

Assessment of the Governance Structure of the NNSA National Security Laboratories

Committee

Richard A. Meserve

Chair

Richard A. Meserve is the President Emeritus of the Carnegie Institution, having served from 2003 to 2014. He previously served as Chairman of the U.S. Nuclear Regulatory Commission (NRC) under both Presidents Clinton and Bush and led the NRC in responding to the terrorism threat that came to the fore after the 9/11 attacks. Before joining the NRC, Meserve was a partner in the Washington, D.C., law firm of Covington & Burling LLP, and he now serves as Senior of Counsel to the firm. He served as a law clerk to Supreme Court Justice Harry A. Blackmun and as legal counsel to the President's Science Adviser. With his Harvard law degree and a Ph.D. in applied physics from Stanford, he has devoted his legal practice to technical issues arising at the intersection of science, law, and public policy. Meserve has served on numerous legal and scientific committees over the years, including many established by the National Academies of Sciences and Engineering. He is a member of the National Academy of Engineering and the American Philosophical Society. He is a Foreign Member of the Russian Academy of Sciences. And he is a Fellow of the American Academy of Arts and Sciences, The American Physical Society, and the American Association for the Advancement of Science.

Everett H. Beckner

Member

Everett H. Beckner is an independent consultant. He is the former Deputy Administrator of the Department of Energy's (DOE's) National Nuclear Security Administration (NNSA) where he directed the Stockpile Stewardship Program responsible for maintaining the safety, security, and reliability of our Nation's nuclear weapons stockpile. Prior to being confirmed as Deputy Administrator, Dr. Beckner was a Vice President of Lockheed Martin Corporation, where he was Deputy Chief Executive at the Atomic Weapons Establishment in Aldermaston, United Kingdom, and Vice President of Technical Operations. Before joining Lockheed Martin, he was the Energy Department's Principal Deputy Assistant Secretary for Defense Programs. For more than 28 years—from 1961 to 1990, he held senior leadership positions at Sandia National Laboratories in Albuquerque, New Mexico, including Vice President, Defense Programs; Vice President, Energy Programs; and Director, Waste Management Programs. Dr. Beckner is a fellow of the American Physical Society and a member of AAAS. He received his Ph.D and MA in Physics from Rice University and his B.S. in physics from Baylor University.

Arden L. Bement, Jr.

Member

Arden L. Bement, Jr. (NAE) is the Emeritus David A. Ross Distinguished Professor of Nuclear Engineering and Director of the Global Policy Research Institute at Purdue University. Prior to his current position, he was the director of the National Science Foundation from 2004 to 2010. He was director of the National Institute of Standards and Technology (NIST) from 2001 to 2004. He joined NIST from Purdue University, where he was the David A. Ross Distinguished Professor of Nuclear Engineering and head of the School of Nuclear Engineering. Bement joined the Purdue faculty in 1992 after a 39-year career in industry, government and academia. His positions included: vice president of technical resources and of science and technology for TRW, Inc. (1980 – 1992); deputy undersecretary of defense for research and engineering (1979 – 1980); director, Office of Materials Science, Defense Advanced Research Projects Agency (DARPA) (1976 – 1979); professor of nuclear materials, Massachusetts Institute of Technology (MIT) (1970 – 1976); manager, Fuels and Materials Department and the Metallurgy Research Department, Battelle Northwest Laboratories (1965 – 1970); and senior research associate, General Electric Co. (1954 – 1965).

Kenneth C. Brill, (Ret.)

Member

Kenneth C. Brill is an independent consultant. He retired from the Department of State in 2010 after a 35-year career in the U.S. Foreign Service and became President of the Fund for Peace, a non-partisan non-governmental organization (NGO), a position he left in late 2011. He is a member of the board of a nonpartisan think tank in Washington, D.C and is active with several nonpartisan NGOs. In his final Foreign Service assignment, he was the founding director of the U.S. National Counterproliferation Center (NCPC), which is part of the Office of the Director of National Intelligence. As director of NCPC, he initiated the process that resulted in the four-party memorandum of understanding between DOE, DHS, DoD and the IC. Brill's overseas assignments with the Department of State included serving as ambassador to the IAEA and the UN Office in Vienna; ambassador to the Republic of Cyprus; acting ambassador and deputy chief of mission at the U.S. Embassy in New Delhi, India; and political counselor at the U.S. Embassy in Amman, Jordan. His domestic assignments included service as acting assistant secretary of state and principal deputy assistant secretary of state for the Bureau of Oceans and International Environmental and Scientific Affairs; executive secretary of the Department of State and special assistant to the Secretary of State; chief of staff for the Under Secretary of State for Political Affairs; and director of the Office of Egyptian Affairs. Brill is a graduate of Ohio University and received his MBA from the University of California at Berkeley.

T. Mark Harrison

Member

T. Mark Harrison (NAS) is Distinguished Professor of Geochemistry at the University of California, Los Angeles. He received his B.Sc. (Hons.) from University of British Columbia in 1977 and Ph.D. from the Australian National University in 1981. After a postdoctoral fellowship at the Carnegie Institution of Washington, he spent 8 years at the State University of New York at Albany rising to full Professor. In 1989, he moved to UCLA where he taught and from 1997-2000 served as Chair of the Department of Earth and Space Sciences. He was then appointed University Professor and Director of the Research School of Earth Sciences at the Australian National University from 2001 to 2006. He returned to UCLA in 2006 to take up his position as Director of the Institute of Geophysics and Planetary Physics. Mark has published over 200 papers and books which have been cited over 27,000 times on a range of research topics including but not limited to the evolution of the Tibet-Himalaya orogenic system, geochemical kinetics, the origin and transport of crustal magmas, the development of geoscience applications of secondary ion mass spectrometry; and investigations of early Earth.

Robert W. Kuckuck

Member

Robert Kuckuck is an independent consultant and serves on advisory boards for the national nuclear weapons research laboratories. He is currently a member of the Nuclear Weapons External Advisory Board for Sandia National Laboratories, and serves on ad-hoc review panels for the nuclear weapons issues. Immediately prior to his retirement Bob served as the Director of the Los Alamos National Laboratory in 2005 and 2006. Kuckuck held research and management positions at the Lawrence Livermore National Laboratory for more than 37 years, culminating in his serving as Deputy Director from 1994 to 2001. He left Livermore in 2001 to become the first Principal Deputy Administrator of the newly created National Nuclear Security Administration in the Department of Energy. In 2003, he received the Secretary of Energy's Gold Award, the Department of Energy's highest honor. In 1992-1994, Kuckuck served as Special Assistant to the President of the University of California and established the University's office for overseeing the three national laboratories the University managed for the DOE, Lawrence Berkeley National Laboratory, Lawrence Livermore National Laboratory and Los Alamos National Laboratory. Kuckuck received his Ph.D. in applied science from the University of California at Davis, and his MSc degree in physics from the Ohio State University. He did his undergraduate work in physics at West Liberty State College in West Virginia.

Warren F. Miller, Jr.

Member

Warren F. Miller, Jr. (NAE) is TEES Distinguished Research Professor at the Texas A & M University System. He recently served as assistant secretary for nuclear energy at the U.S. Department of Energy. Prior to that, Dr. Miller served as associate director of the Nuclear Security Science and Policy Institute at Texas A & M University as well as adjunct professor. Dr. Miller retired from Los Alamos National Laboratory in 2001, where he served for 27 years as a computational physics researcher and senior administrator. His administrative positions at Los Alamos included associate laboratory director for energy programs, associate laboratory director for physics and mathematics, and deputy laboratory director for science and technology. Dr. Miller holds a BS from the United States Military Academy at West Point, and a PhD in Engineering Sciences from Northwestern University. Concurrent with his Los Alamos career, he served on numerous national committees and held appointments at various Universities, including the University of Michigan and the University of California, Berkeley. He was elected a Fellow of the American Nuclear Society in 1982 and was elected to membership in the National Academy of Engineering in 1996.

Alexandra Navrotsky

Member

Alexandra Navrotsky is the Edward Roessler Chair in Mathematical and Physical Sciences; Distinguished Professor, Interdisciplinary Professor of Ceramic, Earth, and Environmental Materials Chemistry; and Director of Nanomaterials in the Environment, Agriculture and Technology Organized Research Unit (NEAT ORU) at the University of California at Davis. Dr. Navrotsky was educated at the Bronx High School of Science and the University of Chicago (B.S., M.S., and Ph.D. in physical chemistry). After postdoctoral work in Germany and at Penn State University, she joined the faculty in Chemistry at Arizona State University, where she remained till her move to the Department of Geological and Geophysical Sciences at Princeton University in 1985. She chaired that department from 1988 to 1991 and has been active in the Princeton Materials Institute. In 1997, she became an Interdisciplinary Professor of Ceramic, Earth, and Environmental Materials Chemistry at the University of California at Davis and was appointed Edward Roessler Chair in Mathematical and Physical Sciences in 2001. She is director of NEAT-ORU and serves on numerous advisory committees and panels in both government and academe, including are several instances with both Los Alamos and Lawrence Livermore National Laboratories. She was elected to the National Academy of Sciences in 1993. She has received several awards including the Urey Medal (the highest career honor of the European Association of Geochemistry) in 2004 and the Roebling Medal, the highest honor of the Mineralogical Society of America, in 2009.

David Overskei

Member

David Overskei is the President and founder of Decision Factors, Inc., a consulting firm providing strategic and management consulting on complex problems since 2004. Dr. Overskei has led internationally recognized fundamental and applied research teams in academia and private industry. He has research and solution delivery experience (from concept development to operation of boutique commercial production and sales) in diverse areas spanning defense, national security, energy technologies, medical systems, optical and wireless communications, and advanced software for command and control applications for the US Department of Defense and civilian first responders. He has successfully led the transition of research results and technologies into intellectual property and subsequent commercial product/service businesses. He has more than 30 years of experience leading for profit-business units, providing strategic planning and leading merger and acquisition deals up to \$750 million deal size. He has experience as a partner, client, and/or technology provider to international commercial industries, national and international laboratories, academic institutions, and government agencies. He is experienced in dealing with US and foreign government organizations, government and private funding entities, and has testified to the US Congress on numerous occasions. Dr. Overskei led the future oriented analysis of the Nuclear Weapons Complex Infrastructure, reporting to the Secretary of Energy Advisory Board in 2005. He has performed numerous studies for the US Department of Energy on problems managing new technology programs, routinely advises the US Department of Defense and US Allies on logic and credibility of approaches to meet nuclear warhead maintenance and supply needs. A common strength is an ability to understand how to manage technology-driven organizations and focus those organizations to achieve the desired objectives. He develops strategic plans and subsequent implementation plans for technology companies and government entities. He brings a unique skill set together, understanding advanced technologies, knowing how to manage and market technical organizations, and is experienced in the contracting, business finance, and protection of intellectual property aspects of running a business for profit.

Charles S. Przybylek

Member

Charles S. (Tyler) Przybylek is an independent consultant who formerly served as Chief Operating Officer and General Counsel of Department of Energy's National Nuclear Security Administration. In this role, Mr. Przybylek served as the headquarters interface for integration of field and headquarters operations. He also served as NNSA's chief legal officer and served as the Source Evaluation Board Chairman for the Los Alamos National Laboratory (LANL) contract competition and as the Source Selection Authority for the Lawrence Livermore National Laboratory (LLNL) contract competition. Prior to his positions in Washington, DC, Mr. Przybylek was the chief counsel for NNSA's Albuquerque Operations Office. There, he twice served as the deputy manager and also served as site manager for the Los Alamos Site Office. Before 1994, Mr. Przybylek served as chief counsel for the Oak Ridge Operations Office. His first mission with the DOE was as senior counsel for the Strategic Petroleum Reserve Project Management Office in New Orleans. Mr. Przybylek received his Juris Doctor degree with honors from the National Law Center at George Washington University. He is a member of the West Virginia and District of Columbia Bar Associations.

Burton Richter

Member

Burton Richter is the Paul Pigott Professor in the Physical Sciences, Stanford University and Director Emeritus at the Stanford Linear Accelerator Center. His research has centered on experimental particle physics with high-energy electrons and electron-positron colliding beams. He began with a post doctoral position at Stanford University in 1956, became a professor in 1967, and was Director of the Stanford Linear Accelerator Center from 1984 through 1999. Richter received the Nobel Prize in Physics (1976) and the E. O. Lawrence Medal of the Department of Energy (1976). He is a member of the National Academy of Sciences and the American Philosophical Society; a Fellow of the American Academy of Arts and Sciences, of the American Association for the Advancement of Science, and of The American Physical Society (President, 1994). He has served on many advisory committees to governments, laboratories and universities including the Secretary of Energy Advisory Board, Laboratory Operations Board, Nuclear Energy Task Force (2000-2006) and chaired the National Research Council's Board on Physics and Astronomy. He is a member of the French Commissaire a l'Energie Atomique (CEA) Visiting Group and the Jason Group. He received his BS and Ph.D. from the Massachusetts Institute of Technology in 1952 and 1956, respectively.

Robert Selden

Member

Robert Selden is a private consultant in defense science and research management. He retired in 1993 as an associate director at Los Alamos National Laboratory (LANL). His career in the DOE national laboratories began at Lawrence Livermore National Laboratory (LLNL) in the 1960s when he was one of the two participants in the Nth Country Experiment to design a nuclear explosive from unclassified information. After moving to LANL in 1979, he served as the Division Leader of the Applied Theoretical Physics Division, as Associate Director for Theoretical and Computational Physics, and as the first Director of the Los Alamos Center for National Security Studies. Dr. Selden served as the Chief Scientist of the U.S. Air Force from 1988 to 1991 where he received the Air Force Association's Theodore von Karman Award for outstanding contributions to defense science and technology. He has been a member of the Strategic Advisory Group to the Commander of the United States Strategic Command since 1995. Since 2003, he has served as Chairman of the Advisory Group's Stockpile Assessment Team, which has the responsibility to conduct a detailed annual review of the U.S. nuclear weapon stockpile. He also is currently a member of the Joint Advisory Committee on Nuclear Surety to the Secretaries of Defense and Energy. He was a member of the Air Force Scientific Advisory Board from 1984 to 2005. Dr. Selden received his BA degree from Pomona College, Claremont, California, in 1958, and his Ph.D. degree in Physics from the University of Wisconsin in 1964.

John C. Sommerer

Member

John C. Sommerer retired as senior fellow in the Director's Office of the Johns Hopkins Applied Physics Laboratory, the largest of the Department of Defense (DOD) University Affiliated Research Centers. He also held a permanent appointment as Daniel Coit Gilman Scholar at Johns Hopkins University. Until January 1, 2014, he was Director of the APL Space Sector, with responsibility for all APL contributions to military, intelligence community, and civil space programs. Prior to 2008, he held a number of other senior executive positions at APL, including Director of Science & Technology, Chief Technology Officer, and Director of the Milton S. Eisenhower Research Center, and he led a number of enterprise-level task forces, strategic plans, and other initiatives. Dr. Sommerer received bachelor's and master's degrees in systems science and mathematics from Washington University in St. Louis, a master's degree in applied physics from The Johns Hopkins University, and a Ph.D. in physics from the University of Maryland. Dr. Sommerer has served on a number of advisory bodies for the US Government, including terms as Chair and Vice Chair of the Naval Research Advisory Committee, senior technical advisory committee to the Secretary of the Navy, Chief of Naval Operations, and Commandant of the Marine Corps. He has also served on numerous National Academy of Sciences boards and committees. He is a full member of the International Academy of Astronautics.

James M. Tien

Member

James Tien (NAE) became the dean of the College of Engineering at the University of Miami in September 2007. An internationally renowned researcher, he formerly served as the Yamada Corporation Professor at Rensselaer Polytechnic Institute, was founding chair of its Department of Decision Sciences and Engineering Systems, and professor in its Department of Electrical, Computer and Systems Engineering. Tien joined the Rensselaer faculty in 1977 and twice served as its acting dean of engineering. In 2001 he was elected to membership in the National Academy of Engineering, one of the highest honors accorded an engineer. His research interests include systems modeling, public policy, decision analysis, and information systems. He has served on the Institute of Electrical and Electronics Engineers Board of Directors (2000-04) and was its vice president in charge of the Publication Services and Products Board and the Educational Activities Board. Tien earned his bachelor's degree in electrical engineering from Rensselaer and his Ph.D. in systems engineering and operations research from the Massachusetts Institute of Technology.

Joan B. Woodard

Member

Joan B. Woodard is an independent consultant. Dr. Woodard retired in 2010 from Sandia National Laboratories as Executive Vice President and Deputy Director. She served as the Chief Operating Officer from 1999 to 2005. During her 36-year career at Sandia National Laboratories, she led the energy technology development programs as well as the national security programs and was the executive with oversight for human resources and compensation as well as budget and finance. She oversaw Sandia's Defense, Homeland Security and Energy programs. She led several strategic initiatives including strategies for energy, cyber security and the future of science and technology. Dr. Woodard served as Deputy Lab Director of Nuclear Weapons at Sandia Corporation. Dr. Woodard earned her doctorate degree in Mechanical Engineering from the University of California Berkley and a Master's degree in Engineering Economics from Stanford.