



# Nye County

## Nuclear Waste Repository Project Office

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06-243-DS (L)

June 28, 2006

C. William Reamer, Director  
Division of High-Level Waste Repository Safety  
Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission (NRC)  
Washington, DC 20005-0001

**Subject:** Nye County Comments on Division of High-Level Waste Repository Safety (HLWRS)-Draft Interim Staff Guidance (ISG)-01, "*Review Methodology for Seismically Initiated Event Sequences*"

Dear Mr. Reamer:

The Nye County Nuclear Waste Repository Project Office (NWRPO) is pleased to comment on NRC's Division of High-Level Waste Repository Safety (HLWRS)-Draft Interim Staff Guidance (ISG)-01, which provides proposed revisions to NRC staff review guidance by specifying the review methodology for seismically initiated event sequences under 10 CFR 63. Specifically, the proposed guidance presents NRC staff's expectations for complying with the performance objectives of 10 CFR 63.111 as it relates to seismically initiated event sequences. Copies of the Draft ISG were made available at the June 7, 2006 NRC/DOE Technical Exchange and Management Meeting on Preclosure Seismic Methodology.

NWRPO commends HLWRS for providing an opportunity for public comment on this draft guidance. Input and comments on the draft guidance should be given due consideration, including discussion in public meetings, if needed, prior to final decisions being made regarding the guidance. Although we applaud NRC Staff (Staff) for providing opportunity for public input, this ISG may create consequences that were not intended by the NRC Commission (Commission) when they promulgated 10 CFR 63. While NWRPO believes that safety must be achieved, the consequence of this ISG could include massive costs for repository development without corresponding safety benefits. Exorbitant expenditures with little or no corresponding benefits may limit the funds that should be available to mitigate real impacts such as the socioeconomic effects of the Yucca Mountain Repository on the residents of Nye County. For this reason, we submit the following comments on the NRC Draft Interim Staff Guidance to bring more reasonableness to the repository regulatory process.

### **Specific Comments on HLWRS-ISG-01**

The proposed ISG ignores Section 63.102(f) of the regulations enacted by the Commission. That section is presented in its entirety below.

(f) *Preclosure safety analysis.* Section 63.111 includes performance objectives for the geologic repository operations area for the period before permanent closure and decontamination or permanent closure, decontamination, and dismantlement of surface facilities. The preclosure safety analysis is a systematic examination of the site; the design; and the potential hazards, initiating events and their resulting event sequences and potential radiological exposures to workers and the public. Initiating events are to be considered for inclusion in the preclosure safety analysis for determining event sequences only if they are reasonable (i.e., based on the characteristics of the geologic setting and the human environment, and consistent with precedents adopted for nuclear facilities with comparable or higher risks to workers and the public). The analysis identifies structures, systems, and components important to safety.

NRC has a long and successful history of instituting requirements that ensure the seismic safety of facilities which it regulates including nuclear power stations which inherently have more risk associated with postulated accident sequences associated with reactor operations than could possibly occur at a fuel handling operation such as proposed for Yucca Mountain. In addition, unlike nuclear power stations, Yucca Mountain is on Federal property miles from any residents thus making the relative risk from repository operations even lower. The safety of nuclear power stations from a seismic design capability is not in question by NRC. With this in mind, the NRC Yucca Mountain Repository regulations recognize that safety is adequately ensured at higher risk facilities than those that will exist at Yucca Mountain. For example fuel handling, the primary operation at a repository is among the lower risk activities that occur at nuclear power stations. Thus 10 CFR 63.102(f) states, "Initiating events are to be considered for inclusion in the preclosure safety analysis for determining event sequences only if they are reasonable (i.e., based on the characteristics of the geologic setting and the human environment, and consistent with precedents adopted for nuclear facilities with comparable or higher risks to workers and the public). The analysis identifies structures, systems, and components important to safety."

The language is clear as enacted by the Commission. As applied to seismic initiating events, such events should only be considered to the extent that "... they are reasonable (i.e., based on the characteristics of the geologic setting and the human environment, and consistent with precedents adopted for nuclear facilities with comparable or higher risks to workers and the public)." What is unclear is why the Staff would try to impose consideration of lower probability seismic events at a repository than is required for operating power reactors based on the wording of 10 CFR 63 taken in its entirety. The proposed ISG would impose more stringent seismic requirements

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that provides little or no safety benefit and could substantially increase repository preclosure facility costs if implemented as drafted.

Perhaps more importantly the ISG totally ignores the existence of Section 63.102(f) of the regulation. As applied to preclosure seismic initiating events, events with a probability corresponding to that for which nuclear power reactors are licensed are adequate to protect public health and safety at a repository. Designing a repository to lower probability seismic initiating events is not required, nor is there a requirement to label structures, systems, and components of a repository "important to safety" if their purpose is to prevent or mitigate such lower probability seismic event initiators. Any staff guidance should at a minimum recognize that fact.

If you have any questions regarding our comments, please contact me at (775) 727-7727, extension 26 or [dswanson@nyecounty.net](mailto:dswanson@nyecounty.net).

Respectfully,  
NYE COUNTY, NEVADA



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David Swanson

DS/zc

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