

**REMARKS OF ROBERT R. LOUX, EXECUTIVE DIRECTOR,  
NEVADA AGENCY FOR NUCLEAR PROJECTS  
TO THE NUCLEAR WASTE TECHNICAL REVIEW BOARD'S  
PANEL ON THE WASTE MANAGEMENT SYSTEM**

**Las Vegas, Nevada  
January 21, 2004**

Last February when I addressed this Board, I discussed the spent fuel and high-level waste transportation matters that encompass the State of Nevada's long-standing transportation safety and security issues. Nevada first identified these areas of concern in 1985 and 1986, very early in the Yucca Mountain program. Over the years we have developed a substantial body of independent research and analysis on these transportation matters.

[Slide # 1]

Based on our findings, we have recommended detailed transportation polices and practices in four areas: (1) a coordinated and comprehensive approach to risk assessment, risk management, and risk communication, including a balanced discussion of the usefulness and the limitations of probabilistic risk analysis; (2) development of a preferred transportation system based on specific measures to reduce radiological risk, including shipment of oldest fuel first and mandatory use of dedicated trains for all rail shipments; (3) full-scale physical testing of shipping containers, including testing to determine cask failure thresholds; and (4) rigorous new accident prevention and emergency response measures, beyond those currently required by federal regulations, developed in consultation with regional organizations, States, Indian tribes, and local governments.

I discussed these recommendations in considerable detail last February. Rather than take up more of the Board's limited time this afternoon, I refer you to my February presentation. Let me reiterate, however, that despite Nevada's opposition to the Yucca Mountain project, the State has used every opportunity available to us over the past 15 years or more to urge DOE to satisfactorily address these safety and risk management concerns, because SNF and HLW transportation safety and public acceptance transcend where a repository might be located. In almost every instance, DOE's response to Nevada has been either inaction or obstruction.

For almost 20 years, Nevada has also worked closely with the Western Interstate Energy Board<sup>1</sup> to develop a comprehensive Transportation Primer and a Strategic Plan that set forth in considerable detail how SNF and HLW shipments must be implemented to assure both safety and public acceptance. DOE's response to the high-quality and important WIEB transportation work was to withdraw funding for the High-Level Radioactive Waste Committee's activities and ignore the recommendations that derived from the

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<sup>1</sup> The Western Interstate Energy Board operated a High-Level Radioactive Waste Committee from 1985 to 1998 under a cooperative agreement with DOE's Office of Civilian Radioactive Waste Management. In 1998 DOE withdrew funding from the WIEB agreement and effectively halted the work of the Committee.

Committee's efforts. Moreover, DOE has refused to follow the WIPP transportation safety protocols, developed in cooperation with the States and the Western Governors Association, in transportation planning for Yucca Mountain.

Another issue mentioned in my discussion last February is the risk of sabotage and terrorism against repository shipments. Well before the terrorist suicide attacks of September 11, 2001, concern about the terrorist threat to repository shipments led Nevada's Attorney General to file a petition for rulemaking with the NRC in June 1999. In the petition, Nevada documented the vulnerability of shipping casks to attacks involving high-energy explosive devices. Nevada also submitted evidence that shipments to a national repository would be dramatically different from past shipments in the United States, and that these differences would create greater opportunities for terrorist attacks and sabotage.

The petition (Docket PRM-73-10) requested a general strengthening of the current transportation safeguards regulations and a comprehensive reexamination of the consequences of radiological sabotage. The Western Governor's Association endorsed Nevada's petition on behalf of 18 western States. Five other states (LA, MI, OK, VA, and WV) also endorsed all or part of the petition. Four and one-half years later, and more than two years after the 9/11 attacks, the NRC has still not officially responded to Nevada's petition.

Your invitation to speak at this meeting requested that we structure our presentation around four questions relating our concerns to information and resources that DOE might provide. It seems to us that restating the State's issues and concerns, outside of any formal process that requires the Department to take heed and act, is a continuing exercise in futility. What is needed is to require strict adherence to a *process* whereby DOE is required to address issues and impacts as part of a comprehensive national transportation decision-making framework. The only way we know to accomplish this is through the National Environmental Policy Act.

The fact that DOE included a discussion of transportation issues in the Yucca Mountain EIS does not absolve the Department from conducting a full-blown NEPA analysis of SNF and HLW transportation. That transportation discussion, spread over hundreds of pages in several chapters and appendices, was selectively detailed, frequently evasive, and in some cases deceptive and misleading. If anything, the analyses contained in the Yucca Mountain EIS demonstrate the need for a separate, comprehensive transportation EIS – one that addresses such an effort in its totality and the decisions that will drive it from the top down.

Nevada has repeatedly set forth recommendations about how DOE should go about such a NEPA review. In August 2002, we provided DOE (and others) with a "roadmap" laying out how a transportation NEPA process could and should be implemented. Once again, this recommendation, like all the others, has fallen on deaf ears.

## *Steps DOE Must Follow in the Process*

[Slide # 2]

For the record, here is how Nevada believes the repository transportation program should be addressed and how programmatic decisions should be made:

1. DOE should develop a draft national transportation plan describing a proposed action and alternatives, including a Nevada component that is fully consistent with the national plan (action plus alternatives). This draft transportation plan would then become the basis for a formal NEPA scoping process.
2. Using the draft plan, DOE would initiate a formal scoping process for a transportation programmatic EIS. This must involve an adequate comment period and scoping meetings in states and cities along all proposed transportation routes, both nationally and in Nevada.

[Slide # 3]

3. Upon completion of the scoping process, DOE must prepare a draft EIS that fully assesses impacts for both the national system (proposed action and alternative) and the Nevada system (proposed action and alternatives). DOE should take extraordinary steps to assure that the public and affected cities, counties, and communities along transportation routes, both nationally and in Nevada, are aware of the draft EIS and have ample opportunity to comment on it. DOE must hold hearings on the draft EIS in communities all along transportation routes.

[Slide # 4]

4. Upon completion of the comment period and hearings on the draft EIS, DOE would prepare a final programmatic EIS that fully complies with NEPA and CEQ requirements. The final EIS will set forth the preferred alternative(s) selected by DOE for both the national and Nevada system, assuring that all aspects of each will be internally consistent.
5. DOE would subsequently issue a formal Record of Decision setting forth the integrated SNF and HLW transportation system (both the selected national and Nevada components and the interface between them).
6. The final EIS and the Record of Decision will become the basis for any discussions with the State of Nevada, Nevada local governments, other states and local governments, the transportation industry, etc. for moving ahead with SNF or HLW transportation activities.

[Slide # 5]

7. Additional NEPA analysis supporting key decisions in both the national and Nevada transportation efforts could then be tiered to the final transportation programmatic EIS.

The process we have laid out is not something that is new or unique to DOE. The Department used just such a NEPA process in compiling the Waste Management

Programmatic Environmental Impact Statement that was done in support of planning and decision-making for clean-up of the DOE weapon's complex. By using a this approach, DOE was able to effectively and logically support decisions at the wider programmatic level. Where those decisions led to the need for more operationally-specific actions, additional NEPA reviews logically flowed out of and were tiered to the programmatic EIS. If such a process could be used successfully for DOE's weapons clean-up actions, there is no reason why DOE cannot employ it for the equally complex Yucca Mountain transportation program.

***DOE's Recent Notice on Preferred Rail Access in Nevada:  
Symptom of a Dysfunctional Process***

The current approach DOE is using to make transportation decisions is antithetical to what is required for a programmatic NEPA analysis. Rather than seeking to integrate transportation planning, DOE appears to be attempting to segment decision-making, moving forward on what are perceived to be politically expedient aspects while abandoning the analytical underpinnings needed to make decisions defensible and ignoring the implications of such decisions on the wider system.

Let's look for a moment at the current decision process DOE intends to use for making mode and rail access decisions, as reflected in the Federal Register Notice DOE published last December.

In that Notice, DOE indicated its preference for the Caliente rail spur as the preferred rail access corridor for Yucca Mountain. Yet nowhere is there documentation of the analyses that went into announcing such a preference. Neither the Yucca Mountain EIS nor any other NEPA document that we are aware of contains a legally and substantively adequate analysis comparing the various rail spur options and justifying either the identification of Caliente as the preferred alternative or the selection of the Carlin route as the secondary preference.

While the Yucca Mountain EIS does not, in our opinion, provide an adequate and supportable basis for making mode and rail access decisions, DOE did promise in that EIS to follow a logical, albeit truncated, decision sequence and to consult with stakeholders in the rail corridor selection process. The FEIS says:

- “If the Yucca Mountain site was approved, DOE would issue at some future date a Record of Decision to select a mode of transportation. [p.1-3]
- “If, for example, mostly rail was selected (both nationally and in Nevada), DOE would then identify a preference for one of the rail *corridors* in consultation with affected *stakeholders*, particularly the State of Nevada.” [p.1-3]
- “In the example, DOE would announce a preferred corridor in the *Federal Register* and other media. No sooner than 30 days after the announcement of a

preference, DOE would publish its selection of a rail corridor in a *Record of Decision*.” [p.1-3]

- “Other transportation decisions, such as the selection of a specific rail *alignment* within a corridor, would require additional field surveys, State and local government and Native American tribal consultations, environmental and engineering analyses, and *National Environmental Policy Act* reviews.” [Pp. 1-3 to 1-4]

[Slide # 6]

DOE chose not to honor even this minimal commitment for some form of logical and defensible decision-making. DOE published its Notice of a rail corridor preference on December 29, 2003, but did not engage in consultations with the State of Nevada or any of the affected stakeholders.

[Slide # 7]

In the Notice, DOE proceeded to identify a preferred rail corridor *before* adopting a preferred mode. DOE identified the Caliente corridor as “its preferred rail corridor” in the event that DOE adopts the “mostly rail mode” and identified the Carlin corridor as “the secondary preference in the event the Caliente corridor is not selected.” No analysis supporting these decisions was provided.

DOE’s Notice raises many questions, including the following:

Why would DOE select a preferred corridor, without first formally adopting a preferred mode?

If DOE adopts the “mostly rail” mode, what is the actual modal mix would be expected? (Nevada believes that 35 percent or more of the waste would likely still be shipped by truck even if DOE succeeds in building a rail spur, resulting in about a thousand truck shipments per year.)

Why did DOE fail to consult with the State of Nevada before selecting the Caliente corridor?

What specific criteria and data were used to select the preferred rail corridor and secondary preference, and where is the analysis that supports the selections?

Will other rail corridors remain under consideration, or be reconsidered, if Caliente and Carlin are both found to be infeasible – something that is not beyond the realm of possibility given that these two alternatives represent the longest, most costly, and most difficult of the discussed in the Yucca Mountain EIS?

When will DOE issue a Record of Decision regarding mode selection?

Has DOE completely eliminated consideration of “mostly truck” as the preferred mode?  
(Under what circumstances would mostly truck be used?)

***Conclusion***

These questions and hundreds of others that are raised by DOE’s piecemeal approach to spent fuel and HLW transportation can only be answered by requiring DOE to undertake a truly comprehensive, integrated, and symmetrical analysis of the transportation system. That can only be accomplished through a full and complete NEPA review, starting with a programmatic EIS.

**Slides Used in the Presentation:**

*Slide #1*  
*State of Nevada Transportation*  
*Recommendations*

- (1) A comprehensive approach to risk assessment, risk management, and risk communication;**
- (2) Development of a preferred transportation system;**
- (3) Full-scale, physical testing of shipping casks;**
- (4) Accident prevention and emergency response;**
- (5) Adequate attention to terrorism and sabotage risks.**

*Slide # 2*  
*Recommended NEPA Process*

- Step 1 – Draft Transportation Plan**
  - Symmetry between national and Nevada components
  - Identification of modes and route alternatives
- Step 2 – Scoping for a Programmatic EIS**
  - Draft transportation plan becomes the basis for scoping

*Slide # 3*

- Step 3 – Draft Programmatic EIS**
  - Fully integrates national and Nevada programmatic elements
  - Provides structured opportunities for public and stakeholder comments/involvement

*Slide # 4*

- Step 4 – Final Programmatic EIS**
  - Identifies preferred system alternatives (mode; routes; at-reactor mode choices; Nevada access mode choices – LWT, HHT, rail; Nevada preferred rail access corridor, if applicable)
- Step 5 – Record of Decision**
  - Programmatic Decisions on Modal choices, Route(s), Nevada rail or highway access, etc.

*Slide # 5*

- Step 6 – Tiered EISs for sub-components of the transportation system (HHT operations, rail alignment, intermodal facilities, etc.)**

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*DOE's Caliente FR Notice: Most Recent Example of DOE's Flawed Approach*

- Lack of a systems approach to transportation planning;**
- Corridor selection and mode selection decisions juxtaposed;**
- Corridor selection decisions not supported by detailed comparative analyses;**
- No State or stakeholder involvement or consultation;**

*Slide# 7*

- Disconnect between national mode/route and Nevada mode/route decisions;**
- Illegal NEPA segmentation.**