



# U.S. NUCLEAR WASTE TECHNICAL REVIEW BOARD

## THE BOARD'S MISSION

The U.S. Nuclear Waste Technical Review Board was established as an independent federal agency in the 1987 amendments to the Nuclear Waste Policy Act (NWPA) to "...evaluate the technical and scientific validity of activities [related to managing and disposing of spent nuclear fuel and high-level radioactive waste] undertaken by the Secretary [of Energy], including

- (1) site characterization activities; and
- (2) activities relating to the packaging or transportation of high-level radioactive waste or spent nuclear fuel."

As recorded in the *Legislative History of the Nuclear Waste Policy Amendments Act*, the purpose of the Board is to provide independent expert advice to the Department of Energy (DOE) and the Congress on technical issues and to review the technical and scientific validity of activities undertaken by the DOE to implement the NWPA. In accordance with this mandate, the Board conducts objective, ongoing, and integrated technical and scientific peer review of DOE activities related to the disposition of commercial and DOE-managed spent nuclear fuel (SNF) and high-level radioactive waste (HLW). According to the Legislative History, the Board is expected to "review the activities [of the Secretary] as they are occurring, not after the fact." The Board reports its findings and recommendations to Congress and the Secretary of Energy.

## THE BOARD'S CONTINUING ROLE

For more than 20 years, DOE focused on developing a permanent geologic repository for disposal of SNF and HLW at Yucca Mountain in Nevada. During that time, the Board performed continuous peer review of DOE's activities and conveyed its findings and recommendations to Congress and the Secretary of Energy in reports, testimony, and correspondence. As the Administration and Congress decide on a path forward for the disposition of nuclear waste, DOE continues to have responsibility under the NWPA for managing and disposing of SNF and HLW, and the Board's statutory responsibility for evaluating DOE's implementation of those activities remains unchanged.

By performing unbiased and ongoing technical and scientific peer review of DOE's nuclear waste management activities, the Board makes an essential contribution to increasing confidence in the scientific process and to informing, from a technical and scientific perspective, decisions on nuclear waste management. The Board provides objective information to Congress, the Administration, DOE, government and non-government organizations, and the public on a wide-range of issues related to SNF and HLW disposition.

All Board reports, factsheets, correspondence, testimony, and meeting materials are available on the Board's website at [www.nwtrb.gov](http://www.nwtrb.gov).

To be added to the Board's mailing list, please forward your contact information via the Board's website or by mail to U.S. NWTRB, 2300 Clarendon Blvd, Ste. 1300, Arlington, VA 22201.

### Reports and Factsheets

The Board issues reports and factsheets intended to communicate the results of the Board's evaluation of DOE activities and provide useful technical information to the public and decision-makers in Congress and the Administration.

### Recent Publications

*Technical Evaluation of the U.S. Department of Energy Deep Borehole Disposal Research and Development Program*

January 2016

*Survey of National Programs for Managing High-Level Radioactive Waste and Spent Nuclear Fuel: Update*

February 2016

## MEMBERS OF THE BOARD

The Board is composed of 11 members who serve on a part-time basis. Board members are appointed by the President from a list of candidates submitted by the National Academy of Sciences. By law, nominees to the Board are selected solely on the bases of distinguished professional service and eminence in a field of science or engineering. The names and affiliations of the current Board members are listed below.



**RODNEY C. EWING, PH.D.**, is Chairman of the Board. He is the Frank Stanton Professor in Nuclear Security in the Center for International Security and Cooperation and a Professor of Geological Sciences in the School of Earth, Energy, and Environmental Sciences at Stanford University.



**JEAN M. BAHR, PH.D.**, is Professor of Hydrogeology in the Department of Geoscience at the University of Wisconsin – Madison.



**GERALD S. FRANKEL, SC.D. \*** is DNV Chair, Professor of Materials Science and Engineering, and Director of the Fontana Corrosion Center at The Ohio State University in Columbus, Ohio.



**STEVEN M. BECKER, PH.D.**, is Professor of Community and Environmental Health, College of Health Sciences, at Old Dominion University in Norfolk, Virginia.



**LINDA K. NOZICK, PH.D.**, is Professor and Director of Civil and Environmental Engineering at Cornell University in Ithaca, New York.



**SUSAN L. BRANTLEY, PH.D.**, is Distinguished Professor of Geosciences and Director of the Earth & Environmental Systems Institute at Pennsylvania State University in University Park, Pennsylvania.



**KENNETH LEE PEDDICORD, PH.D., P.E.** is Director of the Nuclear Power Institute and Professor of Nuclear Engineering at Texas A&M University in College Station, Texas.



**ALLEN G. CROFF, NUCLEAR ENGINEER, M.B.A.**, is an adjunct professor in the Department of Civil and Environmental Engineering at Vanderbilt University in Nashville, Tennessee.



**PAUL J. TURINSKY, PH.D.**, is Professor of Nuclear Engineering at North Carolina State University in Raleigh, North Carolina.



**EFI FOUFOULA-GEORGIU, PH.D.**, is a Distinguished Professor in the Department of Civil and Environmental Engineering at the University of California, Irvine.



**MARY LOU ZOBACK, PH.D.**, is Consulting Professor in the Geophysics Department at Stanford University in Stanford, California.

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\* Dr. Frankel resigned from the Board effective August 15, 2016, in order to focus on the increasing demands of his work at The Ohio State University.