PANEL SESSION 39: Canadian GOCO Transition

Co-Chairs: Christine Fahey, Canadian Nuclear Laboratories (Canada)

Cathy Hickey, Westinghouse Government Services

Panel Reporter: Sean Gamley, Canadian Nuclear Laboratories (Canada)

Panelists:

1. **Richard Sexton,** President & Chief Executive Officer, Atomic Energy Canada Limited (Canada)

- 2. **Kurt Kehler,** *Vice-President Decommissioning and Waste Management, Canadian Nuclear Laboratories (Canada)*
- 3. André Régimbald, Strategic Advisor, Canadian Nuclear Safety Commission (Canada)
- 4. **Adrian Simper,** Director of Strategy and Technology, NDA (United Kingdom)

This panel provided a retrospective view on the transition of Canadian Nuclear Laboratories (CNL) to a three-mission national laboratory managed under a Government-owned, contractor-operated (GoCo) model. The panel's focus was on the first year of operation (2015 September to the end of 2016) and the outlook for the laboratories over the next ten years.

The panel offered perspectives on the expansion of the DWM program as an enabler of CNL revitalization, adoption of new ways of working and the utilization of alternative technologies. Recent and planned changes in the regulatory framework were also considered along with the increased engagement with the host communities and Indigenous Peoples.

Approximately forty-five people were in attendance for this panel discussion.

Summary of Presentations

Representing Atomic Energy of Canada Limited (the Crown Corporation overseeing CNL's operation), Mr. Sexton outlined the overall three-mission scope of the GoCo model, which focuses on decommissioning and waste management (representing about 50% of the total annual expenditures), nuclear science and technology and a revitalization of the CRL infrastructure and facilities. With a CNL workforce of approximately 3,000 employees and approximately \$800M (CAD) in funding per year, this contract represents a major investment on behalf of the Canadian Government. Mr. Sexton noted the key to a successful GoCo implementation scheme is the right contract based on thorough and comprehensive benchmarking; this is what made the first year of Canadian's GoCo model as successful as it was. In reviewing the early lessons learned, Mr. Sexton outlined how transformation has begun (but changing culture will take time), how flexible contracting incentives have proven effective, how a positive relationship between the client and the contractor has enabled collaboration and how a ten-year contract with

stable funding has enabled strategic, long-term planning. Looking forward, CNL and AECL will continue to finalize long-term strategic plans and an accelerated decommissioning and waste management (DWM) plan that reduces the overall liability of an estimated \$3.8B over the next ten years.

Kurt Kehler introduced the scope of CNL's DWM portfolio, which centers on accelerated liability reduction and preparation of the nuclear laboratories for revitalization. The focus of DWM at CNL is the universal demand for demonstrated performance and accelerated performance. Within the first 18 months, CNL's key achievements focused on the development of three formal Environmental Assessments for new projects, the opening of the Port Granby long-term waste management facility (LTWMF) for waste receipt, and the construction of the Port Hope LTWMF, as well as the decommissioning of twenty-three (23) structures at Chalk River Laboratories (CRL) and seventeen (17) structures at Whiteshell Laboratories (WL). Over the next eight years (2017 – 2025), the decommissioning strategy includes the removal of 122 buildings at CRL; the complete closure of the WL site; the development of the Near Surface Disposal Facility (NSDF) by 2021; the in-situ remediation of two nuclear reactors (Nuclear Power Demonstration Reactor in Ontario and the Whiteshell Reactor-1 in Manitoba); and the completion of the Port Hope and Port Granby Projects by 2023 and 2021, respectively. Mr. Kehler closed his presentation with a discussion on the focus to work collaboratively with local communities and First Nations groups, as well as all other external stakeholders.

André Régimbald's presentation offered an overview of the role that the Canadian Nuclear Safety Commission (CNSC) has played and will continue to play in their regulatory oversight of CNL under the GoCo model. The CNSC, as an independent quasi-judicial federal administrative tribunal, is responsible for overseeing the Canadian nuclear industry for the complete cradle-to-grave lifecycle. Mr. Régimbald noted that the CNSC licenses were transferred from AECL to CNL in 2014 in preparation for the transition to the GoCo model, once CNL provided evidence that it was competent to operate AECL's sites that it made adequate safety provisions, that it had sufficient autonomy to carry out its regulatory obligations and that adequate financial guarantees were maintained. Mr. Régimbald then provided an overview of the sound and flexible CNSC regulatory framework and described how the CNSC has positioned itself to help support the three major projects proposed by CNL (e.g., development of the NSDF, as well as the decommissioning of the WR-1 and NPD reactors). The establishment of financial and human resources plans, and the development of administrative protocols between the CNSC and CNL, has helped to position the CNSC to review the CNL projects on their aggressive schedules. The presentation was concluded with an overview of the CNSC's transparent stakeholder engagement process, which involves extensive consultation with the public, Aboriginal peoples and non-government organizations. To ensure that the interested parties have the financial resources necessary to participate in the Environmental Assessment process, the CNSC maintains a Participant Funding Program.

Adrian Simper provided a direct comparison of the Canadian GoCo implementation experience to the United Kingdom (UK) experience, which served as a model for the overall transition. **Dr. Simper** outlined that a bilateral agreement was established in 2011 between AECL and the UK Nuclear Decommissioning Authority (NDA). Under this agreement, the NDA has and continues to provide advice on the transition, contract management and oversight. Together with the US Department of Energy, AECL and the NDA share lessons learned and exchange technical ideas. **Dr. Simper** noted that while organizations such as AECL and NDA are not actively involved in work execution strategies, they have vested interests in seeing the work is executed safely and on-budget. As such, there is a high need for collaborative and transparent relationships between the GoCo contractor and the oversight organization. **Dr. Simper** also recognized that the GoCo structure presents interesting challenges in terms of relationships with the regulatory organizations. The owner (NDA, AECL) is able to have conversations with the regulator about potential strategies and approaches that the contractor/license could not initiate because of its focus on operation safely. While the NDA oversees total liabilities estimated at \$192B (CAD), as opposed to the AECL oversight of \$9.9B (CAD), many of the same challenges are encountered in terms of regulatory engagement, transfer of risk, cultural change and overall uncertainty. **Dr. Simper** also noted that the UK experience has demonstrated that different contract strategies for GoCo implementation have been implemented and changes to the model (which may include a reversion to a GoGo model) have proven to be effective methods to maintain optimization within the UK setting.

Questions and Answers

There were a total of six questions raised by members of the audience following the panel presentations.

The first issue raised was in regard to the future of the Underground Research Laboratory (URL) in Manitoba. **Mr. Kehler** noted that URL mission is complete and that the facility has been permanently closed and the site has been remediated.

The second question was in regard to how management transitions unfolded and how CNL personnel were impacted by the GoCo transition. **Mr. Kehler** estimated that a total of sixty parent company (CNEA) employees have been brought into assist in the management of CNL, although that number was just over one hundred at the time of transition. Within the DWM portfolio, nearly all of the senior management team was displaced in the efforts to transition the laboratories and lead it into a new direction. It was also noted that certain areas (such as business systems and finance) did not see a lot of immediate changes in leadership and that it would have been beneficial if the parent companies did provide additional support to those areas. The assignment of parent organization employees continues to change within the CNL organization to meet the changing needs. **Mr. Sexton** also added that the new CNEA employees (who fulfill the senior leadership positions) are leading the culture change in the organization.

The third question, raised by an employee of CNL, was directed to **Dr. Simper**, requesting insight on how the UK GoCo model has dealt with the so-called "glass

ceiling" for internal laboratory personnel and how many feel that the top positions are inaccessible to them as they are held by parent organization personnel. **Dr. Simper** noted that the focus should remain on getting good leaders, regardless of what organization they come from. The focus needs to be on cultivating a culture of unity to avoid the fractures that may arise between representatives of the Parent Body Organization (PBO) and the representatives of the Site Licensing Company. On the topic of creating a unified team, **Dr. Simper** also noted the importance of cultural sensitivities to the local conditions and how this is critical to avoiding an "us vs. them" mentality. Opportunities for employees to join the parent companies in other capacities and at other sites should be encouraged, and in the UK environment, this has seen accomplished leaders move on and then come to their original site in a more senior capacity.

The fourth and fifth questions came from a retired CNL employee who inquired about the strategic plans for the laboratories after the site revitalization initiatives were completed as well as the timeline for environmental assessments and what are the plans are, if any, for timeline extensions. In responding to the initial question, **Mr. Sexton** outlined that the CNL vision involves leveraging the material and nuclear science knowledge and applying that to different technologies (e.g., different types of reactors and different material science industries). A ten-year plan has been developed to outline this vision and the capital investment (\$1B) is focused on the providing services that the government needs and the commercial sector needs from a facility like this. Business cases are being developed for each of the facilities being built. **Mr. Régimbald** responded to the supplementary question by outlining the measures contained in administrative protocols between the CNSC and CNL that set requirements, timelines and service standards. He noted that proactive communication ensures that surprises are avoided and that technical issues are addressed as they come up. **Mr. Régimbald** added that the CNSC focus remains on working with CNL to meet the project timelines.

The final question was in regard to the updated CNL supply chain and how potential bidders can become pre-qualified. **Mr. Kehler** clarified that the process goes directly through CNL, not through the PBO or through any parent companies. **Mr. Kehler** recommended that they discuss the specifics of the audience members' question following the session. **Mr. Sexton** also added that there is a defined process to ensure fairness whenever one of the parent companies are involved in bidding for a specific project or work scope.

Conclusion

The session was concluded with a commitment from the co-chairs to continue hosting this panel in coming years as a mechanism to share ongoing lessons learned and to provide information on the evolution of Canada's national nuclear laboratories.