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ADDRESSEE: J. Russell Dyer
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STATE OF NEVADA

ROBERT R. LOUX
Executive Director



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September 18, 2007

J. Russell Dyer, PH.D.
Chief Scientist
Department of Energy
Office of Civilian Radioactive Waste Management
1551 Hillshire Drive
Las Vegas NV, 89134-6321

Dear Mr. Dyer:

Thank you for your September 13, 2007 comment on my September 10, 2007 letter to NRC Chairman Klein. Since you have chosen to address **both** the subject of (1) DOE's potential reliance on a "Next Generation Performance Assessment" (NGPA) in the licensing proceeding and (2) the **materially flawed** condition of DOE's Technical Data Management System (TDMS), I urge you to promptly take the following steps to bring both of these concerns to closure:

1. **NGPA:** We have seen numerous references to the NGPA in documents that are contained on DOE's LSN collection. Some of those documents suggest that the current TSPA-LA will be submitted by DOE in support of its License Application, but that DOE is simultaneously working on a subsequent version with substantially different architecture algorithms, calculations, etc., which it may submit some time during the licensing process, but **after** the time of the initial License Application. While your September 13 letter insists upon the primacy of your current TSPA-LA as a support tool for the LA, it stops well short of disavowing the preparation and contemplated utilization of a later NGPA. If your LSN documents, that raise this concern, were **incorrect**, or have been rendered obsolete by subsequent events, you can put an end to any concern of the stakeholders in this regard by immediately:

a. Confirming that no "Next Generation Performance Assessment," however denominated, has been, is being, or will be prepared by DOE;

- b. Confirming that if one has already been prepared, it will not be used in any way in the licensing proceeding; and
- c. Confirming that no further funds for work on a "Next Generation Performance Assessment" will be expended from this day forward.

2. **Flawed TDMS:** Your response to our concern that DOE's critical TDMS is materially flawed, is, unfortunately, not candid and is extremely disingenuous. You chastise us for reaching a conclusion that is "premature" because we cited a "draft" of a Sandia report concerning the flawed TDMS dated March 31, 2007. In your response, you quote what you claim is contained in the Executive Summary of the Final version of that report. Significantly, the words you quote from that final version are **verbatim** the same as the words contained in the Sandia draft report! The following is a quote from page 11 of the Sandia draft report. We have included the 12-word sentence, which precedes the quotation contained in your letter: "We found serious issues and gaps in the TDM in our analysis. The TDM systems do not automatically support, and in some cases inhibit, the flow of the work. By not automatically supporting the flow of work, humans must manually ensure the integrity, accountability, and traceability of the data." Ironically, by the simple expedient of DOE "spin," you have tried to transform a serious Sandia criticism into a compliment. Sandia recognized, however, that in the face of an unreliable TDMS, any effort to **manually** ensure the integrity, accountability, and traceability of the data is impossible. Manual checking was hardly considered a "positive" by Sandia, which explained: "We recommend that the current TDM system be replaced. The replacement system must **automatically** track data items through the system from end-to-end; conclusions developed and published for the Licensing System must be able to automatically verify how data was developed throughout the analysis and modeling process; and referential integrity must be maintained by the database system to ensure the consistency and accuracy of the data." (Sandia Report at 12-13.) "The YMP uses the TDM systems to manage essential scientific and engineering data regarding the site characterization and licensing application for the Yucca Mountain repository. The TDM system's objectives are to ensure the integrity and quality of this YMP data and to maintain traceability for references in legally required, government-deliverable YMP documents that are to be accessible to the public." (Sandia Report at 14.)

Just last week, DOE representatives at a DOE/NRC Technical Exchange Meeting in Las Vegas suggested that with few exceptions, DOE would include "results" only, rather than detailed analyses and calculations in the license application, because the vast thousands of calculations made their inclusion impractical. One can only be confounded at the daunting task of replicating DOE's underlying analyses and calculations, if performed manually in the face of an inadequate TDMS.

Obviously, it is now essential that you immediately provide the Final report on this critical subject to Nevada, NRC, and the other addressees of your September 13 correspondence. Receiving the final document would have been important, even absent your totally unavailing effort to somehow contrast the Sandia draft report with the purported Final, by reliance on an identical quote from both.

A final observation with respect to your response seems appropriate. The letter criticizes our reliance on a Sandia "draft" and accuses us of reaching premature conclusions, relying on "incomplete information" and being guilty of "speculation," all because we relied upon documents placed on its publicly available LSN database by DOE. As you know, DOE added some 2.1 million documents to its LSN database in May of this year. The great majority of those documents had long been languishing in the possession of the NRC's LSN Administrator, with instructions from DOE not to make them public. A great majority of those documents were created in 2005 or earlier. Many, many of those documents are preliminary draft documents – documents that do not even meet the definition of Documentary Material. Nonetheless, with much ballyhoo, DOE released them in May, coupled with a self-laudatory press release: "Today's early disclosure of additional documentary material in advance of DOE's LSN certification is intended to facilitate and expedite the Yucca Mountain licensing proceeding and to assist the NRC staff, the State of Nevada and potential parties to the Yucca Mountain proceeding in their review of DOE's documentary material." While our experience has been that many of these documents are of little value, it is particularly frustrating when DOE's own documents raise issues of concern, and our articulation of those concerns is met with charges of "speculation," "premature conclusions," and reliance on "incomplete information" because we have relied on the very documents DOE suggested we rely upon.

We look forward to your early and unequivocal commitment precluding the use of a "Next Generation Performance Assessment" at any stage of the licensing proceeding and your immediate provision of the final version of the March 31, 2007 draft Sandia report regarding TDMS.

Sincerely,



Robert R. Loux
Executive Director

cc: Chairman Dale Klein
Commissioner Greg Jaczko
Commissioner Pete Lyons
Governor Gibbons
Attorney General Cortez-Masto
Nevada Congressional Delegation
ACNW
TRB