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State of Nuclear Energy in the World
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"Global Energy Needs: Defining a Role for a Right Sized Reactor"

Download Dr. Tom Sanders' Presentation

The end of the Cold War, the events of September 11, 2001, and almost global support for the resurgence of nuclear energy have created a new opportunity to reinvigorate our commitment to peace and prosperity built around a new "Global Nuclear Future." For the U.S. to return to its former position as a visionary leader in the beneficial use of nuclear technology and materials on a global scale, it is imperative that steps be taken to reverse the conditions and decisions that led to the present situation - for the most part, the U.S. nuclear supply industry has moved offshore. This will require an integrated or holistic view of the global nuclear enterprise, from the cradle to the grave. Some of the realities of the global nuclear state will be reviewed in the presentation.

Dr. Sanders has been the Manager/Integrator of Sandia National Laboratories Global Nuclear Materials Management and Global Nuclear Futures Initiatives since 1997. He has organized numerous focus meetings with senior government policy officials on the need for a second nuclear era, from a national security perspective. As the leader of the Global Nuclear Futures vision, he leads the development of topical meetings, policy papers, news articles, partnership events with other countries and non-government organizations, and caucus events on Capitol Hill to articulate that a healthy and thriving U.S. nuclear energy infrastructure (from education to labs, suppliers, operators, and NGOs) is key to global proliferation risk management in the future.

He developed a complementary partnership initiative between 7 U.S. and 9 Russian Lab Directors; this message has been delivered at Presidential summits, White House and Congressional briefings, and to numerous champions throughout government, industry, labor, and academia. He is the co-founder and former Vice President of the American Council on Global Nuclear Competitiveness. He has contributed to and managed several technical groups and programs at Sandia since joining in 1984.

Dr. Sanders has authored over one-hundred journal articles, conference papers, magazine articles, and white papers covering all aspects of the nuclear fuel cycle, from fusion and fast fission breeder reactor systems to criticality safety of spent fuel transport, storage, and disposal systems. He completed a Bachelor of Science, Master of Science, and Doctor of Philosophy Degrees in Mechanical/Nuclear Engineering at the University of Texas in Austin.

Dr. Sanders also received an NRC license as a Senior Reactor Operator at the University of Texas. He served as a nuclear operator and supervisor on U.S. Navy nuclear submarines for several years, completing several patrols on the USS Kamehameha and the USS Shark. He is

also qualified as a journeyman shipyard electrician. Dr. Sanders is a member of ANS, ASME, ACGNC, and INMM. In June 2008, Dr. Sanders was elected Vice President/President-Elect of the American Nuclear Society.