

LECTURER'S VITAE

IAEA-ARGONNE TRAINING COURSE

Name: John Arthur Grobe (Please list me as Jack Grobe in any program materials)

Present Position: Executive Director

Affiliation: Exelon Nuclear Partners

Address: See attached

See attached

See attached

See attached

Phone Number: See attached

Fax Number: See attached

E-mail Address: See attached

Scope of Present Duties:

See attached

Most Relevant Past Experience:

See attached

Educational Background:

See attached

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Jack Grobe

**Executive Director
Exelon Nuclear Partners, LLC**

Profile

Mr. Grobe is a principal in Exelon Nuclear Partners, LLC responsible for domestic and international nuclear business development and work.

Professional History

Mr. Grobe has over 35 years experience in nuclear operations, safety and research, including two years with Exelon Generation. Prior to joining Exelon, he completed a 32 year career with the U.S. Nuclear Regulatory Commission (U.S. NRC). Since joining Exelon, Mr. Grobe has provided leadership during the recovery and restart of the Fort Calhoun Station, which was shutdown for approximately 2 ½ years beginning in 2011 due to organizational, operational and safety concerns. In addition, he has supported domestic and international business development within Exelon Nuclear Partners, LLC.

At the U.S. NRC, Mr. Grobe was Deputy Director for Engineering in the Office of Nuclear Reactor Regulation responsible for all technical aspects of operational safety, regulation, licensing, oversight and emergency response of the 104 operating reactors in the United States. Mr. Grobe provided strategic leadership and executive oversight for major reactor safety initiatives, including co-authorship of the "Recommendations for Enhancing Reactor Safety in the 21st Century: The Near Term Task Force Review of Insights from the Fukushima Dai-ichi Accident." In addition, Mr. Grobe led other U.S. initiatives in reactor safety, including developing innovative strategies for ensuring reactor, containment and spent fuel safety following a terrorist attack, establishing standards for use of digital instrumentation and control systems for operating and advanced reactors, enhancing nuclear fire protection incorporating performance-based and risk-informed insights, managing gas intrusion into emergency core cooling systems, addressing water-related degradation of cable jacket materials, ensuring grid reliability, inspecting and ensuring the integrity of steam generator tubes, and addressing potential post-accident debris blockage of pressurized water reactor sump strainers. Mr. Grobe also led the oversight of the recovery and restart activities at multiple nuclear power plants which had been shut down for several years due to operational and safety concerns, including the Davis-Besse plant following the discovery of significant reactor pressure vessel head degradation in 2002.

Jack Grobe, Executive Director, Exelon Nuclear Partners, LLC

Industry Leadership

Mr. Grobe has been Chair of U.S. committees transforming nuclear safety and technology in several areas, including the Fire Protection Steering Committee and the Digital Instrumentation and Controls Steering Committee. He has also been a member of the Probabilistic Risk Analysis Steering Committee and the Committee to Review Generic Requirements. Mr. Grobe has appeared multiple times before the U.S. NRC's Advisory Committee on Reactor Safeguards on a variety of nuclear plant safety culture, operational, engineering, and safety topics.

Internationally, Mr. Grobe represented the United States at the 2008 and 2011 International Atomic Energy Agency (IAEA) Convention on Nuclear Safety and was Group Vice Chairman at the 2011 IAEA Convention on Nuclear Safety. Mr. Grobe provided key addresses to a joint nuclear safety and public policy conference in Paris sponsored by the École Normale Supérieure and L'Institut de Radioprotection et de Sûreté Nucléaire and at the European Commission conference in Amsterdam on enhancing the European nuclear operating experience program. Mr. Grobe is also a member of the International Steering Committee for the Japan Society of Maintenance and has presented papers on performance-based and risk-informed maintenance practices at that society's annual conference in Sendai, Japan. Mr. Grobe also provided papers to the International Congress on Advances in Nuclear Power Plants.

Education

Mr. Grobe received his bachelor's degree in nuclear engineering and his master's degree in bionucleonics from Purdue University. Mr. Grobe is a graduate of the U.S. Federal Executive Institute's program for Leadership in a Democratic Society and is a certified U.S. NRC Senior Resident Inspector for Boiling Water Reactor facilities.

Mr. Grobe has provided keynote addresses, lectures and technical papers at a variety of universities, conferences and venues in the United States and internationally.

In 2005, the President of the United States recognized Mr. Grobe's sustained superior contribution to the safety of nuclear power and the people of the United States by presenting him with the rank of Meritorious Executive.

Commitment to the Community

Mr. Grobe has applied his skills and abilities to the successful education of the children in Wheaton, Illinois as a member of the school district Board of Directors for seven years, including serving as Board Chairman and Vice Chairman. In that capacity, he provided for the educational needs of 17,000 youth from five to 18 years of age and was responsible for an organization of approximately 1,400 employees with an annual budget of approximately \$100 million. In addition, Mr. Grobe served three years on the Board of Directors for the Montgomery County Science Fair in Maryland providing enhanced educational opportunities in the physical and life sciences and engineering for young adults before entering university. He also served on the Scientific Review Committee evaluating the veracity of scientific experiments and studies. Mr. Grobe held a variety of leadership positions in his church, community and youth sports, volunteering his time to teach young people and help those less fortunate and in need.

John Arthur (“Jack”) Grobe

Executive Director, Exelon Nuclear Partners, LLP

Professional summary

Mr. Grobe is recognized nationally and internationally for his leadership in nuclear power plant engineering, safety and regulation. He has over 35 years experience leading and managing complex programs at Exelon Generation, at the U.S. Nuclear Regulatory Commission and at a high energy physics national research laboratory. He provided strategic leadership for many innovations and improvements in nuclear plant engineering and safety. He was involved in leading the recovery and restart oversight of six nuclear power facilities that had been in multi-year shutdown due to operational performance and safety concerns; those plants remain operating today. He provided leadership for or presentations at a number of international nuclear engineering and safety conferences and conventions, and has been an invited speaker at various national and international nuclear conferences and meetings. He has extensive experience in the licensing and regulation of nuclear power plants. Mr. Grobe has demonstrated leadership, communication and technical skills and experience necessary to bring complex projects to successful conclusion.

Professional qualifications/registration(s)

U.S. Nuclear Regulatory Commission Certificate in Boiling Water Reactor Operation – 1984
U.S. Nuclear Regulatory Commission Certificate in Pressurized Water Reactor Operation - 1981

Education

Master of Science, Bionucleonics, Purdue University, West Lafayette, Indiana, U.S.A. – 1978
Bachelor of Science, Nuclear Engineering, Purdue University, West Lafayette, Indiana, U.S.A. – 1977

Memberships/Affiliations

American Nuclear Society
United States Senior Executive Service
International Steering Committee for the Japan Society of Maintenance

Languages

English

Employment history

Exelon Generation, Exelon Nuclear Partners, LLC, Executive Director, Warrenville, Illinois, 2012 – Present

U. S. Nuclear Regulatory Commission, Deputy Director for Engineering, Office of Nuclear Reactor Regulation, Rockville, Maryland, 2006 – 2012

U. S. Nuclear Regulatory Commission, Chair, Digital Instrumentation and Control Steering Committee, Rockville, Maryland, 2007 – 2010

U. S. Nuclear Regulatory Commission, Chair, Fire Protection Steering Committee, Rockville, Maryland, 2007 – 2010

U. S. Nuclear Regulatory Commission, Member, Probabilistic Risk Assessment Steering Committee, Rockville, Maryland, 2006 – 2012

U. S. Nuclear Regulatory Commission, Member, Committee to Review Generic Requirements, Rockville, Maryland, 2006 – 2012

U. S. Nuclear Regulatory Commission, Director, Division of Component Integrity, Office of Nuclear Reactor Regulation, Rockville, Maryland, 2005 – 2006

U. S. Nuclear Regulatory Commission, Director, Office of Nuclear Security Special Projects, Rockville, Maryland, 2004 – 2005

U. S. Nuclear Regulatory Commission, Director, Division of Reactor Projects, Region III, Lisle, Illinois, 2002 – 2004

U. S. Nuclear Regulatory Commission, Director, Division of Reactor Safety, Region III, Lisle, Illinois, 1999 – 2002

U. S. Nuclear Regulatory Commission, Deputy Director, Divisions of Reactor Safety and Reactor Projects, Region III, Lisle, Illinois, 1994 – 1999

U. S. Nuclear Regulatory Commission, Chief, Nuclear Materials Safety, Region III, Glen Ellyn, Illinois, 1990 – 1994

U. S. Nuclear Regulatory Commission, Director, Enforcement and Investigations, Region III, Glen Ellyn, Illinois, 1986 – 1990

U. S. Nuclear Regulatory Commission, Senior Resident Inspector, Perry Nuclear Power Plant, Perry, Ohio, 1984 – 1986

U. S. Nuclear Regulatory Commission, Engineering Inspector, Region III, Glen Ellyn, Illinois, 1980 – 1984

Fermi National Accelerator Laboratory, Radiation Safety Officer, Neutrino Experimental Department, Batavia, Illinois, 1978 - 1980

Representative projects

Nuclear power plant licensing and regulation/U.S. Nuclear Regulatory Commission, Rockville, Maryland and Perry, Ohio, U.S.A.

As Deputy Director for Engineering in the Office of Nuclear Reactor Regulation, Mr. Grobe was responsible for all engineering, technical and scientific aspects of the licensing and regulation of the nuclear reactors in the United States. This involved issuance of approximately 1500 licensing actions and processing approximately 30 new or revised safety regulations each year. In the mid-2000s, the U.S. new-build nuclear power program was growing rapidly and the Office of Nuclear Reactor Regulation expanded from approximately 650 staff to 1100 staff. In 2007, the new reactor licensing activities were split from operating reactor licensing forming the Office of New Reactors with approximately 450 staff. Mr. Grobe was key to staffing the leadership and technical aspects of the new office.

In addition, Mr. Grobe was the Senior Inspector at the Perry Nuclear Power Plant at the completion of construction, pre-operational testing and licensing of the facility.

Recovery and Restart of Fort Calhoun Station (FCS)/Omaha Public Power District (OPPD) and Exelon Generation, Fort Calhoun, Nebraska, U.S.A. 2012-2013

FCS was shutdown in the spring 2011 for routine refuelling activities. The plant had been experiencing operational and safety performance decline for a number of years. Shortly after shutdown, the plant experienced a significant electrical fault and fire, and then a major flood of the Missouri River. In 2012, Exelon Nuclear Partners established two agreements with OPPD to recover and restart the plant, and then to operate the plant for twenty years. Mr. Grobe provided strategic insight on recovery and restart to the OPPD Chief Nuclear Officer and Exelon Senior Vice President and tactical direction to the organization for the recovery and restart of FCS. Key to this recovery was reestablishment of intrusive corporate governance and oversight, an appropriate nuclear safety culture, and effective corrective action and quality assurance programs. Mr. Grobe developed and consolidated the necessary technical and operational issues into regulatory documentation required for restart of the reactor. The recovery involved evaluation of numerous aspects of plant operation and engineering including operating and abnormal procedures, flood protection design, high energy line break analysis and electrical equipment qualification, tornado missile protection, containment electrical penetration design, preventative maintenance and equipment service life, plant modification control, and containment internal structures design. Mr. Grobe also provided strategic direction for managing the interaction with the U.S. Nuclear Regulatory Commission to obtain restart regulatory authorization and was the principle author of the post-restart continuing improvement plan. The plant successfully restarted in December 2013.

U.S. response to the accidents at the Fukushima Dai-ichi in Japan/ U.S. Nuclear Regulatory Commission, Rockville, Maryland, U.S.A.

Mr. Grobe was one of six members of the U.S. lessons learned task force studying the accident in Japan and developing the U.S. response to the accident. This resulted in publishing the report "Recommendations for Enhancing Reactor Safety in the 21st Century – The Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident" which has formed the basis for U.S. actions since the 2011 accident and contributed to the international dialogue on the lessons learned from the accident.

Developing innovative operations and engineering strategies for response to terrorist attacks on nuclear power plants/U.S. Nuclear Regulatory Commission, Rockville, Maryland, U.S.A.

Following the 2001 terrorist attacks in the United States, Mr. Grobe was assigned the responsibility to form and manage an organization to develop engineering and operating strategies to mitigate the consequences of a terrorist attack on an operating nuclear power plant. Mr. Grobe recruited and hired a staff of approximately 50 experts to develop and implement methodologies and analysis techniques to determine the best engineering and operations response strategies at the 104 operating U.S. reactors. This resulted in the implementation of innovative and cost-effective safety enhancements at U.S. reactors effective for any type of casualty, including a major terrorist attack.

Evaluating international safety and regulatory programs effectiveness/International Atomic Energy Agency (IAEA), Vienna, Austria

Mr. Grobe was Group Vice Chairman at the 2011 IAEA Convention on Nuclear Safety (CNS) and represented the United States at the 2008 IAEA CNS. As Group Vice Chairman in 2011, Mr. Grobe managed the evaluation of the nuclear safety and regulatory programs of six countries that operated nuclear power plants, including the development of recommendations for enhancement of those programs.

Establishing the technical, quality and regulatory framework for use of digital control systems at nuclear power plants/ U.S. Nuclear Regulatory Commission, Rockville, Maryland, U.S.A.

Mr. Grobe provided the strategic leadership and direction to develop a comprehensive set of technical standards, quality requirements and the regulatory framework to utilize modern digital control systems in safety-related applications at U.S. operating and new-build reactors. This included the requirements for retrofitting operating reactor control systems and certifying and licensing new-build digital control systems. He recruited and managed a cross-discipline group of approximately 50 experts to develop the necessary standards. These activities contributed significantly to the Multi-national Design Evaluation Program (MDEP) digital review activities conducted under the auspices of the Nuclear Energy Agency in Paris France. Great Britain was part of the MDEP effort.

Certifications and training

Leadership in a Democratic Society – Senior Executive Institute
Boiling Water Reactor Operations
Nuclear Reactor Engineering and Core Physics
Pressurized Water Reactor Operations
Probabilistic Risk Assessment

Honors and awards

Meritorious Executive – 2005 Recognized by the President of the United States for contribution to the protection of the U.S. people and environment and the safety of the U.S. nuclear power plants.

Numerous performance awards and high quality work recognitions

Publications and presentations

“Recommendations for Enhancing Reactor Safety in the 21st Century – The Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident.” Charles Miller, Amy Cabbage, Daniel Dorman, Jack Grobe, Gary Holahan, and Nathan Sanfilippo. July 12, 2011.

“Implementation of Performance-Based Fire Protection at Operating U.S. Nuclear Power Plants.” John A. Grobe and Steven A. Laur. Proceedings of the International Congress on Advances in Nuclear Power Plants 2011. May 2-6, 2011. (ISBN: 978-1-61839-809-3)

“Regulatory Aspects of Digital Systems Retrofit at U.S. Nuclear Power Plants.” John A. Grobe and Steven A. Arndt. Proceedings of the International Congress on Advances in Nuclear Power Plants 2011. May 2-6, 2011. (ISBN: 978-1-61839-809-3)

“Public Policy on Nuclear Reactor Safety.” Joint conference of Ecole Normale Superieure and L'Institute de Radioprotection et de Surete Nucleaire. Paris, France. November 2011.

“U.S. Nuclear Operating Experience Program.” European Commission Conference on Nuclear Operating Experience. Amsterdam, The Kingdom of the Netherlands. 2010.

“Performance-Based and Risk-Informed Nuclear Power Plant Maintenance.” Conference of the Japan Society of Maintenance. Sendai, Japan. 2010.

Mr. Grobe has testified numerous times before the U.S. NRC’s Advisory Committee on Reactor Safeguards on a variety of nuclear plant safety culture, operational, engineering and safety topics.

Mr. Grobe has been the invited keynote speaker at multiple U.S. nuclear technology conferences.

Mr. Grobe has been an invited lecturer at the Massachusetts Institute of Technology nuclear executive training program.

Mr. Grobe has been an invited presenter at several nuclear engineering graduate school colloquia.