



A champion of collaboration

As he enters semi-retirement, COG's Paul Lafrenière looks back on 42 years in the CANDU industry with a continued belief in the power of collaboration.

In the earliest parts of Paul Lafrenière's career, he learned a key ingredient of the CANDU culture was problem solving.

Lafrenière started his journey in nuclear with Atomic Energy of Canada Limited (AECL), in the late seventies, working alongside "pioneers," of the Canadian industry including R.L. (Bob) Hemmings and, later, Ontario Hydro's Ray McDermott, individuals who, to him, personified the spirit of innovation and resourcefulness that defined the sector during that era. Hemmings led a career at the forefront of Canadian nuclear and fusion power development while McDermott served as an early Bruce B Station Manager and played a critical role in the plant's commissioning.

"It was the early days of the nuclear industry and you were there with the people who were involved with CANDU from the very beginning," says Lafrenière. "We didn't have the supports we have today, but we were very resourceful and there was a lot of problem solving going on. It really was a 'CAN-DO' culture."

One of Lafrenière's first roles was as a commissioning engineer at Bruce B.

"One of the innovative techniques we developed at the time was finger-printing the station," he says. "We set-up a program with additional instruments to capture all aspects of the station in its original state. We developed databases of this information and it proved valuable in monitoring and identifying changes and problems that arose as the station aged and allowed us to perform troubleshooting in an effective and rapid manner."

Even during this period of CANDU continuous improvement, Lafrenière observed that problem solving was typically centred at the stations themselves and there was a tendency for stations to work and operate independently rather than collectively.

"You quickly realized in talking with the other stations that everybody basically had the same problems and there was a lot of reinventing the wheel going on," says Lafrenière. "This delayed the resolution of problems and made it a lot more costly."

After stints with AECL and Ontario Hydro, Lafrenière joined Hydro-Québec in 1988, where he spent a decade at Gentilly-2 Nuclear Plant, serving primarily as engineering manager.

It was during that time Lafrenière began to learn more about CANDU Owners Group (COG), which started in 1984. He recognized the tremendous potential of industry collaboration.

"My work at Gentilly contributed to improving the station's lifetime performance above 80 per cent and brought in a lot more cooperation from the [CANDU] fleet," says Lafrenière. "We were only beginning to recognize then that collaboration could be leveraged to the benefit of the industry as a whole."

A new journey in collaboration

The mid-to-late 1990s and early 2000s marked a period of transition for the Canadian nuclear industry. In 1995, the Canadian federal government completed a review of AECL's funding model, including its R&D expenditures, and the result was a significant reduction in nuclear investment.

By the end of 1998, changes in the Canadian energy landscape, combined with controversial policy and restructuring decisions in Ontario, including layup of several Ontario Hydro reactors, meant changes in industry funding and organizational structures.

From 1998-2006, Lafrenière spent much of his time at Chalk River Laboratories, serving as general manager of nuclear facilities, navigating tight operating budgets during a "difficult and trying time for the industry."

After his "first retirement," from AECL in 2006, Lafrenière joined COG as project manager in joint projects, invited in by Henry Chan, an original COG staff member, now himself retired.

"Henry recognized that I had always been a COG supporter and that I had unique design and plant operating experience as an engineering manager," says Lafrenière. "Going back to 1984, COG had completed billions of dollars in joint projects work and was bringing the fleet together to solve complex problems."

Lafrenière is proud of his COG contributions, in particular, "getting the stations to see the power of working together."

"We launched joint projects in a number of areas. I was proud to lead the first COG benchmarking initiative in 2008, forming the COG member benchmarking team, and coordinating 16 CANDU station visits, around the world. This led to 20 or so member benchmarking joint projects and served as predecessors to initiatives like CCIV (COG's Continuous Collaborative Improvement Visits that identify member challenges and benchmark utilities who have successfully tackled them). It also led to streamlining of benchmarking visits and exercises being conducted electronically. This work became the main component of COG's Inter-station Assistance Program," says Lafrenière.

"We popularized peer-led technical site visits, brought in INPO, WANO and EPRI collaboration, increased focus on obsolescence and spare parts. We developed industry guidelines and best practice databases, including a treasure chest of approximately 700 CANDU benchmarking exercises that now benefit the entire industry."

Lafrenière also counts his work supporting international member performance improvement and calandria and internal conditions assessment as achievements that would not have been possible without CANDU fleet collaboration. He believes this is what makes the Canadian nuclear industry and COG such unique success stories.

"People just don't recognize that we're really inter-dependent," says Lafrenière.

"Mondays were never boring throughout my career; there was always a new problem to solve."

Lafrenière will use his recently announced semi-retirement, to spend more time with his family including his grandson, and to pursue interests like golf and ballroom dancing with his wife.

Paul's industry colleagues share their thoughts on his strengths and contributions to the industry

"I've always been impressed by Paul's breadth and depth of knowledge. He seems to know the most arcane details and could pull them out when they were most needed. I don't think we could find someone like Paul, and it's great that his retirement is only "semi"."

Fred Dermarkar, COG President and CEO

"Paul is extremely dedicated to COG and to the nuclear industry where he has served in many leadership roles across many organizations. He strives to solve any problem brought forth by our members and work in collaboration to provide them with the best possible solution. He loves the nuclear industry and the industry loves his enthusiasm and commitment."

Sonia Qureshi, COG Director, JP&S

"I will miss seeing Paul walking with a stack of folders in his hand through the office corridors. Those folders are a symbol of his extensive knowledge and brilliance. The pace of his walk, his enthusiasm and passion for the work, even after 35-years-plus in the industry, and the smile on his face are a reflection of his positivity and kindness."

Nidhi Gaudani, COG Program Manager, JP&S

"When I think of COG's vision: excellence through collaboration, Paul's name comes to mind. I have worked with Paul from his days at AECL, to when he was technical manager at Gentilly-2, and, later, after he joined COG. Throughout that time, he has consistently demonstrated professionalism, energy, enthusiasm and willingness to share and to encourage collaboration for the betterment of the industry."

Paul Thompson, Sr. Strategic Advisor, NB Power

"Thank you, Paul, for your hard work and commitment to COG, to Embalse NPP and other COG members enabling us to achieve excellence through collaboration. You may be retiring from work but you will never retire from being a great person."

Carlos Moreno, Engineering Manager, and Sergio Battiato, OPEX Manager, NA-SA (Argentina)

Paul, who loves Korean kimchi and food.

As a communication channel between international members, he played a very important role.

Understanding and supporting international members, he made a great contribution to COG excellence through collaboration.

Lovely and romantic engineer, Paul, your devotion to KHNP will remain in our memory for a long time.

Donghwan Park, Sr. Researcher, KHNP



Paul Lafrenière (far left) celebrates KEPCO becoming COG's first international supplier participant program member in 2017. Lafrenière, now semi-retired, strengthened international CANDU collaboration and improved station performance through his COG work.

This story is one of an on-going series about COG employees; a diverse group in expertise, gender, age and nationality. Our team reflects the diversity and strengths of our Members and the COG community. Their skills help create the best in collaboration for nuclear innovation. Through COG, our Members and the nuclear community worldwide achieve results that contribute to the highest standard of safety, efficiency and environmental performance. Together we create Excellence Through Collaboration.