

Mr. David K. Hayes is the Group Leader of the Advanced Nuclear Technology Group (N-2) at Los Alamos National Laboratory. In this capacity, Mr. Hayes manages a staff responsible for executing a wide variety of missions supporting a multitude of programs and agencies including the DOE Nuclear Criticality Safety Program (NCSP), DOE Emergency Response Programs, DOE Global Threat Reduction Programs, DOE Nuclear Counter Terrorism Programs, DHS Domestic Nuclear Detection Office, and Defense Threat Reduction Agency among others. N-2 is responsible for the operation of the National Criticality Experiments Research Center (NCERC) located at the Nevada National Security Site (NNSS). Mr. Hayes received M.S. (1997) and M.Eng. (1994) degrees in Nuclear Science and Engineering from Cornell University (1997) and his B.S. (1992) in Nuclear Engineering from Rensselaer Polytechnic Institute (RPI).

Mr. Hayes is an expert in criticality and operational nuclear safety. His career in the nuclear field began in 1982 as a submarine reactor operator in the U. S. Navy. After an Honorable Discharge in 1988, he pursued undergraduate studies at RPI. As an undergraduate at RPI, he became an N.R.C. Licensed Senior Reactor Operator for the Rensselaer Critical Facility, a pool-type research reactor. In 1992 he accepted a technical internship with the Defense Nuclear Facilities Safety Board (DNFSB). As a staff member for the DNFSB, he performed safety reviews at each of the DOE Weapons Complex Sites. During 1994-95, he was a visiting scientist at the Los Alamos Critical Experiments Facility (LACEF) and qualified as a critical assembly crew member. In 1997, Mr. Hayes joined the criticality safety group (ESH-6) at Los Alamos National Laboratory as a criticality safety engineer. From 1997 through 2000, he performed criticality safety evaluations for operations in the plutonium facility, the Chemistry and Metallurgy Research (CMR) facility, waste disposal facility, and LACEF. From 2000-2002, Mr. Hayes managed the Safety Basis Oversight Group at the Y-12 National Security Site. In 2002 he rejoined the Advanced Nuclear Technology Group as a Technical Staff Member at LACEF.

Prior to the decision (2004) to move LACEF to the Device Assembly Facility in Nevada, Mr. Hayes was certified as a crew chief on the five operational critical assembly machines: Comet, Flat-Top, Godiva-IV, Planet, and SHEBA. Since 2005, he has supported the transfer and re-establishment of general purpose nuclear material handling and criticality experiment capabilities. In 2008, he collaborated with the *Commissariat à l'énergie atomique* (CEA) to develop and implement a training program for critical assembly operators, culminating with 5 LACEF crew members qualified to operate the critical assemblies at Valduc: Caliban, Prospero, and Silene. He assembled and lead a core team of operators through the Criticality Experiments Facility (CEF) readiness review process from 2009 through the successful completion of the DOE Operational Readiness Review in 2010. During this timeframe, he also served as the country manager for Armenia, Romania, and Mongolia supporting the DOE Second Line of Defense Programs, conducting acceptance testing, training, and site surveys for radiation portal monitor installations in those countries. Mr. Hayes became the N-2 Group Leader in 2011.

Mr. Hayes is a member of the Nuclear Criticality Safety Division (NCSD) of the American Nuclear Society. He is a former member of the NCSD Executive Committee and past Chairman of the NCSD.