

#### UNITED STATES NUCLEAR WASTE TECHNICAL REVIEW BOARD 2300 Clarendon Boulevard, Suite 1300 Arlington, VA 22201

April 29, 2005

The Honorable Jon Porter Chairman Subcommittee on the Federal Workforce and Agency Organization Committee on Government Reform U.S. House of Representatives B-373A Rayburn House Office Building Washington, DC 20515

Dear Chairman Porter:

Thank you very much for the opportunity to present the views of the Nuclear Waste Technical Review Board at a hearing before the Subcommittee on the Federal Workforce and Agency Organization on April 5, 2005. Enclosed are responses to follow-up questions from that hearing that were transmitted in your letter of April 14, 2005.

As you know, the Board is charged by Congress with conducting an ongoing and independent review of the technical and scientific validity of activities undertaken by the Secretary of Energy associated with implementing the Nuclear Waste Policy Act. The Board provides its technical views to help inform the consideration of issues related to the management and disposal of spent nuclear fuel and high-level radioactive waste.

Please do not hesitate to contact me or have your staff contact Bill Barnard, Board Executive Director, if you have questions related to the Board's responses or any other issue related to the Board's technical and scientific review.

Sincerely,

{Signed by}

B. John Garrick Chairman

Enclosure

#### "Yucca Mountain Project: Have Federal Employees Falsified Documents?" Subcommittee on the Federal Workforce and Agency Organization Chairman Jon C. Porter Questions Submitted For the Record Submitted April 8, 2005 Answers Submitted April 29, 2005

### John Garrick, U.S. Nuclear Waste Technical Review Board

## • If the allegations are proven true, what is the impact the "sound science" of the project?

Answer: It is not possible to reach conclusions about what effect, if any, there may be on the scientific program until investigations currently under way at the Department of Energy (DOE) and the Department of the Interior (DOI) are concluded. At that point, the Board will evaluate the results of the investigations to determine if they have implications for the validity of the DOE's technical and scientific work. In the meantime, the Board will continue reviewing the technical and scientific validity of ongoing DOE activities. In accordance with its mandate established in the Nuclear Waste Policy Amendments Act, the Board will report its findings and recommendations from those evaluations to Congress and the Secretary of Energy.

# • We know for certain that the e-mails in question were written during the time that DOE was rushing to prepare and submit a license application to the NRC. How many times has DOE asked for an extension in filing the license application and what reasons were given in support of an extension of time?

Answer: The Board's understanding is that the DOE decides when to submit a license application (LA). Consequently, any deadline that the DOE might have had for submitting an LA would have been self-imposed.

# • Based upon DOE's persistent quality assurance failures and in light of the recent controversy documenting employee falsification of scientific studies, what is the Board's position regarding the current state of the scientific credibility of the project?

Answer: The Board believes that a rigorous quality assurance program is important for this scientific program. However, deficiencies in complying with quality assurance requirements, which are monitored by the Nuclear Regulatory Commission (NRC), may or may not significantly affect the DOE's technical and scientific findings. The Board will review this matter when investigations currently under way at the DOE and the DOI are concluded. In the meantime, the Board will continue evaluating the technical and scientific validity of the DOE's ongoing activities and providing its straightforward assessment to Congress and the Secretary.

## • Should the allegations be proven true, what is the board's recommendation regarding the continuation of the project?

Answer: At this time, the Board does not know how the allegations, if proven true, would affect the DOE's technical and scientific program. In any case, a decision related to continuing the Yucca Mountain program is a matter of policy that is well beyond the Board's technical and scientific purview. Through its regular and special reports, the Board provides technical and scientific information to policy-makers, who can then use the Board's assessment when making policy decisions. As has always been the case, if at some point the Board were to determine that a condition or conditions existed that clearly made the site unsuitable, the Board would make its opinion known to Congress and the Secretary immediately.

# • It is my understanding that this past February (February 8, 2005) the Board called for hearings in March to review concerns over the corrosion of the titanium drip shields that are intended to keep water from leaking into casks inside Yucca Mountain. Have you held those hearings and, if so, what were your findings?

Answer: No "hearings" were requested, but the Board did ask the DOE to discuss the drip shields at our next meeting. That meeting is currently planned for November 8, 2005, in Las Vegas, Nevada.

## • Given the fact that DOE is self-regulated and can choose not to implement the recommendations of the Board, has there ever been a feeling among the Board that DOE uses its privilege to hide information?

Answer: Congress clearly intended that the Board function as a peer reviewer – not as a regulator or a program manager. While it is true that the Board was not granted authority to implement its recommendations, Congress provided the Board access to all information necessary for conducting its ongoing review, including draft documents produced by the DOE. Over the years, all the documents that have been requested from the DOE, including drafts, have been provided within a reasonable time frame. However, the Board can only request and evaluate information that it knows about.

## • Based upon your review, has DOE come up with a plan for safely transporting nuclear waste to the proposed repository?

Answer: The DOE is developing a plan and is working on the integration of waste management activities. Although at this point the Board has no reason to believe that a safe transportation system cannot be developed, the DOE has a great deal of work to do before it can claim credibly that it has a workable plan in place for safely transporting spent nuclear fuel or high-level radioactive waste.

#### • To your knowledge, what has DOE done to study the transportation issues?

Answer: The DOE reported on its efforts to develop a transportation system at four Board meetings held in the last year and a half. Examples of DOE activities that were discussed at those meetings include developing a systematic approach to transportation planning; identifying critical transportation planning components and their interdependencies; developing tools and analyzing issues associated with ensuring safe, secure, and efficient transportation; and working on the integration of transportation activities with activities related to the transfer of spent nuclear fuel and high-level radioactive waste at generation sites and with the receipt and handling of the wastes at the proposed repository site. For much more detailed information on the DOE presentations, transcripts of Board meetings and Board letters to and from the DOE are available on the Board's Web site at, www.nwtrb.gov.

## • If scientific studies concerning the hydrology and geology of Yucca Mountain were falsified, and if falsified reports were used as the basis for other work, how would that affect the overall reliability of the scientific studies at Yucca Mountain?

Answer: If data or analyses were falsified and if those data or analyses significantly affected repository performance estimates, the consequences could be serious. However, the Board has no evidence at this point to indicate that that is the case. It is not clear how a change in a single parameter would affect the DOE's estimates of repository performance, which are based on a range of values. The Board will look very carefully at this issue.

## • Based on the quality of the science seen in the e-mails we have released, can we be certain that the waste stored at the site can be safely contained for even several hundred years?

Answer: Drawing conclusions about the quality of the science is not possible until the results of investigations currently under way at the DOE and the DOI are known. To date, the Board has seen no evidence suggesting that the containment capability of the repository would be limited to a few hundred years.

## • Does the NWTRB plan any particular action in response to these charges? (Such as revisit previous conclusions or more aggressive review of DOE)

Answer: The Board's technical and scientific evaluation of the DOE's work is ongoing and vigorous. Consequently, the Board reviews its findings and analyses whenever necessary or appropriate. As stated previously, the Board will evaluate the results of the DOE and DOI investigations when they are available and will determine their implications for the validity of the DOE's technical and scientific work. In the meantime, the Board will continue reviewing the DOE's ongoing activities. In accordance with its congressional mandate, the Board will regularly and candidly report its findings and recommendations to Congress and the Secretary of Energy.