

APPENDIX A

PANEL BIOGRAPHIES AND CHARTER

HUGH L. THOMPSON, JR. – Mr. Hugh Thompson is Senior Nuclear Regulatory Advisor for SCIENTECH, Inc. He has over 33 years of nuclear safety experience, including senior level management for the regulatory programs at the Nuclear Regulatory Commission. As Deputy Executive Director for Regulatory Programs, Mr. Thompson directed and implemented the licensing, inspection, and rulemaking activities for operating nuclear power reactors, high-level and low-level radioactive waste management and disposal activities, medical, industrial academic and commercial uses of radioisotopes, safeguard activities and the transportation and storage of spent nuclear fuel and other radioactive material. Mr. Thompson led NRC operational readiness review teams as part of the NRC licensing reviews following the TMI-2 accident. Mr. Thompson also directed and implemented the human factors program changes for nuclear power plants and the training requirements for operators that followed the TMI-2 accident.

He received his JD from George Washington University, his MS in Nuclear Engineering from Georgia Institute of Technology, and his BS from the U.S. Naval Academy.

JOHN A. AUXIER, Ph.D., CHP – Dr. Auxier is an expert in the areas of nuclear engineering and health physics. During his tenure at the Oak Ridge National Laboratory in Tennessee, he was a research scientist, and from 1972, Director of the Health Physics Division. He participated in, and ultimately directed, successful efforts to obtain levels of radiation doses for survivors of the nuclear bombings of Hiroshima and Nagasaki, Japan. He has been a consultant to the Radiation Effects Research Foundation of Japan.

Dr. Auxier's special consulting activities have included the President's Commission on the Accident at the Three Mile Island Nuclear Power Plant. Also, he was the head of the task committee on health physics and radiation dosimetry for this incident. He has been a member of the Advisory Committee to the U.S. Department of Energy for the Northern Marshall Islands and a

member of the Department of Energy/Defense Nuclear Agency Inspection and Advisory Team for the Cleanup of Enewetak Atoll.

Dr. Auxier received his Ph.D., Nuclear Engineering from Georgia Institute of Technology, Atlanta, Georgia; 1972; his M.S., Physics from Vanderbilt University, Nashville, Tennessee; 1952; and A.B., Physics from Berea College, Berea, Kentucky; 1951.

JAMES H. CLARKE, Ph.D. – Dr. Jim Clarke is Senior Vice President and Technical Practice Leader for Environmental Forensics for Brown and Caldwell. He has over 28 years of experience in the overall area of environmental chemistry with emphasis on the fate and transport of chemicals in the environment and the investigation and remediation of contaminated sites. He is also a member of the Adjunct Faculty of the Department of Civil and Environmental Engineering at the School of Engineering of Vanderbilt University, where he serves as a co-lecturer in courses on Environmental Chemistry and Hazardous Waste Management. He is a member of the faculties of several continuing education and professional development programs including those of The Johns Hopkins University, Vanderbilt University, the American Institute of Chemical Engineers, and the Center for Professional Advancement. He is also a member of the National Academy of Sciences Committee on Remediation of Buried and Tank Wastes. He has over 100 publications and presentations, including several reports for the National Research Council and one book chapter on contaminant transport in the subsurface.

He received his Ph.D. in Theoretical Chemistry from The Johns Hopkins University and his BA in Chemistry from Rockford College.

MICHAEL D. COBURN, Ph.D. – Dr. Coburn is an expert in the fields of synthesis and characterization of energetic materials (explosives and propellants). He was a Technical Staff Member at the Los Alamos National Laboratory from 1964 to 1994. Following his retirement from Los

Alamos, he has been a consultant with the Lawrence Livermore National Laboratory, the Office of Naval Research, TRW Vehicle Restraint Systems, and TPL, Inc.

Dr. Coburn has authored 52 publications in refereed scientific journals, numerous technical reports, and 11 patents.

Dr. Coburn received his Ph.D. in Organic Chemistry from the University of Texas at Austin in 1964 and his B. S. in Chemistry from the University of Texas at Austin in 1962, where he was inducted into Phi Beta Kappa and Phi Lambda Upsilon.

B. JOHN GARRICK, Ph.D., PE – Dr. B. John Garrick was a founder of PLG, Inc., and retired as President and Chief Executive Officer in 1997. Currently he has an active consulting practice. He received the Society for Risk Analysis' highest honor, the Distinguished Achievement Award in 1994, and was its President in 1989-90. Dr. Garrick was elected to the National Academy of

Engineering in 1993, and is a member and chairs several National Research Council committees, having served as Vice Chair of the Academies' Board on Radioactive Waste Management and as a member of the Commission on Geosciences, Environment, and Resources. He is a Fellow of three professional societies: the American Nuclear Society, Society for Risk Analysis, and Institute for the Advancement of Engineering. In 1994, he was appointed to the U.S. Nuclear Regulatory Commission's Advisory Committee on Nuclear Waste for which he is now chairman. Dr. Garrick has published approximately 200 papers and reports on risk, reliability analysis, nuclear engineering, and energy; written several book chapters, and edited a book on risk management and assessment. He has a Ph.D. in Engineering and Applied Science from the University of California, Los Angeles; a degree in physics; and attended the Oak Ridge School of Reactor Technology. He is registered a professional engineer in the State of California.

July 6, 1999

**Independent Technical Review Panel Charter
for OU-7-10, Idaho National Engineering Laboratory (INEEL)**

The Office of Environment, Safety and Health (EH) and the Office of Environmental Management (EM) of the Department of Energy (DOE) authorize the operation of this Independent Technical Review Panel (ITRP) to evaluate the planned remediation approach and to derive technical conclusions on the following aspects of the planned remediation for Pit 9 (OU-7-10) at the Idaho National Environmental and Engineering Laboratory (INEEL):

- (1) Review INEEL plans for investigating Pit 9, considering an Employee Concern regarding the risk of explosion.
- (2) Review relevant technical information and render an independent technical opinion with respect to the likelihood and consequences of fires, explosions, or other safety consequences (including nuclear safety) that could result from sonic drilling in Pit 9 (i.e., apply best engineering judgment).
- (3) Identify design features – engineered and administrative – that are normally provided to prevent or mitigate accidents for similar evolutions and hazards; i.e., radioactive and hazardous (and to maintain the design safety margin).

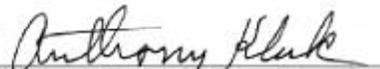
Mr. Hugh L. Thompson, Jr. is appointed Chairman of the ITRP. The Chairman should provide overall management and coordination of the ITRP consistent with the review plan and schedules. The Chairman should coordinate, with EH assistance, activities of the review panel and its members to ensure that the technical evaluations of the ITRP are thorough, documented, and definitive relative to the lines of inquiry specified above. At the conclusion of the review, the Chairman should submit a final report to the DOE coordinators, which has received a factual review by appropriate parties, documenting its conclusions and their bases to the DOE coordinators. Prior to finalization, all comments should be addressed. The report should be signed by all ITRP members indicating concurrence, unless a differing professional opinion exists. Any differing professional opinion should be documented as part of the final report and should be signed by the member. The Chairman should plan on briefing DOE management on the review and its conclusions. Replacement of members may occur only with the consent of the Chairman and EH.

ITRP members are responsible for the technical defense of ITRP conclusions. ITRP members will coordinate all activities with the Chairman. Members should possess no conflict of interest relative to the evaluation. Questions on potential conflicts of interest should be addressed to the Chairman and EH. Members should participate in all ITRP meetings. They may consult with technical consultants provided for the panel or with other sources that they deem applicable and appropriate, contingent on available funding and contractual issues. Members may need to draw on additional resources for technical activities such as modeling or testing; these resource requests should be coordinated with the Chairman and the DOE coordinators. Issues involving contracts or funding should be coordinated with the Chairman and the DOE coordinators.

The following individuals are appointed to the ITRP: Mr. Hugh L. Thompson (Chairman), John Auxier, Ph.D., James H. Clark, Ph.D., Michael D. Coburn, Ph.D., John Garrick, Ph.D.



DOE Coordinator (Pranab Guha, EH-34)
Office of Environment, Safety and Health



DOE Coordinator (Anthony Kluk, EM-44)
Office of Environmental Management

