



John P.S. Froats, P. Eng

John Froats is a recognized leader in the CANDU Nuclear Industry. With over 45 years of experience in reactor design, start-up and operation, John has an extensive knowledge and experience base in all aspects of Nuclear Generation. John is known for his passion in leading people and for high standards of technical performance.

In 2005, John was awarded the OPG “Power Within” Achievement Award for “Leadership”. In 2009, he received the Canadian Standards Association Award of Merit for improvements in the Canadian Nuclear Standards Program.

In 2015, John received the prestigious John Jenkins Award, the CSA’s highest recognition for outstanding contribution to standards development in Canada. In 2016, he received recognition from the CNS for ‘Outstanding Contribution to the Nuclear Industry’ and was voted ‘Best Lecturer’ and ‘Most Inspirational Lecturer’ by the UOIT FESNS 2016 graduating Class. In 2020 he was nominated for a teaching excellence award at Ontario Tech University (formerly UOIT).

John held the role of President and CEO of the CANDU Owners Group (COG) from 2006 to 2010. During his four years as President and CEO, John led the Company to grow and become a highly respected provider of R&D, operating experience and highly leveraged products and services to CANDU operators worldwide. During his tenure, COG provided increased Industry collaborative focus on several key technical issues and facilitated a change in the perspective of the CANDU void coefficient.

Prior to his role at COG, John held a number of key leadership positions at Ontario Power Generation (OPG). As Chief Nuclear Engineer & VP Engineering and Modifications, John led a team of over 1600 people to improve performance in the OPG Engineering and Modifications program across the fleet, and in delivery of approximately \$500M of services annually. John led changes including establishment of the Conduct of Engineering Program and the Advanced Operations Overview for Managers. He introduced fundamental changes to enhance the quality and predictability of delivery of plant modifications and was instrumental in establishing a highly respected program for the recruitment and development of between 100 and 200 new engineers annually.

John Froats has held various positions at the Pickering Nuclear Generating Station, including Director Site Engineering, Engineering Services Manager, Technical Superintendent, Electrical, Instrumentation & Control and Licensed Shift Supervisor.

John has been a qualified Nuclear Emergency Response Manager, Emergency Response Technical Manager and an Environmental Spills Manager and has acted in these capacities in several situations including a loss of coolant event in 1994, the preparation and oversight for the Y2K transition and the grid collapse in summer 2003. He led the cultural and hardware changes in the transition to a modern-day Nuclear Security program in Canada.

In recent years, John has continued to be highly engaged in the advancement of the Canadian Nuclear program. Specifically:

In 2011, he took on the role of Associate Professor and Nuclear Engineer in Residence at the Ontario Tech University. In that role, he has helped shape the programming in the Nuclear Engineering area, including being one of the creators of the unique Graduate Diploma Program in Nuclear Design Engineering. Over his time at the University, John has delivered courses in Nuclear Plant Operation, Nuclear Safety Design, Nuclear Design Engineering Methods and Processes and CAPSTONE Design Project work. While at the University John has also served as an Associate NSERC Design Chair focused on enhancing Nuclear Design education and has contributed to health and safety programming at the University.

In 2023 John was awarded the Ontario Tech University Yuelel (James) Yang Engineering Teaching award for excellence in teaching and in 2024 was nominated for the Students Choice Award, also for excellence in teaching.

John has continued to serve Canada and the Canadian Nuclear Program in roles with CSA and the IAEA. At CSA, John led the CSA Nuclear Strategic Steering Committee over the period of 2004 to 2015 at which time; he was appointed to the CSA Standards Development Council and awarded the John Jenkins award for outstanding contribution to standards in Canada. At the IAEA, he has continued to support the Team representing Canada at the Convention on Nuclear Safety in roles of Officer of the Convention serving as Rapporteur or Country Group Chair at four conventions and more recently in an advisory capacity. As well, John has been active with the IAEA in the Knowledge Management area – being part of the first IAEA team evaluating Masters of Nuclear Technology Programs.

As a Principal in Froats & Froats and Associates, John provides leadership development mentoring and seminar delivery, technical assessments, and independent oversight services in Canada and abroad. Services are most notably in the area of Safety Culture, leading high performing organizations, and nuclear engineering. He mentors leaders in the nuclear sector.

John currently holds the role of Associate Professor and Nuclear Engineer in Residence at Ontario Tech University and is Principal of Froats & Froats and Associates. At CSA, he is the Past Chair of the Nuclear Executive Steering Committee, a member of the CSA N290.2 Technical Committee and a member of the CSA Standards Development Council. He has served on the Nuclear Safety Review Board for Ontario Power Generation (March 2011 to June 2014), and as Chair of the Safety Advisory Board and Advisor to the Board for Canadian Nuclear Laboratories (April 2014 to the present).

John Froats received his Bachelor of Engineering (Electrical) Degree from McMaster University, his Reactor Shift Manager License from the AECB, is a graduate of the OPG Senior Nuclear Plant Manager Program and is a Registered Professional Engineer in the Province of Ontario.