

**Independent Public Comments
and Recommendations to the
Draft DOE/EIS-0250F-S1D (SEIS)
for the Yucca Mountain
Repository; October 2007**

**Public Hearing in Las Vegas, NV
Cashman Center, December 3, 2007**

Presented by:
Richard DeKlever

Draft Supplemental Environmental Impact Statement (SEIS); Comments/Recommendations

• Major Issues:

- 1 [1) No mention of a Quality Assurance Program -
- 2 [2) No mention of Design Basis Allowing for Retrievability of Waste -

Continued 1

- [1) DOE Order 414.1C, Quality Assurance (consider items non-important to Safety and Waste Isolation, and their related activities); 10 CFR 63.142 (Subpart G) Quality Assurance; (consider items important to Safety and Waste Isolation, and their related activities.)

COMMENT: Since the SEIS presents a discussion about various important to safety activities such as; the TSPA, Performance Confirmation, and the Pre-closure Safety Analysis Report; these activities are discussed as important to safety activities in the Quality Assurance and Requirements Description (QARD) document.

RECOMMENDATION: Develop a generic boiler plate statement for these type documents that would acknowledge work for producing these and referenced documents were developed under applicable portions of the QARD. Although, the SEIS was produced under applicable QARD requirements the resulting document is considered non-QA and non-auditable.]

Continued 2

- [2) Reference 10 CFR 63.111 Performance objectives for the geologic repository operations area through permanent closure.

(a) Protection against radiation exposures and releases of radioactive material.

(e) Retrievability of waste - "The geologic repository operations area must be designed to preserve the option of waste retrieval throughout the period during which wastes are being emplaced and thereafter, until the completion of a performance confirmation program and Commission review of the information obtained from such a program."

COMMENT: Since this is considered a pre-closure issue consider describing the retrieval of emplaced used nuclear fuel concept and design basis for this SEIS.

RECOMMENDATION: Since the SEIS documents a brief discussion about the recently proposed Global Nuclear Energy Partnership (GNEP), the implication of requiring the retrieving of the emplaced used nuclear fuel is acknowledged.

**Draft Supplemental Environmental
Impact Statement (SEIS);
Comments/Recommendations**

• **Major Issues**

- [3) **Global Nuclear Energy
Partnership discussed in
section S.5 of this SEIS -**

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Continued

[3) Discuss the relationship between Retrievability of implaced used nuclear fuel and the GNEP.

RECOMMENDATION: As a previous systems / design mechanical engineer with the Exploratory Studies Facility (ESF) the basic design of the retrieval system should be described and preliminary analysis should address anticipated worker radiation levels, risk analysis of vibration induced failures of structural elements in the tunnel, and which portal will the emplaced used nuclear fuel be removed and how.

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- [4) Based on Experience with Project Budget Over-Runs, Extending Schedules, and the lack of lessons learned published; the DOE Environmental Management System should manage the revision or issue new DOE Orders, specifications, or regulations for the specified activities -]

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Continued

- [4) Discuss CR's issued and lack of adequate Orders / regulations Involving hundreds of million of dollarsthe following activities

Modeling; Data; Software, and Scientific Investigation.

i.e., The title of the MODELING regulation is; Regulatory Perspectives
*on Model Validation in High-Level Radioactive Waste Management
Programs: A Joint NRC/SKI White Paper

•Random House defines the word *Perspectives* as – one's mental view of facts, ideas, etc., and their interrelationshipsthe ability to see all the relevant data in a meaningful relationship,

COMMENT – The word *Perspectives* implies a lack of confidence and a built in interpretation with the model development. This regulation has resulted in many hundreds of millions of dollars and many years of project schedule wasted. Since we must design and build additional mined geological repositories in the future the improved DOE Orders, specifications, and regulations should be developed based on lessons learned published for experience with modeling, software control, data management, and scientific investigations.

RECOMMENDATION: Revise NUREG-1636 so that it reads more like a specification / regulation rather than a PhD thesis.]