



**Report of the Auditor General of Canada  
to the Board of Directors of  
Atomic Energy of Canada Limited**

Independent Audit Report

Special Examination—2017



Office of the  
Auditor General  
of Canada

Bureau du  
vérificateur général  
du Canada

## Special examination reports

Special examinations are a form of performance audit that is conducted within Crown corporations. The Office of the Auditor General of Canada audits most, but not all, Crown corporations.

The scope of special examinations is set out in the *Financial Administration Act*. A special examination considers whether a Crown corporation's systems and practices provide reasonable assurance that its assets are safeguarded and controlled, its resources are managed economically and efficiently, and its operations are carried out effectively.

More details about the audit objective, scope, approach, and sources of criteria are in *About the Audit* at the end of this report.

*Ce document est également publié en français.*

© Her Majesty the Queen in Right of Canada, as represented  
by the Auditor General of Canada, 2017.

Cat. No. FA3-126/2017E-PDF  
ISBN 978-0-660-08604-0





Office of the  
Auditor General  
of Canada

Bureau du  
vérificateur général  
du Canada

13 June 2017

To the Board of Directors of Atomic Energy of Canada Limited:

We have completed the special examination of Atomic Energy of Canada Limited in accordance with the plan presented to the Audit Committee of the Board of Directors on 25 August 2016. As required by Section 139 of the *Financial Administration Act* (FAA), we are pleased to provide the attached final special examination report to the Board of Directors.

We will present this report for tabling in Parliament shortly after it has been made public by Atomic Energy of Canada Limited.

I would like to take this opportunity to express my appreciation to the Board members, management, and the Corporation's staff for the excellent cooperation and assistance offered to us during the examination.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Clyde MacLellan".

Clyde MacLellan, FCPA, FCA  
Assistant Auditor General



# Table of Contents

<b>Introduction</b>	<b>1</b>
Background .....	1
Focus of the audit .....	3
<b>Findings, Recommendations, and Responses</b>	<b>4</b>
Corporate management practices .....	4
Except for a significant deficiency in Board renewal and some other improvements needed, the Corporation had in place good corporate management practices .....	4
Contract management .....	17
The Corporation had good contract management practices, but improvement was needed in the area of skills and competencies .....	17
<b>Conclusion</b>	<b>22</b>
<b>About the Audit</b>	<b>23</b>
<b>List of Recommendations</b>	<b>27</b>



# Introduction

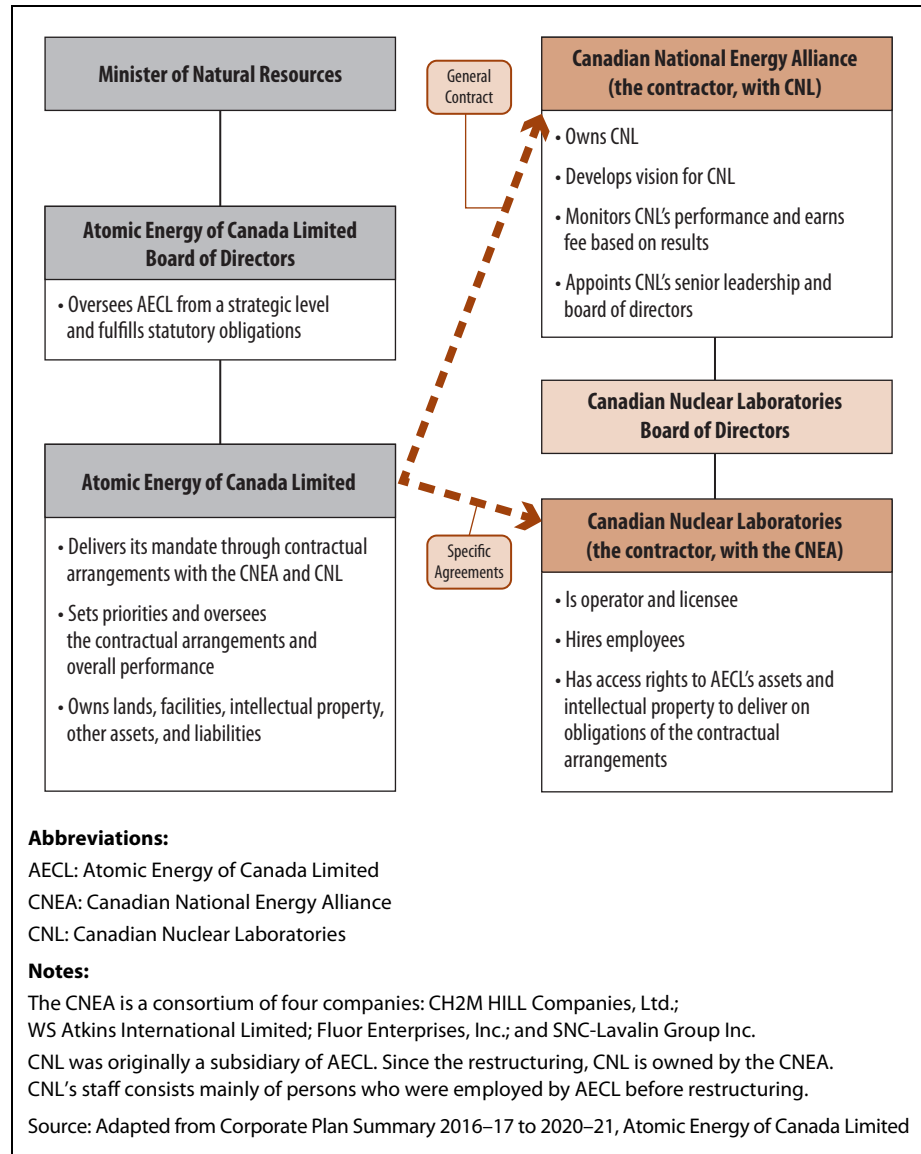
## Background

---

### Role and mandate

1. Atomic Energy of Canada Limited is a federal Crown corporation, reporting to Parliament through the Minister of Natural Resources. The Corporation's mandate is to enable nuclear science and technology and fulfill Canada's radioactive waste and decommissioning responsibilities. It receives federal funding and delivers its mandate through long-term contracts with a private-sector contractor for the management and operation of its sites.
2. Starting in 2009, the Corporation underwent a major restructuring, officially completed in September 2015. The initial goal was to leverage the experience and capabilities of the private sector in order to enhance efficiency and effectiveness, and to contain and reduce costs and risks for Canadians over time. The restructuring involved a competitive procurement process to select a contractor through which the Corporation would deliver its mandate.
3. The private-sector contractor selected was the Canadian National Energy Alliance (CNEA). With the completion of restructuring, the Corporation transferred ownership of its subsidiary, Canadian Nuclear Laboratories (CNL), to the CNEA. Under a Government-owned, Contractor-operated (GoCo) model, the Corporation delivers its mandate through long-term contracts with both the CNEA and CNL, together called "the contractor" (Exhibit 1). The Corporation retains ownership of all lands, facilities, intellectual property, other assets, and liabilities.
4. The GoCo arrangement consists of one general contract with the contractor and incorporates three specific agreements:
  - **Site Operating Company Agreement.** This agreement covers the contractor's decommissioning and waste management activities at Chalk River Laboratories and other satellite sites, its science and technology program at Chalk River, and the revitalization of the Chalk River campus.
  - **Whiteshell Laboratories Target Cost Agreement.** This agreement covers the closure of Whiteshell Laboratories, in Pinawa, Manitoba.
  - **Nuclear Power Demonstration Reactor Target Cost Agreement.** This agreement covers the closure of the Nuclear Power Demonstration reactor's waste management facility, near Rolphton, Ontario.

**Exhibit 1 Atomic Energy of Canada Limited's arrangement with the private-sector contractor**



**Nature of business and operating environment**

5. At the time of our audit, the Corporation had existed in its new form for about one year. Since the restructuring, the Corporation monitors the contractor's operations under the GoCo arrangement at eight sites across Canada. The Corporation has its headquarters in Chalk River, Ontario. The Chalk River site is the Corporation's main laboratory campus and Canada's largest research and development complex. The site is also the location of research and development facilities, including the National Research Universal reactor (planned to close in March 2018). The Corporation's work is conducted by a small group of approximately 40 full-time employees. Federal funding for the 2016–17 fiscal year was set at \$969 million, to be used toward the contractor's operating expenses and



the Corporation's operations. The amount consisted of \$530 million for decommissioning and waste management, and \$439 million for nuclear science and technology (including \$160 million for capital investments).

6. The monitoring of the GoCo arrangement involves engaging with the contractor so that the Corporation can achieve a number of tasks, including approving long-term (5- and 10-year) strategic plans, reviewing and approving annual work plans, negotiating annual performance incentives, and ensuring compliance with the GoCo arrangement.

7. One element of the Corporation's mandate concerns decommissioning and waste management to deal with the results of decades of nuclear activities at the Corporation's sites and with the cleanup of waste at orphan sites for which the federal government has assumed responsibility. The cost of this work is estimated at over \$7.9 billion as of 31 March 2016.

8. A second element of the Corporation's mandate concerns providing nuclear science and technology in order to sustain and develop Canada's capabilities in both the federal government and the private sector. In support of this objective, the government is investing in infrastructure renewal projects to make Chalk River Laboratories a world-class science complex.

## Focus of the audit

9. Our objective for this audit was to determine whether the systems and practices we selected for examination at Atomic Energy of Canada Limited were providing it with reasonable assurance that its assets were safeguarded and controlled, its resources were managed economically and efficiently, and its operations were carried out effectively as required by section 138 of the *Financial Administration Act*.

10. Based on our assessment of risks, we selected systems and practices in the following areas:

- corporate management practices, and
- contract management.

The selected systems and practices and the criteria used to assess them are found in the exhibits throughout the report.

11. More details about the audit objective, scope, approach, and sources of criteria are in **About the Audit** at the end of this report (see pages 23–26).

# Findings, Recommendations, and Responses

## Corporate management practices

**Except for a significant deficiency in Board renewal and some other improvements needed, the Corporation had in place good corporate management practices**

---

### Overall message



12. Overall, except for a significant deficiency in Board renewal and some other improvements needed, the Corporation had in place good corporate management practices. The significant deficiency related to the delays in the appointment of Board members, over which the Corporation did not have control. During the period covered by the audit, the Corporation was operating with an interim Board and without a President and Chief Executive Officer while developing long-term strategic plans. In addition, the Board had not yet implemented a formal, systematic process for monitoring and reporting on the risks identified in the corporate risk register.

13. These findings matter because this is a critical time for the Corporation, when it is attempting to set its direction for the next 10 years and beyond. To do this, it is important to have a full complement of Board members with an appropriate mix of skills and appropriate terms, who can guide the development of long-term, comprehensive strategic plans. Delays in appointing new Board members and the President and Chief Executive Officer can have an impact on their understanding and ownership of the Corporation's strategic direction, including their ability to oversee its implementation. It is important as well for the Board to closely monitor risks, particularly during early implementation of a new business model involving a contractor. Continuing leadership from the Board and the Chief Executive Officer protects against the risk of not being able to achieve the initial goal of restructuring—that is, to leverage the experience and capabilities of the private sector in order to enhance efficiency and effectiveness, and to contain and reduce costs and risks for Canadians over time.

14. Our analysis supporting this finding discusses the following topics:

- Corporate governance and related practices
- Human resource management

---

### Context

15. Sound practices in corporate governance are essential to meeting the objectives that are outlined in Part X of the *Financial Administration Act* as it relates to Crown corporations. The Board is responsible for determining that the Corporation's long-term strategy is clearly aligned with the Government of Canada's objectives for the Government-owned,

Contractor-operated (GoCo) arrangement. The Board is also responsible for determining whether the Corporation has identified the risks associated with the strategy and is mitigating them effectively and efficiently.

16. The full complement of the Board is from five to seven members, appointed by the **Governor in Council**, a process outside the control of the Corporation. Two committees support the Board: the Audit Committee and the Human Resources and Governance Committee. Expected Board competencies include extensive knowledge and experience in the areas of energy operations, science and technology, and international commerce. The Corporation's business model also indicates a need for knowledge in the area of contract management.

17. September 2015 marked the completion of a restructuring process that implemented the Corporation's new role and reduced its workforce from approximately 3,400 employees to 40. The Chief Transition Officer stepped down in March 2016, and the Governor in Council had not yet appointed a new President and Chief Executive Officer. In the interim, the Board named a vice-president to serve as Acting Chief Transition Officer. As a result of the restructuring and the related changes to the position of President and Chief Executive Officer, the Governor in Council approved a reclassification of that role with an associated decrease in salary of approximately \$100,000.

18. It is important for the Board to engage in strategic planning and closely monitor risks, particularly during early implementation of the GoCo model. Under the new model, the contractor is currently developing 5- and 10-year strategic plans setting out a long-term vision of the Corporation. Upon Board approval, the strategic plans will provide the basis for future corporate plans and, in turn, for the Annual Program of Work and Budget, identifying all activities to be performed by the contractor for the year for the operation of Chalk River Laboratories and other satellite sites. In addition, the Performance Evaluation and Measurement Plan enables the Corporation to identify fees payable to the contractor by measuring work performance against a predetermined set of evaluation criteria and milestones.

19. The Corporation particularly depends on strategies for attracting and retaining talented employees. Currently, some members of the senior management staff are from outside Canada, where the GoCo model has been used in the nuclear sector for a much longer time. In addition, as a small organization, it is important for the Corporation to have in place a strong succession planning process to ensure continuity of its operations, especially since replacements might be needed for key senior management positions in the short term.

---

**Governor in Council**—The Governor General, acting on the advice of Cabinet, as the formal executive body that gives legal effect to those decisions of Cabinet that are to have the force of law.






**Recommendations**

20. Our recommendations in these areas of examination appear at paragraphs 25, 26, 27, 28, and 33.

**Analysis to support this finding**

21. **Corporate governance and related practices.** Skills and expertise needed by Board members were identified; Board roles and responsibilities were defined; and appropriate and accurate information was provided to the Board for oversight and decision making. However, we found a significant deficiency in Board renewal (a process over which the Corporation did not have control). We also found weaknesses in the implementation of strategic direction, in risk monitoring, in the design of measurable performance indicators, and in communications (Exhibit 2).

**Exhibit 2 Corporate governance and related practices—key findings and assessment**

Systems and practices	Criteria used	Key findings	Assessment against the criteria
<b>Governance</b>			
Board competencies	The Board had a sufficient number of members with the ability, skills, knowledge, and experience, as well as access to external expertise and training, to discharge its responsibilities.	<p>After restructuring, the Corporation identified the skills and expertise needed by Board members.</p> <p>The Corporation identified the knowledge and expertise currently missing in its oversight process, for the information of the Board.</p> <p>The new Board member appointed during our audit had access to orientation sessions providing information about the Corporation’s mandate and activities, as well as directors’ roles and responsibilities.</p>	
Board structure	The Board and its committees clearly defined and implemented their roles, responsibilities, authorities, and accountabilities.	<p>The Board’s organizational structure reflected the nature and complexity of the Corporation’s business and its new responsibilities under the Government-owned, Contractor-operated (GoCo) model.</p> <p>In spring 2016, the Board assessed its performance.</p> <p>The terms of reference of the Board were updated to reflect roles and responsibilities connected with oversight of the new GoCo arrangement.</p>	
<p><b>Legend—Assessment against the criteria</b></p> <p> Met the criteria</p> <p> Met the criteria, with improvement needed</p> <p> Did not meet the criteria</p>			

**Exhibit 2 Corporate governance and related practices—key findings and assessment (continued)**












Systems and practices	Criteria used	Key findings	Assessment against the criteria
Board oversight and decision making	The Board received timely information necessary to oversee and monitor the Corporation's activities, results, and management of risk, and for decision making to achieve corporate objectives.	<p>The Board received reports on how the Corporation achieved its corporate objectives through the contractor. It also received information on the contractor's performance against the criteria and milestones set out in the Performance Evaluation and Measurement Plan.</p> <p>The information received by the Board was at an appropriate level of detail and supported decision making.</p>	
Internal audit	The internal audit function, through the Audit Committee, provided an independent and objective view on risk and internal controls that contributed to the Board's oversight responsibilities.	<p>The internal auditor performed an internal audit risk assessment and developed an audit plan that was approved by the Audit Committee.</p> <p>Through the Audit Committee, the internal auditor provided an independent and objective view of the risks and internal controls that contributed to the Board's oversight responsibilities.</p>	
Board renewal process and appointment	The Board communicated its needs for the selection of directors and the Chief Executive Officer appointment in a proactive and clear manner.	<p>Discussions took place at Board and committee levels on the composition of the Board and the progress made on appointments.</p> <p>The Board proactively and transparently communicated its needs and concerns to the Minister regarding Board renewal and appointments.</p> <p>Despite delays in renewal and appointment, the Board was able to maintain quorum at its meetings and focus on its responsibilities.</p> <p><b>Significant deficiency</b></p> <p>As of January 2017, instead of a full complement, there were only four members of the Corporation's Board of Directors, all holding office on an interim basis. (Appointments are the responsibility of the Governor in Council and therefore outside the control of the Corporation.)</p>	
<p><b>Legend—Assessment against the criteria</b></p> <p> Met the criteria</p> <p> Met the criteria, with improvement needed</p> <p> Did not meet the criteria</p>			

Exhibit 2 Corporate governance and related practices—key findings and assessment (continued)

Systems and practices	Criteria used	Key findings	Assessment against the criteria
<b>Strategic planning and risk management</b>			
Strategic direction	<p>The Board had the necessary information to interpret the Corporation’s legislative and public policy mandate. This information allowed the Board to provide management with a strategic direction.</p> <p>Strategic direction was clearly defined and communicated and was congruent with government priorities and the Corporation’s mandate.</p>	<p>The approved Corporate Plan for the 2016–17 fiscal year was aligned with the Corporation’s mandate. The plan presented a set of priorities. Each was supported by a series of projects that included outcomes, performance measures, and targets.</p> <p>For the Acting Chief Transition Officer, the Board set objectives and conducted performance assessments. The objectives for the position were aligned with the Corporate Plan.</p>	
Implementation of strategic direction through operational planning	Operational plans were aligned with the strategic direction, contained sufficient and appropriate information to guide management action, and were well communicated throughout the organization.	<p>The Corporation and the contractor agreed on an Annual Program of Work and Budget, which identified activities to be performed by the contractor. The Annual Program was aligned with the vision and objectives of the 2016–17 Corporate Plan.</p> <p>The Annual Program was sufficiently detailed to guide the contractor’s actions.</p> <p>A Performance Evaluation and Measurement Plan was first prepared for the 2016–17 fiscal year. It established financial incentives for the contractor to perform selected activities required under the Annual Program.</p> <p><b>Weakness</b></p> <p>At a time when the 5- and 10-year strategic plans were being developed, the Governor in Council had not appointed a President and Chief Executive Officer for the Corporation. (On 17 February 2017, after the period of our audit, the Governor in Council appointed an interim President and Chief Executive Officer for a one-year period, or until the appointment of a new President and Chief Executive Officer.)</p>	
<p><b>Legend—Assessment against the criteria</b></p> <p> Met the criteria</p> <p> Met the criteria, with improvement needed</p> <p> Did not meet the criteria</p>			

**Exhibit 2 Corporate governance and related practices—key findings and assessment (continued)**













<b>Systems and practices</b>	<b>Criteria used</b>	<b>Key findings</b>	<b>Assessment against the criteria</b>
Risk identification and assessment	The Corporation identified and assessed the potential risks that needed to be managed to achieve its strategic and operational objectives.	The Corporation identified and prioritized its key risks and the related mitigation measures through its risk register.	
Risk mitigation	The Corporation defined and implemented responses to the risks it faced.	The Corporation identified which staff members were accountable within the organization for implementing strategies to mitigate risks. Risks were discussed and updated, if necessary.	
Information for decision making and monitoring of risks	There was appropriate information on risks provided to senior management and to the Board for decision making and to allow them to manage/monitor risks and update risk mitigation strategies.	During the restructuring period, senior management actively discussed and managed operational risks.  <b>Weakness</b> The Board had not yet implemented a formal, systematic process for monitoring and reporting on risks identified in the corporate risk register.	
<b>Performance measurement</b>			
Designing measurable performance indicators	The Corporation designed measurable performance indicators to generate information that was important to users (entity management, the Board, and the public) and supported achievement of its strategic objectives.	The Corporation's 2016–17 Corporate Plan established some qualitative and quantitative indicators to assess performance against priorities. This gave the Corporation a basis for consistent performance reporting on the operations of the contractor.  <b>Weakness</b> The reporting framework in the Corporate Plan did not demonstrate how the Corporation would measure the overall objectives of restructuring, which were to enhance efficiency and effectiveness, and to contain and reduce costs and risks for Canadians over time.	
<p><b>Legend—Assessment against the criteria</b></p> <p> Met the criteria</p> <p> Met the criteria, with improvement needed</p> <p> Did not meet the criteria</p>			

Exhibit 2 Corporate governance and related practices—key findings and assessment (continued)

Systems and practices	Criteria used	Key findings	Assessment against the criteria
Collecting data to assess performance against operational targets	The Corporation collected performance-indicator data that measured its success in achieving its operational targets as set out in annual corporate plans.	<p>The Corporation collected data on the contractor's performance. Performance was measured against the criteria and milestones established by the Performance Evaluation and Measurement Plan for the Site Operating Company Agreement.</p> <p>The Corporation also collected performance data on the Whiteshell Laboratories and Nuclear Power Demonstration reactor target cost agreements.</p> <p>This data provided the Corporation with the necessary information to report against its performance indicators in future annual reports.</p>	
Communications	<p>In the delivery of its mandate, the Board maintained effective communications with external stakeholders, the responsible Minister, and the public.</p> <p>Annual reports communicated key performance information to management, the Board, and the public.</p>	<p>The Corporation completed an annual report and made it available on its website.</p> <p>The 2015–16 Annual Report presented some performance information on the restructuring, the activities of the Corporation's nuclear laboratories, and its decommissioning and waste management activities.</p> <p>The Board maintained ongoing communications with the Acting Chief Transition Officer, the executive team, and the representative of the Minister and Department of Natural Resources.</p> <p><b>Weakness</b></p> <p>Since 2009, the Board had not held public meetings as required by the <i>Financial Administration Act</i>.</p>	
<p><b>Legend—Assessment against the criteria</b></p> <p> Met the criteria</p> <p> Met the criteria, with improvement needed</p> <p> Did not meet the criteria</p>			

22. **Significant deficiency—Corporate governance and related practices.** We found a significant deficiency and four weaknesses. Of greatest concern to us was the fact that the Board did not have a full complement of members, and those serving on the Board all held office on an interim basis. The Governor in Council had not yet appointed Board members to longer terms. It had appointed a new Board member for one year and had reappointed an incumbent, also for one year. In the case of the two other members, their terms of appointment had expired, and the incumbents were awaiting reappointment or replacement.



23. This significant deficiency matters because, to be effective, a board needs a full complement of members who have an appropriate mix of skills, knowledge, and experience, and who serve staggered terms to maintain board continuity. A full complement is needed for the Board to provide continuity during the development and implementation of the new GoCo model and the strategic direction.

24. We also found the following additional weaknesses:

- *Implementation of the strategic direction.* During our audit period, the Governor in Council had not yet appointed a new President and Chief Executive Officer. This was the situation at a critical time, when the new GoCo business model was in the implementation stage and the 5- and 10-year strategic plans were being developed. Strategic planning was still ongoing at the end of our audit period. On 17 February 2017, after the period of our audit, the Governor in Council appointed an interim President and Chief Executive Officer for a one-year period or until the appointment of a new President and Chief Executive Officer.

This weakness matters because a temporary approach to filling the President and Chief Executive Officer position could seriously compromise the continuity of leadership needed during this time, when the Corporation is developing its strategic plans. A future President and Chief Executive Officer not involved in developing the strategic direction could significantly alter the established strategic direction or not support it. As a result, there could be an increased risk to the implementation of the strategic plans and to the achievement of the goals of restructuring.

- *Information for decision making and monitoring risks.* The Board had not yet implemented a formal, systematic process for monitoring and reporting on risks identified in the corporate risk register. We found limited evidence of discussions by the Board and the Audit Committee concerning the risks listed in the new risk register.

This weakness matters because the Board needs to obtain information and react promptly to the major risks that the Corporation faces since restructuring. Proper risk monitoring and reporting will protect against the possibility of not achieving the initial goal of restructuring.

- *Designing measurable performance indicators.* The reporting framework in the Corporate Plan did not demonstrate how the Corporation would measure the overall objectives of restructuring, which were to enhance efficiency and effectiveness, and to contain and reduce costs and risks for Canadians over time. Although the Corporation included some performance measures in its most recent corporate plan, it had not developed a framework for communicating the performance of the new operating model.

- *Communications.* Since 2009, the Board had not met its statutory obligation to hold public meetings at which Board members and the President and Chief Executive Officer presented the annual report and answered questions from the public.

These two weaknesses matter because a sound reporting framework and communication of results are important to inform Canadians about the Corporation's success with the GoCo model.

25. **Recommendation.** The Corporation should continue to engage with the Minister of Natural Resources on the need for the timely appointment of the President and Chief Executive Officer and of a full complement of members to its Board of Directors. It should also reinforce the need for staggered terms of office to ensure continuity.

*The Corporation's response.* Agreed. The Corporation shares the Office of the Auditor General of Canada's noted concern. The Corporation will, as it has to date, continue to engage with the Minister of Natural Resources, as well as the Privy Council Office, on the need for the timely appointment of Board members who satisfy the skills and experience identified as important for the Board in its Board skills matrix. The Corporation is also reinforcing the need for staggered terms of office to foster continuity. The Corporation, as it has to date, will continue to engage with the Minister on the need for the timely appointment of a permanent or non-interim President and Chief Executive Officer.

26. **Recommendation.** The Corporation should plan for an orderly transition, during which the newly appointed Board members and the President and Chief Executive Officer have the opportunity to familiarize themselves with the initial goal of restructuring; the resulting Government-owned, Contractor-operated arrangement; and the Corporation's strategic plans. They should also have the opportunity to provide guidance on modifying and implementing the plans.

*The Corporation's response.* Agreed. The Corporation is planning for an orderly transition. It has in place an approach and materials, including a director orientation program, to support the orientation of new Board members and executives. This has already been used as part of the orderly orientation and onboarding of the Corporation's most recently appointed board member in the fall of 2016.

*As noted in the key findings, the new Board member appointed during the examination, for a term of up to one year, had access to orientation sessions providing information about the Corporation's mandate and activities, as well as directors' roles and responsibilities. More specifically, the orientation consisted of significant background materials regarding the Corporation's governance framework and Government-owned, Contractor-operated (GoCo) model (including the Corporation's mandate, role, and priorities). These materials familiarized the member with the Corporation, its overall governance, and the operation of the Board and its*

*committees, as well as with related procedures, the management team, the history of the Corporation and the impact of its restructuring, Canadian Nuclear Laboratories' vision for the future, 5- and 10-year plans, and ongoing key elements of the GoCo model. Background material was augmented with the member's participation in a multi-day orientation program, which included, among other things, a tour of key operations under the Corporation's oversight, one-on-one meetings with members of the Corporation's executive team to orient the new member on the areas under their respective responsibilities, and participation in a quarterly Board meeting as well as a quarterly meeting of the Human Resources and Governance Committee and the Audit Committee.*

*The Corporation will continue to update its approach and materials as necessary in preparation for future appointments.*

**27. Recommendation.** The Board should strengthen and improve its process for monitoring and reviewing risks listed in its risk register and should appropriately document discussions and actions.

***The Corporation's response.*** *Agreed. Management and the Board have had, and will continue to have, regular engagement on the management of risks. For instance, at the 1 October 2015 meeting, the Stored Liquid Waste Project was presented to the Board as "A Case Study in Governance of Risk." As one step in creating a risk management framework, the Corporation's corporate risk register (developed in September 2015) was presented, reviewed, and discussed with the Audit Committee and Board in November 2015 and again after just over a year, in February 2017. Additionally, management undertakes a quarterly review and update of the corporate risk register. The Board also receives commentary on risk management issues in management's quarterly corporate reports to the Board.*

*The Corporation will formalize the Board's regular review of the corporate risk register, or appropriate risk management program, and the Corporation has engaged an expert third party to improve its risk monitoring and review procedures. The periodic review of the corporate risk register is now a formal part of the Audit Committee Annual Work Plan and meeting agendas.*

**28. Recommendation.** The Corporation should develop a more detailed reporting framework so that it can better measure and demonstrate to Canadians that it is enhancing efficiency and effectiveness, and is containing and reducing costs and risks over time. The Board should hold periodic public meetings, as required by the *Financial Administration Act*, to present its annual report and provide information on the Government-owned, Contractor-operated model.

***The Corporation's response.*** *Agreed. With the restructuring now complete, the focus in the Corporation's Corporate Plan will naturally move from the restructuring process itself to performance against the*

stated objectives. With this in mind, the Corporation is already collecting and assessing information across a broad range of metrics, including the performance of Canadian Nuclear Laboratories (CNL) against milestones and other performance objectives. Over time, this will provide the data needed to evaluate the extent to which the objectives of the restructuring were met. Currently, the Corporation reports on the performance of CNL under the Government-owned, Contractor-operated contract within its Corporate Plan. This will be further developed as sufficient data is available and collected, and appropriate baselines are established through CNL's long-term planning and the implementation of Earned-Value Management, which are now in the process of being put in place.

During the period of restructuring, between 2009 and 2015, the Corporation engaged regularly with stakeholders and the public, and held more than 40 stakeholder engagements. These engagements included regular meetings of its Public Liaison Committee and Environmental Stewardship Council, and numerous public open houses and joint updates on restructuring with the Department of Natural Resources and the Department of Public Works and Government Services. Now that the restructuring has ended, while CNL leads on some of these ongoing engagements, the Corporation remains a participant, and a public meeting was held in May to discuss the Corporation's first annual report since restructuring, as well as corporate planning for the coming five years.

29. **Human resource management.** We found that the Corporation had good systems and practices in succession planning for key positions, and in training and development. However, we found a weakness in compensation (Exhibit 3).

**Exhibit 3 Human resource management—key findings and assessment**










Systems and practices	Criteria used	Key findings	Assessment against the criteria
Succession (management / critical position)	Succession planning for key positions in the organization was performed to ensure the achievement of corporate objectives.	<p>The Corporation identified and described all key positions needed during and after the restructuring of the organization. It specified the skills and expertise needed for these positions, particularly in the Government-owned, Contractor-operated (GoCo) model.</p> <p>The Corporation collected and maintained information on the demographic and employment characteristics of its employees.</p> <p>The Corporation had in place a succession plan for senior management positions.</p>	
<p><b>Legend—Assessment against the criteria</b></p> <ul style="list-style-type: none"> <li> Met the criteria</li> <li> Met the criteria, with improvement needed</li> <li> Did not meet the criteria</li> </ul>			

Exhibit 3 Human resource management—key findings and assessment (continued)

Systems and practices	Criteria used	Key findings	Assessment against the criteria
Training and development	A training and development program was in place and enabled the acquisition, maintenance, and development of skills and competencies needed to carry out required work and meet objectives.	<p>The Corporation identified the training needs of its employees on an individual basis.</p> <p>The Corporation provided training and development to its employees, including safety and security courses mandatory in the nuclear industry.</p> <p>The Corporation offered workshops for its employees on operational issues, such as contract management.</p>	
Compensation	A compensation strategy was in place and contributed to attracting, retaining, and rewarding employees who were required to achieve the corporate objectives and to ensure internal equity.	<p>The Corporation had put in place elements of a compensation policy for employees and senior management, including salary structure and performance incentive ranges.</p> <p>With regard to executive compensation matters, the Board’s Human Resources and Governance Committee received information that was complete, accurate, and sufficient for decision-making purposes.</p> <p>The performance compensation for senior management was properly documented and in alignment with results achieved (performance ratings) and actual performance.</p> <p><b>Weakness</b></p> <p>Some elements of the Corporation’s salary structure were not aligned with the President and Chief Executive Officer’s remuneration as established by the Governor in Council after restructuring.</p>	
<p><b>Legend—Assessment against the criteria</b></p> <p> Met the criteria</p> <p> Met the criteria, with improvement needed</p> <p> Did not meet the criteria</p>			

30. **Weakness—Compensation.** In 2013, while restructuring was under way, the Corporation acknowledged that before hiring employees, it needed to know the new salary level for the President and Chief Executive Officer position of the restructured Corporation, which informs the salary structure for the rest of the Corporation. Starting in December 2014, the Corporation hired its senior employees, referring to an external compensation review, which presented a salary structure aligned with the President and Chief Executive Officer’s salary level before restructuring. The Board approved this salary structure. Subsequently,

the Governor in Council approved a decrease in the President and Chief Executive Officer's salary of approximately \$100,000; this took into account changes in the responsibilities of the President and Chief Executive Officer, changes in the role of the Corporation, and the resulting reduction in the number of its employees (40 instead of 3,400). As a result, at the time of our audit, some elements of the Corporation's salary structure were not aligned with the President and Chief Executive Officer's remuneration as established by the Governor in Council after restructuring.

31. This weakness matters because the salary level of the President and Chief Executive Officer is established by the Governor in Council in accordance with the *Financial Administration Act* and is a key parameter that informs the design of the classification and compensation system in Crown corporations. The assigned salary level of the President and Chief Executive Officer informs the salary ranges of senior management and staff, for whom the Board has the authority to establish remuneration. At the same time, it is important to recognize that some positions may require specialized expertise with appropriate compensation.

32. Aside from payments under the contract, compensation arrangements are the Corporation's single biggest expenditure item. In our opinion, to ensure transparency, it is a good practice for the Corporation to disclose its compensation framework as well as total compensation for senior managers in its annual report. Enhanced disclosure of the compensation framework would provide stakeholders with more detailed information on the process followed in setting remuneration and on the results of that process.

33. **Recommendation.** The Corporation should address the alignment in remuneration by engaging with the Minister of Natural Resources. In its annual report, it should consider providing additional insight and disclosure concerning its compensation framework.

*The Corporation's response.* Agreed. The Corporation will continue to engage with the Minister on remuneration. The Corporation has been actively reviewing its salary structure and has hired external consultants—both before and following restructuring, as well as before and following the change in level of the Chief Executive Officer—to advise it on this matter.

*The Corporation continues to work with this external consultant to review its salary structure, taking into account all relevant factors, including appropriate market comparators, the geographical location of its employees, specialized expertise needed, and the President and Chief Executive Officer salary level. The Corporation will consider the advice of the external compensation consultant and will make adjustments to the salary structure, as appropriate, for the Corporation to achieve the goal of attracting and retaining those employees needed to fulfill its mandate. This consideration will include the review and approval of any changes by the Board of Directors and its committees, as required by the Board's governance requirements. Additionally, the Corporation will continue to engage with the Department of Natural Resources on the remuneration of the President and Chief Executive Officer.*

*In its annual report, the Corporation will provide additional disclosure about its compensation framework and how compensation is determined so that the Corporation is able to provide effective oversight of the Government-owned, Contractor-operated contractual arrangement. The Corporation will also continue to disclose the total compensation for senior managers in compliance with the accounting and reporting standards under which the Corporation reports.*

## Contract management

### **The Corporation had good contract management practices, but improvement was needed in the area of skills and competencies**

---

#### Overall message



34. Overall, we found that despite the challenges it faced throughout its transition to a Government-owned, Contractor-operated (GoCo) business model, the Corporation did a good job in implementing systems and practices to monitor its GoCo arrangement. However, we found that the Corporation still faced challenges in acquiring a contracting team with the necessary skills and competencies to monitor the GoCo model.

35. This finding matters because under a GoCo model, which is relatively new to the Canadian nuclear sector, the contract management team must have a sufficient number of staff members who are qualified to oversee operations and properly manage contract performance.

36. Our analysis supporting this finding discusses the following topic:

- Contract management

---

**Context**

37. Since September 2015, the Corporation has had in place a GoCo arrangement with the contractor, which manages the operation of its sites according to the Corporation's mandate and priorities. The Corporation provides direction, sets performance measures, oversees performance, and issues payment to the contractor.

38. Since the restructuring, the Corporation's role consists primarily of monitoring the GoCo arrangement, as follows:

- **Site Operating Company Agreement.** The Corporation monitors the contractor's decommissioning and waste management responsibilities at Chalk River Laboratories and other satellite sites, its science and technology program at Chalk River, and the revitalization of the Chalk River campus. Each year, the Corporation reimburses the contractor for actual costs and also pays a performance fee, based on a predetermined set of evaluation criteria.
- **Target cost agreements—Whiteshell Laboratories and the Nuclear Power Demonstration reactor.** The Corporation monitors the contractor's activities related to the decommissioning and closure of Whiteshell Laboratories, in Pinawa, Manitoba, and the closure of the Nuclear Power Demonstration reactor's waste management facility, near Rolphton, Ontario. Each year, the Corporation reimburses the contractor for actual costs and issues an advance on the performance fee payable if the work is completed ahead of schedule.

Under the GoCo arrangement, approximately \$866 million for contractual expenses was paid or payable by the Corporation in the 2016–17 fiscal year.

39. The success of the GoCo model depends on the Corporation's ability to oversee the arrangement through an adequate contracting framework that includes key systems and practices. In addition to this framework, successful oversight requires managers with the necessary skills and competencies. Another essential factor is the contractor's ability to deliver on its commitments.

---

**Recommendation**

40. Our recommendation in this area of examination appears at paragraph 45.







---

**Analysis to support this finding**






41. **Contract management.** We found good systems and practices in most aspects of contract management. However, we found a weakness in contracting skills and competencies (Exhibit 4).









#### Exhibit 4 Contract management—key findings and assessment

Systems and practices	Criteria used	Key findings	Assessment against the criteria
Contract planning and governance	The Corporation had a well-defined contract management framework.	<p>A Contract Management and Oversight Plan provided guidance for managing and administering the Government-owned, Contractor-operated (GoCo) arrangement.</p> <p>The contract governance structure was set out in the Contract Management and Oversight Plan, as well as in the Corporation's Plan and Expenditure Approval Policy.</p> <p>Contract management issues and performance were reported and discussed by senior managers.</p>	
Contracting skills and competencies	The Corporation had the right people in place with the skills and competencies to carry out the contract management activities.	<p>The contract management team had the opportunity to draw on the knowledge and experience of individuals who had been involved in tendering and awarding contracts and who subsequently joined the staff of the Corporation.</p> <p>The Corporation recruited an experienced Lead Contracting Officer.</p> <p><b>Weakness</b></p> <p>Except for the Lead Contracting Officer, the Corporation's contracting team had limited experience working with the GoCo model.</p>	
Contract administration	The Corporation had administrative systems and practices for managing the contract and the timetable for making key decisions.	<p>The Corporation had put in place systems and practices for managing the contract.</p> <p>The contract management team provided regular reports and status updates to senior management and the Board.</p>	
<p><b>Legend—Assessment against the criteria</b></p> <p> Met the criteria</p> <p> Met the criteria, with improvement needed</p> <p> Did not meet the criteria</p>			

**Exhibit 4 Contract management—key findings and assessment (continued)**

Systems and practices	Criteria used	Key findings	Assessment against the criteria
Contractor and stakeholders relations management	The Corporation had strong internal and external communication and collaboration to facilitate contract delivery.	<p>Signed agreements and the Contract Management and Oversight Plan set out the roles and responsibilities of the Corporation and the contractor.</p> <p>The Corporation had in place protocols for communication with the contractor, covering both formal and informal communications. The protocols included a formal dispute resolution process for major disagreements.</p> <p>In May 2015, the Corporation established a memorandum of understanding with the Canadian Nuclear Safety Commission. The purpose was to maintain a dialogue between the Corporation and the Commission given the impending introduction of the GoCo arrangement.</p>	
Contract performance management	<p>The Corporation ensured that the service was provided in line with the contract, which included</p> <ul style="list-style-type: none"> <li>• nuclear decommissioning and radioactive waste management,</li> <li>• nuclear science and technology for Government of Canada departments and third-party customers, and</li> <li>• infrastructure renewal.</li> </ul>	<p>For the Site Operating Company Agreement:</p> <ul style="list-style-type: none"> <li>• An Annual Program of Work and Budget identified all activities to be performed by the contractor.</li> <li>• The Corporation established a Performance Evaluation and Measurement Plan, which provided financial incentives annually to the contractor to meet or exceed the Corporation’s priorities. These priorities were captured in the evaluation criteria.</li> </ul> <p>For each of the two target cost agreements:</p> <ul style="list-style-type: none"> <li>• Baselines were established in 2016 to define the scope and associated costs.</li> <li>• The contractor was entitled to an additional fee if it realized cost savings while delivering on its obligations.</li> </ul> <p>The contract management team monitored the contractor’s performance on an ongoing basis.</p> <p>The contractor was developing a Contractor Assurance System, intended to provide more complete performance information to the Corporation.</p>	
<p><b>Legend—Assessment against the criteria</b></p> <ul style="list-style-type: none"> <li> Met the criteria</li> <li> Met the criteria, with improvement needed</li> <li> Did not meet the criteria</li> </ul>			

**Exhibit 4 Contract management—key findings and assessment (continued)**

<b>Systems and practices</b>	<b>Criteria used</b>	<b>Key findings</b>	<b>Assessment against the criteria</b>
Contract payments and incentives	The Corporation ensured that payments were made to the contractor in line with the contract and that incentive mechanisms were well managed.	The GoCo arrangement had clearly defined payment mechanisms. The Corporation established a system of delegated authority for payments, as well as an internal control system for contract payments.  At the time of our audit, the Corporation had not completed a full operating year and had not yet evaluated the contractor’s performance with respect to annual earnable awards.	
Contract risk management	The Corporation had a contract risk management framework in place to manage and mitigate risk.	The Corporation established a risk register that included risks associated with contract management and identified an owner who monitored each risk.  The GoCo arrangement had clauses regarding the appropriate handling and safeguarding of information and assets.  The Corporation reviewed annual audited financial statements of the contractor.	
Contract changes	The Corporation had a governance structure and processes in place to allow effective and prompt contract change implementation.	The GoCo arrangement included a clearly defined procedure for changing and extending the contract.  For contract changes, the Corporation established clear approval mechanisms and accountabilities.  The GoCo arrangement defined the terms governing contract changes and outlined the process for formal change requests.	
<p><b>Legend—Assessment against the criteria</b></p> <p> Met the criteria</p> <p> Met the criteria, with improvement needed</p> <p> Did not meet the criteria</p>			

42. **Weakness—Contracting skills and competencies.** Except for the Lead Contracting Officer, the Corporation’s contracting team had limited experience working with the GoCo model in the Canadian nuclear sector. The model was new in that sector, and relatively few individuals had the unique skill set required. It was a challenge for the Corporation to find someone with the right expertise and experience. In the end, the Corporation hired the Lead Contracting Officer from abroad for a three-year term. At the time of our audit, the Lead Contracting Officer was the only member of the contract management team who had previous experience with the GoCo model.

43. This weakness matters because a successful shift to a GoCo model depends on the Corporation's ability to oversee and manage the arrangement and to maintain alignment with the Government of Canada's objectives for the GoCo arrangement. An experienced team well versed in GoCo and similar large, complex procurement practices would help ensure that the contractor fulfilled all the tasks required and would provide proven solutions to any problems that arose.

44. This weakness also matters because if the only team member who had previous GoCo experience and was responsible for providing strategic leadership to the team left earlier than expected, the Corporation would be at risk of not having sufficient expertise and corporate knowledge to fulfill its monitoring and management functions.

45. **Recommendation.** The Corporation should strengthen the skills and competencies of the contract management team to manage the overall performance of the contractor in the context of the Government-owned, Contractor-operated model.

*The Corporation's response.* Agreed. Work is already under way to strengthen the skills and competencies of the contract management staff through formal classroom training and on-the-job mentoring. In addition, the Corporation will continue to further mitigate the risk described in the weakness by implementing the Corporation's succession plan, including those aspects specific to planning for the replacement of the Lead Contracting Officer, should it be necessary.

## Conclusion

46. In our opinion, based on the criteria established, with the exception of the significant deficiency we found in Board renewal, there were no significant deficiencies in Atomic Energy of Canada Limited's systems and practices that we examined for corporate management and contract management. We concluded that the Corporation has maintained these systems and practices during the period covered by the audit in a manner that provided the reasonable assurance required under section 138 of the *Financial Administration Act*.

# About the Audit

This independent assurance report was prepared by the Office of the Auditor General of Canada on Atomic Energy of Canada Limited. Our responsibility was to express

- an opinion on whether there is reasonable assurance that during the period covered by the audit, there were no significant deficiencies in the Corporation's systems and practices that we selected for examination; and
- a conclusion about whether the Corporation complied in all significant respects with the applicable criteria.

Under section 131 of the *Financial Administration Act* (FAA), Atomic Energy of Canada Limited is required to maintain financial and management control and information systems and management practices that provide reasonable assurance that

- its assets are safeguarded and controlled;
- its financial, human, and physical resources are managed economically and efficiently; and
- its operations are carried out effectively.

In addition, section 138 of the FAA requires the Corporation to have a special examination of these systems and practices carried out at least once every 10 years.

All work in this audit was performed to a reasonable level of assurance in accordance with the Canadian Standard for Assurance Engagements (CSAE) 3001—Direct Engagements set out by the Chartered Professional Accountants of Canada (CPA Canada) in the CPA Canada Handbook—Assurance.

The Office applies Canadian Standard on Quality Control 1 and, accordingly, maintains a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

In conducting the audit work, we have complied with the independence and other ethical requirements of the Rules of Professional Conduct of Chartered Professional Accountants of Ontario and the Code of Values, Ethics and Professional Conduct of the Office of the Auditor General of Canada. Both the Rules of Professional Conduct and the Code are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality, and professional behaviour.

In accordance with our regular audit process, we obtained the following from management:

- confirmation of management's responsibility for the subject under audit;
- acknowledgement of the suitability of the criteria used in the audit;
- confirmation that all known information that has been requested, or that could affect the findings or audit conclusion, has been provided; and
- confirmation that the findings in this report are factually based.

## Audit objective

The objective of this audit was to determine whether the systems and practices we selected for examination at Atomic Energy of Canada Limited were providing it with reasonable assurance that its assets were safeguarded and controlled, its resources were managed economically and efficiently, and its operations were carried out effectively as required by section 138 of the *Financial Administration Act*.

## Scope and approach

Our audit work examined Atomic Energy of Canada Limited. The scope of the special examination was based on our assessment of the risks the Corporation faces that could affect its ability to meet the requirements set out by the *Financial Administration Act*.

In performing our work, we reviewed key documents related to the systems and practices selected for examination. We interviewed members of the Board of Directors, senior management, and other employees of the Corporation. We also tested the systems and practices in place to obtain the required level of audit assurance.

The systems and practices selected for examination for each area of the audit are found in the exhibits throughout the report.

In carrying out the special examination, we did not rely on any internal audits.

## Sources of criteria

The criteria used to assess the systems and practices selected for examination are found in the exhibits throughout the report.

## Corporate governance

*20 Questions Directors Should Ask about Crown Corporation Governance*, Canadian Institute of Chartered Accountants, 2007

*OECD Guidelines on Corporate Governance of State-Owned Enterprises*, Organisation for Economic Co-operation and Development, 2015

*Meeting the Expectations of Canadians: Review of the Governance Framework for Canada's Crown Corporations*, Treasury Board Secretariat, 2005

*Internal Control—Integrated Framework*, Committee of Sponsoring Organizations of the Treadway Commission, 2013

*Corporate Governance in Crown Corporations and Other Public Enterprises—Guidelines*, Treasury Board Secretariat, 1996

*Practice Guide: Assessing Organizational Governance in the Private Sector*, The Institute of Internal Auditors, 2012

*Practice Guide: Assessing Organizational Governance in the Public Sector*, The Institute of Internal Auditors, 2014

*20 Questions Directors Should Ask about Risk*, Canadian Institute of Chartered Accountants, 2006

*20 Questions Directors Should Ask about Internal Audit*, third edition, Chartered Professional Accountants of Canada, 2016

*Financial Administration Act*

### **Strategic planning, risk management, and performance measurement and reporting**

*OECD Guidelines on Corporate Governance of State-Owned Enterprises*, Organisation for Economic Co-operation and Development, 2015

*20 Questions Directors Should Ask about Crown Corporation Governance*, Canadian Institute of Chartered Accountants, 2007

*Meeting the Expectations of Canadians: Review of the Governance Framework for Canada's Crown Corporations*, Treasury Board Secretariat, 2005

*Guidelines for the Preparation of Corporate Plans*, Treasury Board Secretariat, 1996

*Internal Control—Integrated Framework*, Committee of Sponsoring Organizations of the Treadway Commission, 2013

*20 Questions Directors Should Ask about Risk*, Canadian Institute of Chartered Accountants, 2006  
*Framework for the Management of Risk*, Treasury Board Secretariat, 2010

*Enterprise Risk Management—Integrated Framework*, Committee of Sponsoring Organizations of the Treadway Commission, 2004

*Recommended Practice Guideline 3, Reporting Service Performance Information*, International Public Sector Accounting Standards Board, 2015

### **Human resource management**

*Internal Control—Integrated Framework*, Committee of Sponsoring Organizations of the Treadway Commission, 2013

*Ultimate HR Manual*, Human Resources Professionals Association and CCH

*Policy on Learning, Training, and Development*, Treasury Board, 2006

*Policy Framework for the Management of Compensation*, Treasury Board Secretariat, 2007

*Crown Corporation Executive Compensation Policy*, BC Ministry of Finance, 2012

*HR Toolkit: Compensation & Benefits*, [hrcouncil.ca](http://hrcouncil.ca), accessed May 2016

### **Contract management**

*Contracting Policy*, Treasury Board, 2013

*Supply Manual*, Department of Public Works and Government Services, 2016

*Government Contracts Regulations*

*Good Practice Contract Management Framework*, UK National Audit Office, 2016

*Components of an Effective Contract Monitoring System*, US State of Georgia Department of Audits and Accounts, 2003

*Contract Management Plan: LLWR Site Management and Operations Contract and Parent Body Agreement*, Nuclear Decommissioning Authority and LLW Repository Ltd, 2016

*Department of Energy (DOE) Acquisition Guide*, Office of Management, US Department of Energy

*Contract Management Guide*, The Chartered Institute of Purchasing & Supply, 2007

Corporate Plan Summary 2014–2015 to 2018–2019, Atomic Energy of Canada Limited

ISO 14000—Environmental Management, International Organization for Standardization

### **Period covered by the audit**

The special examination covered the period between 1 April 2016 and 31 January 2017. This is the period to which the audit conclusion applies. However, to gain a more complete understanding of the significant systems and practices, we also examined certain matters that preceded the starting date of the special examination.

### **Date of the report**

We obtained sufficient and appropriate audit evidence on which to base our conclusion on 23 May 2017, in Ottawa, Ontario.

### **Audit team**

Principal: Aline Vienneau

Director: Patrick Polan

Charles Gay

France Lépine

Stacey Wowchuk



# List of Recommendations

The following table lists the recommendations and responses found in this report. The paragraph number preceding the recommendation indicates the location of the recommendation in the report, and the numbers in parentheses indicate the location of the related discussion.

Recommendation	Response
<b>Corporate management practices</b>	
<p><b>25.</b> The Corporation should continue to engage with the Minister of Natural Resources on the need for the timely appointment of the President and Chief Executive Officer and of a full complement of members to its Board of Directors. It should also reinforce the need for staggered terms of office to ensure continuity. <b>(21–24)</b></p>	<p><b>The Corporation’s response.</b> Agreed. The Corporation shares the Office of the Auditor General of Canada’s noted concern. The Corporation will, as it has to date, continue to engage with the Minister of Natural Resources, as well as the Privy Council Office, on the need for the timely appointment of Board members who satisfy the skills and experience identified as important for the Board in its Board skills matrix. The Corporation is also reinforcing the need for staggered terms of office to foster continuity. The Corporation, as it has to date, will continue to engage with the Minister on the need for the timely appointment of a permanent or non-interim President and Chief Executive Officer.</p>
<p><b>26.</b> The Corporation should plan for an orderly transition, during which the newly appointed Board members and the President and Chief Executive Officer have the opportunity to familiarize themselves with the initial goal of restructuring; the resulting Government-owned, Contractor-operated arrangement; and the Corporation’s strategic plans. They should also have the opportunity to provide guidance on modifying and implementing the plans. <b>(21–24)</b></p>	<p><b>The Corporation’s response.</b> Agreed. The Corporation is planning for an orderly transition. It has in place an approach and materials, including a director orientation program, to support the orientation of new Board members and executives. This has already been used as part of the orderly orientation and onboarding of the Corporation’s most recently appointed board member in the fall of 2016.</p> <p>As noted in the key findings, the new Board member appointed during the examination, for a term of up to one year, had access to orientation sessions providing information about the Corporation’s mandate and activities, as well as directors’ roles and responsibilities. More specifically, the orientation consisted of significant background materials regarding the Corporation’s governance framework and Government-owned, Contractor-operated (GoCo) model (including the Corporation’s mandate, role, and priorities). These materials familiarized the member with the Corporation, its overall governance, and the operation of the Board and its committees, as well as with related procedures, the management team, the history of the Corporation and the impact of its restructuring, Canadian Nuclear Laboratories’ vision for the future, 5- and 10-year plans, and ongoing key elements of the GoCo model. Background material was augmented with the member’s participation in a multi-day orientation program, which included, among other things, a tour of key operations under the Corporation’s oversight, one-on-one meetings with members of the Corporation’s executive team to orient the new member on the areas under their respective responsibilities, and participation in a quarterly Board meeting as well as a quarterly meeting of the Human Resources and Governance Committee and the Audit Committee.</p> <p>The Corporation will continue to update its approach and materials as necessary in preparation for future appointments.</p>

Recommendation	Response
<p><b>27.</b> The Board should strengthen and improve its process for monitoring and reviewing risks listed in its risk register and should appropriately document discussions and actions. <b>(21 and 24)</b></p>	<p><b>The Corporation's response.</b> Agreed. Management and the Board have had, and will continue to have, regular engagement on the management of risks. For instance, at the 1 October 2015 meeting, the Stored Liquid Waste Project was presented to the Board as "A Case Study in Governance of Risk." As one step in creating a risk management framework, the Corporation's corporate risk register (developed in September 2015) was presented, reviewed, and discussed with the Audit Committee and Board in November 2015 and again after just over a year, in February 2017. Additionally, management undertakes a quarterly review and update of the corporate risk register. The Board also receives commentary on risk management issues in management's quarterly corporate reports to the Board.</p> <p>The Corporation will formalize the Board's regular review of the corporate risk register, or appropriate risk management program, and the Corporation has engaged an expert third party to improve its risk monitoring and review procedures. The periodic review of the corporate risk register is now a formal part of the Audit Committee Annual Work Plan and meeting agendas.</p>
<p><b>28.</b> The Corporation should develop a more detailed reporting framework so that it can better measure and demonstrate to Canadians that it is enhancing efficiency and effectiveness, and is containing and reducing costs and risks over time. The Board should hold periodic public meetings, as required by the <i>Financial Administration Act</i>, to present its annual report and provide information on the Government-owned, Contractor-operated model. <b>(21 and 24)</b></p>	<p><b>The Corporation's response.</b> Agreed. With the restructuring now complete, the focus in the Corporation's Corporate Plan will naturally move from the restructuring process itself to performance against the stated objectives. With this in mind, the Corporation is already collecting and assessing information across a broad range of metrics, including the performance of Canadian Nuclear Laboratories (CNL) against milestones and other performance objectives. Over time, this will provide the data needed to evaluate the extent to which the objectives of the restructuring were met. Currently, the Corporation reports on the performance of CNL under the Government-owned, Contractor-operated contract within its Corporate Plan. This will be further developed as sufficient data is available and collected, and appropriate baselines are established through CNL's long-term planning and the implementation of Earned-Value Management, which are now in the process of being put in place.</p> <p>During the period of restructuring, between 2009 and 2015, the Corporation engaged regularly with stakeholders and the public, and held more than 40 stakeholder engagements. These engagements included regular meetings of its Public Liaison Committee and Environmental Stewardship Council, and numerous public open houses and joint updates on restructuring with the Department of Natural Resources and the Department of Public Works and Government Services. Now that the restructuring has ended, while CNL leads on some of these ongoing engagements, the Corporation remains a participant, and a public meeting was held in May to discuss the Corporation's first annual report since restructuring, as well as corporate planning for the coming five years.</p>

Recommendation	Response
<p><b>33.</b> The Corporation should address the alignment in remuneration by engaging with the Minister of Natural Resources. In its annual report, it should consider providing additional insight and disclosure concerning its compensation framework. <b>(29–32)</b></p>	<p><b>The Corporation’s response.</b> Agreed. The Corporation will continue to engage with the Minister on remuneration. The Corporation has been actively reviewing its salary structure and has hired external consultants—both before and following restructuring, as well as before and following the change in level of the Chief Executive Officer—to advise it on this matter.</p> <p>The Corporation continues to work with this external consultant to review its salary structure, taking into account all relevant factors, including appropriate market comparators, the geographical location of its employees, specialized expertise needed, and the President and Chief Executive Officer salary level. The Corporation will consider the advice of the external compensation consultant and will make adjustments to the salary structure, as appropriate, for the Corporation to achieve the goal of attracting and retaining those employees needed to fulfill its mandate. This consideration will include the review and approval of any changes by the Board of Directors and its committees, as required by the Board’s governance requirements. Additionally, the Corporation will continue to engage with the Department of Natural Resources on the remuneration of the President and Chief Executive Officer.</p> <p>In its annual report, the Corporation will provide additional disclosure about its compensation framework and how compensation is determined so that the Corporation is able to provide effective oversight of the Government-owned, Contractor-operated contractual arrangement. The Corporation will also continue to disclose the total compensation for senior managers in compliance with the accounting and reporting standards under which the Corporation reports.</p>
<p><b>Contract management</b></p> <p><b>45.</b> The Corporation should strengthen the skills and competencies of the contract management team to manage the overall performance of the contractor in the context of the Government-owned, Contractor-operated model. <b>(41–44)</b></p>	<p><b>The Corporation’s response.</b> Agreed. Work is already under way to strengthen the skills and competencies of the contract management staff through formal classroom training and on-the-job mentoring. In addition, the Corporation will continue to further mitigate the risk described in the weakness by implementing the Corporation’s succession plan, including those aspects specific to planning for the replacement of the Lead Contracting Officer, should it be necessary.</p>