PANEL SESSION 106: **Transition to Government Owned – Contractor Operated (GOCO) at Canadian Nuclear Laboratories (CNL)**

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Panelists:

1. **David Newland**, *Director General, Canadian Nuclear Safety Commission (CNSC)*
2. **Mark Lesinski**, *President & CEO, Canadian Nuclear Laboratories (CNL)*
3. **Richard Sexton**, *Vice President, Decommissioning and Waste Management, Atomic Energy of Canada Limited (AECL)*
4. **Kurt Kehler**, *Vice President Decommissioning & Waste Management, (CNL)*

Summary of Presentations:

The Government of Canada has recently completed the procurement process to create a Government Owned – Contractor Operated (GOCO) structure for all of AECL's sites in Canada. The Canadian National Energy Alliance (CNEA) was awarded the contracts to restructure and manage Canada's nuclear laboratories. The contracts became in effect on 2015 September 12 and wrap up of the transition-in process is imminent. The panel presenters represent key stakeholders in this process and gave their thoughts on the GOCO structure, the transition period and the next few years under this new GOCO model for Canada.

The session began with **Richard Sexton**, Vice President Decommissioning and Waste Management of AECL providing a brief overview of the organizational structure of the GOCO model; he explained the main parties and their roles and relationships. Mr. Sexton explained the relationship, roles and structure of Natural Resources Canada (NRCan), AECL, CNEA and CNL. He also showed the relationship of CNSC, the Canadian nuclear regulator, to CNL. CNL is the enduring entity with all the staff and performs the work. CNL has approximately 3,400 employees and an annual budget of ~$800 million Canadian dollars. CNL has three main areas of focus under the GOCO contract: decommissioning and waste management, nuclear science and technology, and the revitalization of the Chalk River Labs infrastructure and facilities.

AECL is a Federal Government Crown Corporation, funded by the Canadian Government. In 2006 the Government of Canada decided to restructure the organization to reduce risks and costs to the Canadian taxpayer. Essentially the desired outcome was to bring in an experienced private sector contractor to manage and operate the company. **Mr. R. Sexton** explained the AECL GOCO model is a hybrid, based on Nuclear Decommissioning Authority (NDA) and Department of Energy (DOE) models. It is similar to the UK model. AECL is equivalent to NDA in the UK. It owns the liability and all assets. AECL provides the "what", not the "how" with respect to the

execution of the work under the GOCO. CNEA brings international expertise, experience and reach back. CNL is the site operating company and licensee.

Under the Canadian GOCO model, there are two types of contracts; cost reimbursable based on performance, and target cost. There are two target cost contracts, one for the closure of the Whiteshell Laboratories (WL) site and the other for the Nuclear Power Demonstration (NPD) reactor closure. The lightest touch of oversight by AECL is on the target cost contracts because the contractor is responsible for how, when, and how much. More oversight is needed for the site operating contract (SOC).

Mr. R. Sexton explained that AECL was purposely structured to be small. This allows it to be nimble and make quick decisions. He closed by describing some of the objectives and challenges related to the GOCO model. The goal is to achieve transformational change of the organization and deliver better value to Canadians. The challenge is that Canada is new at this game (GOCO).

Mr. Mark Lesinski, President and CEO of CNL, was the second speaker and presented the vision for the company under the GOCO contracts. He began by congratulating Canada (NRCan and AECL) for the procurement process, especially on beating the schedule to award. Mr. Lesinski gave a brief introduction to AECL assets in Canada and indicated that **Mr. Kurt Kehler** would give additional details later in the panel presentations. Mark explained that CNEA is a new team. Some of the organizations have worked together on previous projects, but the partnership is new. CNEA is comprised of Energy Solutions, Fluor, CH2M, and SNC Lavalin. Rolls Royce Canada is in a supporting role to the CNEA partnership. CNL will develop world-class applied science capabilities in four mission areas: Energy, Health, Environment, and Safety & Security. These align with the federal research priorities as well as CNL's current and future commercial markets.

Mr. Lesinski described the CNL vision to be a world class, right sized and sustainable national nuclear lab, delivering science and technology (S&T). The Decommissioning and Waste Management (D&WM) clean up is a major focus, but lab renewal and demonstration that Canada has tier 1 nuclear expertise will be enhanced. There are three main missions for CNL: S&T Federal, S&T Commercial, and D&WM. There is significant D&WM in the coming years to support the renewal plan for CRL. The plan is to remove 122 buildings, eliminating liability by $3B. Mr. Lesinski also gave a quick overview of the separate CNEA contracts to close the NPD and WL sites.

Mr. Lesinski expanded on the Transition-In process. CNEA began with a focussed listening campaign to understand issues that existed in the organization. The team has been working on tackling a few quick wins such as walking paths to improve safety and address some urgent infrastructure challenges for offices. There is a "new way of business" at CNL, which is code for replacing many outdated procedures and processes.

In addition to a strong focus on D&WM, the next 12 months will see the creation of a Science Advisory Board that draws on external and international expertise. The Moly-99 mission will also conclude in October.

Mr. Lesinski concluded with lessons learned during transition-in. Operating the site and preparing plans concurrently has been tough. In hindsight, his recommendation is to perform transition first, then take over the shares and operations. CNL was ready for transition-in by the CNEA team, including preparing offices, phones, etc. As a result, the transition-in was smooth. Relationships are good, and will be reinforced as they move forward.

Mr. Kurt Kehler began his presentation describing the mission and scope details for each of the main sites: Chalk River Laboratories, Whiteshell Laboratories, Port Hope Area Initiative, and the prototype reactor sites. He explained that the D&WM priorities for the period 2016 to 2025 are to reduce risks and liabilities. This includes the demolition of 122 buildings at the Chalk River site, the licensing and construction of a near surface disposal site for low-level waste, the closure of the WL and NPD sites, the repatriation of fuels and target residue materials to the USA and the Port Hope/Port Granby clean up initiatives. Mr. Kehler provided details on a few of the major challenges such as soil and groundwater contamination at CRL. The Whiteshell Laboratories closure project is significant and will have challenges with waste packaging and transportation of spent fuel and the waste management area wastes. NPD is initiating an environmental assessment process to perform in-situ decommissioning of the reactor. The Port Hope Area Initiative is Canada's largest environmental remediation project ($1.4B CDN). Mr. Kehler closed his presentation by discussing critical success factors to achieve the mission. This includes effective planning and execution of projects; regulatory certainty for environmental and licensing approvals; social license through effective communication with First Nations, local communities and the public; and a highly skilled and motivated work force.

Dr. David Newland, Director General of the Canadian Nuclear Safety Commission (CNSC) was the final speaker and he presented the Regulator's perspective on the transition of CNL to a GOCO model. Dr. Newland began by giving background information on the CNSC, including a brief history, its scope and mission. Dr. Newland explained that the Commission is at "arm's length" from the Government of Canada, but not isolated from them. The CNSC regulates all nuclear activities in Canada, from cradle to grave, and for all public or private entities. CNSC does not have a prescriptive approach to decommissioning. It is up to waste owners to determine the approach, and the CNSC provides review and acceptance. The Commission reports to Parliament through the Minister of Natural Resources. Dr. Newland described the relationship of the CNSC in the organizational model that includes AECL, CNL, and CNEA. The CNSC is the regulator and grants operating and decommissioning licenses to CNL for its various sites.

Dr. Newland explained that the details of the GOCO contract are not particularly of interest to the CNSC. However, the agreement between AECL and CNL is of interest because it outlines the autonomy of CNL and their ability to be a licensee.

During the establishment of the GOCO competition, the CNSC was an advisor to the process. They were not a formal part of the procurement process, but there to give context on the regulatory environment. CNSC also wanted clarity of who owned responsibility of funding the liabilities and who was responsible for premiums for insurance on the nuclear liability.

The CNSC wanted to ensure CNL as licensee had independence for meeting license obligations. The CNSC has considered how it might have to change as a result of the GOCO model; including preparedness to respond to accelerated projects, and being open to new approaches to performing D&WM. The CNSC is concerned about the volume and rate of change. Dr. Newland summarized with the implications to the CNSC as a result of the GOCO contracts. These include more projects, more licensing actions, environmental assessments, and changes to regulatory compliance oversight. To respond in a timely matter, the CNSC has identified a dedicated team to respond to the acceleration of work.

Conclusions

The GOCO model that Canada adopted for management of the AECL sites relied on lessons learned and experience from several sites in the USA and the UK. As a result, the Canadian model is a hybrid, but more closely aligned to the UK model.

The transition in of CNEA to the various AECL sites went extremely well. Working spaces were ready for the new executives and other key leaders. The roles of CNEA, AECL, and CNL have been clearly established and communication among the organizations, and with the CNSC is strong.

In hindsight, the transition in period and the new performance baseline preparation periods should not have been concurrent. The early focus should have been on establishing new executives and key managers, then working on planning for execution under the three contracts.

The panel members represented all key organizations in the GOCO, and the Canadian Nuclear Safety Commission. This provided a very complete view of the main stakeholders. Approximately 45 people attended the panel session and there were a number of interesting and applicable questions following the panel presentations.