicable, incorporate the approach into its program areas, including decommissioning, low-level waste, and waste incidental to reprocessing.

In the rulemaking addressing groundwater protection at in-situ leach uranium recovery facilities (ISL facilities), the staff will conform its regulations to the applicable U.S. Environmental Protection Agency (EPA) standards, as required by the Uranium Mill Tailings Radiation Control Act. The staff considers EPA's standards for the Underground Injection Control (UIC) program as the applicable standards to conform to in developing NRC regulations for ISL groundwater protection. The regulations will be risk-informed to the extent NRC can consider risk-informing guidance while maintaining conformance with the EPA's UIC standards.

Regarding fuel cycle issues – including design criteria for reprocessing – the current level of planning associated with the Global Nuclear Energy Partnership does not allow us to determine whether new rulemaking for reprocessing will be a candidate for risk-informed regulations. Current thinking is that the reprocessing/recycling licensing will be completed within the framework of 10 CFR Part 70, which is risk-informed.

M. Ryan

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Regarding revisions to 10 CFR Part 40 for conversion facilities, Part 40 was identified as a potential candidate for modification to risk inform the regulation for the anticipated increase in the number of uranium conversion facilities from the one existing facility to perhaps several facilities. However, this rulemaking is not currently being pursued based on comments from the Commission to focus on in-situ leach rulemaking discussed below.

Regarding risk-informing the licensing processes that use the standard review plans for independent spent fuel storage installations (ISFSIs), the Spent Fuel Project Office (SFPO) agrees with the Committee's recommendation on the need to risk-inform the standard review plans used for ISFSIs and has already started a systematic approach, with contract support, to first risk-inform the ISFSI standard review plan, and then to apply the lessons learned from this effort to the revisions of other SFPO guidance documents.

Your letter also recommended continuing to develop the infrastructure to support these initiatives. The NRC staff intends to do so consistent with resource and other limitations.

The staff agrees with the Committee recommendation for periodic review of the draft risk-informing guidance as experience is gained.

Finally the Committee recommended training and summary information be used to raise staff awareness. The NRC staff conducts periodic training that incorporates the content of this guidance, including course P-400, "Introduction to Risk Assessment in NMSS." Additionally a summary workshop specifically on the guidance was held June 1, 2006. NMSS will continue to conduct such training.

I trust this reply responds to your concerns. The NRC staff appreciates the ACNW's continued interest and thoughtful advice in this area, and will be happy to interact with you on any issues that arise.

Sincerely,

/RA/

Luis A. Reyes
Executive Director
for Operations

cc: Chairman Diaz
Commissioner McGaffigan
Commissioner Merrifield
Commissioner Jaczko
Commissioner Lyons
SECY

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/RA/
 Luis A. Reyes
 Executive Director
 for Operations

cc: Chairman Diaz
 Commissioner McGaffigan
 Commissioner Merrifield
 Commissioner Jaczko
 Commissioner Lyons
 SECY

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