

# **CNL STATEMENT OF WORK (2025 onwards)**

# LAND ACKNOWLEDGEMENT

AECL acknowledges with gratitude that our Sites are situated on territories that have since time immemorial been the traditional lands of Indigenous Peoples in Canada.

We deeply appreciate their historic connection to these lands, while recognizing Elders and Knowledge Keepers, past, present and future. We recognize that we still have much to learn and that reconciliation is an ongoing process for us all.

# **INTRODUCTION AND GENERAL REQUIREMENTS**

This Statement of Work describes the overall work to be performed by CNL pursuant to the contractual agreement with AECL (the "CNL Agreement"). This version has been edited for public publication (e.g. building numbers have been removed and certain terms have been defined for ease of reference and to help with readability).

AECL's objective is that CNL leverages its capabilities and resources to successfully deliver on the 'Primary Missions' and their individual and collective purpose:

- Science & Technology ("S&T"): Strengthen CNL's role as Canada's national nuclear laboratories by delivering on federal priorities in science & technology, pursuing valuable collaborations and partnerships, and advancing nuclear innovation and clean technologies for the public good. Leverage capabilities and assets to grow third party commercial services. Current work in this area includes supporting advanced reactors and small modular reactor development, the development and application of targeted alpha therapy for medical applications, support for the CANDU fleet, and research in support of hydrogen and fusion applications.
- Decommissioning & Waste Management ("DWM"), sometimes referred to as "Environmental Remediation Management" ("ERM"): Optimize, with consideration for acceleration opportunities, decommissioning, environmental remediation, and waste management activities, to reduce risks and hazards, protect the environment, lower AECL and Government of Canada liabilities, and decrease risks and costs over the long term. AECL expects that six Sites/projects will be closed by 20351, with decommissioning activities remaining only at the Chalk River site after that time.
- Chalk River Revitalization (Capital): Deliver an integrated, optimally configured capital
  expenditure and asset management program at the Chalk River Laboratories to continue
  the transformation of the site into a world-class, modern and sustainable nuclear research
  campus. Safely and securely manage AECL's real property, Sites, buildings and facilities,
  and maintain capabilities, resources and infrastructure to meet current and future S&T
  needs. Activities in this area include completing the construction of the Advanced Nuclear

<sup>&</sup>lt;sup>1</sup> The six sites are: the Whiteshell Laboratories, the Port Hope Area Initiative, the Northern Transportation Route, the Nuclear Power Demonstration Reactor, the Douglas Point Prototype Reactor and the Gentilly-1 Prototype Reactor.



Materials Research Centre, addressing significant base site infrastructure needs (e.g. electrical switchyard), and recapitalization of existing assets.

The principles of safety, environmental protection, and reconciliation with Indigenous Peoples, underpin all of the work of the Primary Missions.

In undertaking the above, CNL shall:

- Drive innovation through the enhancement and development of new collaborations across academic and research networks and national and international industries;
- Leverage capabilities to deliver on federal research priorities and grow third-party revenues;
- Continue the revitalization of the Chalk River Laboratories to transform it into a more efficient, modern nuclear science and technology campus;
- Optimize the delivery of the decommissioning program and waste management program to reduce AECL's liabilities safely and cost effectively;
- Build and maintain meaningful collaborative relationships with Indigenous Peoples based on healing and reconciliation;
- Sustain a robust health, safety, security and environment culture, that it is compliant and
  efficiently managed, and that capabilities, resources and infrastructure required to satisfy
  AECL's mandate are maintained;
- Drive organizational transformation and build the capabilities of CNL staff; and
- Optimize delivery and cost of site operations.

The work to be performed by CNL under the CNL Agreement will be subject to AECL's existing contractual obligations and restrictions, including for greater certainty, its obligations and restrictions relating to the maintenance, use and exploitation of AECL's IP, and in accordance with the applicable regulatory regime.

In addition, the activities described in this Statement of Work will be delivered through the implementation of the Annual Program of Work and Budget that will be required to be submitted to, and accepted by, AECL. The Annual Program of Work and Budget will be informed by multi-year plans to be developed and maintained by CNL. CNL shall report monthly to AECL on performance against plans and measures in response to contractual, regulatory, and legal obligations.

CNL is the holder of all permits, licenses, approvals and agreements issued by the Canadian Nuclear Safety Commission, and must fulfill all obligations and requirements associated with these Permits, Licenses, Approvals and Agreements. CNL manages staff and processes to demonstrate compliance with these requirements.



Regardless of the Annual Program of Work and Budget, CNL shall take any reasonable action to expeditiously address regulatory and/or safety concerns as they arise, including in respect of emergencies.

The work to be performed will be carried out at all AECL.

CNL shall employ industry leading practices in change management in the implementation of all work outlined in this Statement of Work and consistent with regulatory obligations, Canadian labour law, union collective agreements and existing agreements to which CNL is a party, as they may be amended from time to time, without precluding other relevant considerations and requirements.

This Statement of Work is organized in sections as follows:

- 1. S&T management and delivery of all S&T activities, including services to Canada and to third parties, as well as the development of new commercial opportunities;
- DWM management and delivery of DWM work to reduce AECL's liabilities for Historic Low-Level and Legacy Wastes, and other nuclear waste and decommissioning responsibilities;
- Chalk River Revitalization (Capital) Chalk River Laboratories site development and investment, including project management and effective design and construction management;
- 4. General Services all site support and overhead services required for the safe, effective and secure management of the AECL resources, including corporate services, health, safety, security and environmental protection and site operations; and
- 5. Indigenous Engagement, Communications, Public Affairs and Community Engagement.



#### **DEFINITIONS**

"AECL Sites" or "Sites" – Refers to all AECL Sites, including, but not limited to: the Chalk River Laboratories, the Whiteshell Laboratories, the Port Hope Area Initiative, the Nuclear Power Demonstration Reactor, the Douglas Point Prototype Reactor, the Gentilly-1 Prototype Reactor, the Northern Transportation Route, the Fredericton Center for Nuclear Energy Research, certain properties located in the Town of Deep River, and any other Sites that are the responsibility of AECL.

"Closure" – Closure of a site encompasses all activities required to complete all DWM at the site in order to achieve interim and final end-state(s) and ultimately the Site-Specific Release and Clean-Up Criteria, including obtaining the required permits, licences, approvals and agreements for the site. For the avoidance of doubt, the Closure of a site means that all DWM work is completed (i.e., only Long-Term Care activities remain).

"CNL Agreement" – Refers to the Agreement for the Management and Operation of Canadian Nuclear Laboratories Ltd., entered into between CNL and AECL.

"Commencement Date" means the date of the CNL Agreement.

"Contaminated Sites Liability" – Represents the estimated cost to discharge AECL's obligation for Historic Low-Level Waste in order to protect the environment, satisfy regulatory requirements or other Government of Canada commitments for remediation. The estimate of the liability includes costs directly attributable to remediation activities, including post-remediation operation, maintenance and monitoring, as well as the construction costs associated with certain enabling facilities, such as management facilities for nuclear waste. It is recorded using net present value.

"**Decommissioning**" – Decommissioning as used in this document generally applies to facilities (including all man-made structures) and includes the following activities:

- (a) regulatory analysis and preparation of documents as required to obtain all permits, licences, approvals and agreements;
- (b) deactivation (isolation and/or re-routing of the utilities, removal of hold up materials, etc.);
- (c) decontamination (characterization, radioactive and hazardous material abatement activities, removal of equipment, site clean-up, verification);
- (d) dismantlement and demolition (demolishing man-made/components including building slabs and below-grade features within the immediate building footprint area);
- (e) disposition which also includes disposal and refurbishment of structures/components; and
- (f) securing all required regulatory approvals to achieve Closure or to place a site or facility in long-term care and maintenance, as applicable.



"Decommissioning and Waste Management" or "DWM" – Has the meaning specified in section 2.1.1 of this Statement of Work.

"Decommissioning and Waste Management Provision" or "Liability Cost Estimate"—Represents the estimated cost to discharge AECL's obligations to Decommission nuclear facilities located at the AECL Sites and to manage its radioactive waste in order to protect the environment and satisfy regulatory requirements. The estimate of the liability includes costs directly attributable to asset retirement activities, including post-retirement operation, maintenance and monitoring, as well as the future construction costs associated with certain enabling facilities, such as processing and disposal facilities for nuclear waste. It is recorded using net present value.

"Federal Interdepartmental Committee" – A committee made up of Government of Canada officials who are responsible for establishing the priorities for and scope of work to be performed by CNL under the FNST Work Plan.

"Federal Nuclear Science and Technology Work Plan" or "FNST Work Plan" – Has the meaning specified in section 1.3 of this Statement of Work.

"Governmental Authority" means any federal, provincial, state, territorial, Indigenous, regional, municipal or local government or governmental authority, quasi-governmental authority, court, law enforcement agency or authority, government or self-regulatory organization, commission, board, tribunal, organization, or any regulatory, administrative or other agency, including the Canadian Nuclear Safety Commission, or any political or other subdivision, department, or branch of any of the foregoing, having legal jurisdiction in any way over the relevant work, activity or person, in each case to the extent it has or performs legislative, judicial, regulatory, administrative or other functions within its jurisdiction, but does not include AECL.

"High-Level Waste" – Used (i.e., irradiated) nuclear fuel that has been declared as radioactive waste and/or is waste that generates significant heat (typically more than 2 kW/m3) via radioactive decay.

"Historic Low-Level Waste" – Low-Level Waste and/or uranium ore contamination for which the owner cannot reasonably be held responsible and for which the Government of Canada has accepted responsibility for its long-term management. AECL is responsible for the management of this Historic Low-Level Waste on behalf of the Government of Canada.

"Host Communities" means the following Local Communities:

- (a) the Town of Deep River, Ontario;
- (b) the Municipality of Clarington, Ontario;
- (c) the Municipality of Port Hope, Ontario; and
- (d) the Local Government District of Pinawa, Manitoba.

"Indigenous Knowledge" – Indigenous knowledge means the Indigenous knowledge of the Indigenous Peoples of Canada, reflecting the unique cultures, languages, values, histories, governance and legal systems of Indigenous Peoples. It is place-based, cumulative and dynamic. Indigenous Knowledge systems often involve living well with, and being in relationship with, the



natural world. Indigenous Knowledge systems build upon the experiences of earlier generations, inform the practice of current generations, and evolve in the context of contemporary society.

"Indigenous Peoples" means aboriginal peoples of Canada, as defined in section 35(2) of the Constitution Act, 1982 (Canada).

"Intermediate Level Waste" – Waste, as per the safety standards of the International Atomic Energy Agency, which exhibits levels of penetrating radiation sufficient to require shielding but needs little or no provision for heat dissipation during its handling and transportation. Intermediate-Level Waste generally contains long lived radionuclides in concentrations that require isolation and containment for periods greater than several hundred years (i.e., more than 300 to 500 years).

"**Legacy Wastes**" – Radioactive waste generated from past operations, shutdown buildings and infrastructure, and lands affected by past practices at AECL properties.

"Legal Agreement" – Refers to An Agreement for the Cleanup and the Long-Term Safe Management of Low-Level Radioactive Waste Situated in the Town of Port Hope, the Township of Hope and the Municipality of Clarington, as amended, available online at <a href="https://www.phai.ca/wp-content/uploads/Legal-Agreement\_FINAL\_2023.pdf">https://www.phai.ca/wp-content/uploads/Legal-Agreement\_FINAL\_2023.pdf</a>.

"Local Communities" means those communities (including cities, municipalities, towns, villages and unincorporated communities) located adjacent, or in close proximity, to a Site that express an interest in, or may be affected by, operations associated with such Site;

"Long-Term Care" – The control of residual risks at a site after it has been decommissioned and all DWM requirements have been achieved. This control is either 'active' (e.g., involving mechanical systems or continuous or intermittent human intervention to monitor and control the risk) or 'passive' (e.g., the registration or posting of information that will provide a warning against the remaining hazards). The use of such Long-Term Care shall be justified to applicable Governmental Authorities and accepted.

"Long-Term Disposal of Radioactive Waste Fund" means an investment fund established and maintained by AECL for the purpose of setting aside funds at AECL to satisfy the costs of the long-term disposal of radioactive waste.

"Low-Level Waste" – Waste, as per the safety standards of the International Atomic Energy Agency, with radionuclide content above established clearance levels and exemption quantities, but that generally has limited amounts of long-lived activity. Low-Level Waste requires isolation and containment for periods of up to a few hundred years. Low-Level Waste does not require significant shielding during handling and transportation.

"Nuclear Waste Management Organization" – The Nuclear Waste Management Organization was established in 2002 in accordance with the *Nuclear Fuel Waste Act* to assume responsibility for long term management of Canada's used nuclear fuel, a small portion of which is AECL's.

"**Primary Missions**" – Refers to the DWM Mission, the S&T Mission and the Chalk River Revitalization (Capital) Mission as described in this Statement of Work (collectively the "**Primary Missions**" and individually each a "**Mission**").



"Site Master Plan" – Has the meaning specified in section 3.2.1 of this Statement of Work.

"Site-Specific Release and Clean-up Criteria" – The criteria and specific end-states of any and all portions of a Site approved by the applicable Governmental Authorities, which together comprise a basis to obtain the release of the whole Site from regulatory control or the release of a portion of the Site from regulatory control with the remaining portion to be maintained under the appropriate licence which could include Long-Term Care provisions.

"Waste Acceptance Criteria" – Quantitative or qualitative criteria, specified by the waste receiver, for the waste to be accepted for processing, storage or disposal at a waste management facility. Waste acceptance criteria can include requirements concerning the waste form, packaging or restrictions on the activity concentration or the total activity of particular radionuclides (or types of radionuclide) in the waste.

"Waste Management" – All aspects of characterization, removal, segregation, treatment, storage, and disposal of all types of radioactive waste including mixed, Low-Level Waste, Intermediate-Level Waste, High-Level Waste (used fuel), as defined by the standards of the International Atomic Energy Agency.



# 1. Science and Technology (S&T)

## 1.1 General

- 1.1.1 CNL shall deliver an integrated, effective, program and project-based, customer-focused S&T Mission that serves the needs of AECL and the Government of Canada as well as those of external customers. CNL shall leverage its capabilities to connect academia, industry and research networks to advance technologies for the benefit of Canada.
- 1.1.2 CNL shall provide technical services and research and development products in support of:
  - 1.1.2.1 Federal responsibilities and priorities;
  - 1.1.2.2 Commercial work for third parties and AECL, subject to AECL's existing contractual obligations and restrictions; and
  - 1.1.2.3 Other activities of CNL as described herein, including the pursuit of valuable collaborations and partnerships, and advancing nuclear innovation and clean technologies for the public good.
- 1.1.3 CNL shall enhance the Chalk River Laboratories' professional stature and reputation in Canada and globally.
  - 1.1.3.1 CNL shall develop a comprehensive set of strategic performance measures that fit CNL's future based on AECL, Government of Canada and third-party business needs.

CNL shall implement these measures, baseline performance against the measures, report on progress, and propose growth goals that consider maintaining and/or enhancing Canadian expertise and developing intellectual property.

- 1.1.4 CNL shall manage S&T project performance such that products and services are consistently delivered in accordance with any required client specifications, on time and within budget.
- 1.1.5 CNL shall endeavor to find opportunities for partnerships with Indigenous Peoples in advancing nuclear innovation work described in section 1.6, and build broader support from the public and Local Communities (including Host Communities) for these S&T opportunities to enable their success.

#### 1.2 Planning

1.2.1 CNL shall maintain performance baselines and forecasts as it relates to S&T activities, with appropriate governance such that plans, including the Annual Program of Work and Budget and multi-year plans, may be updated as required or as directed by AECL. These performance baselines will provide an appropriate level of detail as it relates to cost, schedule and risk to support performance reporting and forward-looking planning, including funding requirements.



- 1.2.2 S&T performance baselines will be supported by other planning materials that will include:
  - 1.2.2.1 <u>S&T Capability Plan</u> a plan that details the organization's current scientific capabilities from a facility, process and human resource perspective and provides an outlook on additional, redundant or outdated capabilities to be considered given the current and forecasted federal and industry requirements. The S&T Capability Plan shall consider the need for maintaining, developing and/or enhancing Canadian expertise.
  - 1.2.2.2 <u>Business Development Plan</u> a plan that details the commercial pursuits to be taken over the same period as the multi-year plans, outlining strategies for entering new markets, maintaining or growing existing markets and providing forecast(s) for revenue targets. The Business Development Plan will align with the S&T Capability Plan.
- 1.2.3 Where appropriate, S&T projects will be subject to appropriate governance via project gating and sanctioning procedures and subject to AECL approval commensurate with the project's level of risk, complexity and cost.

#### 1.3 Federal Priorities

- 1.3.1 CNL delivers an integrated, effective, project based, and customer-focused S&T Mission that serves the needs of AECL and the Government of Canada through both the FNST Work Plan and commercial service.
- 1.3.2 Federal priorities focus on four research themes:
  - 1.3.2.1 Supporting safe, secure and responsible use and development of nuclear technologies.
  - 1.3.2.2 Supporting the development of biological applications and understanding the implications of radiation on living things.
  - 1.3.2.3 Enhancing national and global security, nuclear preparedness and emergency response.
  - 1.3.2.4 Supporting environmental stewardship and radioactive waste management.
- 1.3.3 The core needs of the Government of Canada drive the infrastructure, skills and capabilities to be maintained at the laboratories, while changing policy interests and priorities of Government of Canada inform what specific projects are undertaken in each theme over time.
- 1.3.4 The project lists and specific priorities are determined annually on a consensus basis across the participating departments and agencies that have representation on the governance structure (committees). These federal interdepartmental committees set the priorities and determine strategic direction and funding



- allocations to support the FNST Work Plan. AECL manages and oversees the delivery of the FNST Work Plan.
- 1.3.5 CNL shall support AECL and the Government of Canada's S&T needs, which includes performing work as directed by AECL or the Government of Canada to meet core federal responsibilities in nuclear S&T services, policy and advice and any other areas in which CNL have products, services and capabilities needed by Canada.
- 1.3.6 CNL shall deliver the S&T services needed for the FNST Work Plan, as determined by an interdepartmental committee and communicated by AECL.
- 1.3.7 As required by AECL, CNL shall work with the interdepartmental committee(s) to assist in determining an ensemble of projects that will fit within the scope and priorities of the federal nuclear S&T needs, and, at the same time, help to support and maintain facilities and capabilities identified by the interdepartmental committee(s) as being important to ensure federal roles and responsibilities can be fulfilled.
- 1.3.8 As part of the FNST, CNL shall develop and track performance and impact outcomes of the research on an ongoing basis.
- 1.3.9 As part of the FNST, CNL shall work with and support AECL in disseminating and communicating the results of the FNST with Government of Canada stakeholders, academia, the nuclear industry, other research institutions and the public more broadly.

# 1.4 Other S&T Activities for Government of Canada Organizations

- 1.4.1 CNL shall sustain and pursue opportunities for strengthening existing and developing new relationships with Government of Canada organizations (including AECL) to provide S&T services outside of the scope of the FNST Work Plan. These activities fall under what is called 'CNL as a federal laboratory'.
- 1.4.2 CNL shall be responsive to any requests to support federal ad hoc S&T needs and ad hoc S&T needs of AECL from time to time. In particular, CNL shall support, on a priority basis, any service requests from the Government of Canada arising in the event of a nuclear emergency as determined by AECL.

#### 1.5 Commercial Work for Third Parties

- 1.5.1 CNL shall provide commercial services which may include S&T products, services and access to the AECL resources and CNL's capabilities to third parties (including, but not limited to, AECL, Canadian and international private industry, academia, and non-federal public institutions and organizations).
- 1.5.2 CNL shall sustain and grow the commercial work for third parties through, but not limited to, outstanding customer service, key technical capabilities, specialized services and facilities, cost competitiveness, an integrated and effective quality assurance program, and effective balancing of the portfolio of needs to deliver on



- all Government of Canada and customer expectations such that additional revenue streams and improved facility utilization will result.
- 1.5.3 CNL shall provide support, as requested, to the nuclear power industry (including AECL) to address their emergent technical challenges or other service needs.
  - 1.5.3.1 CNL shall comply with all contractual obligations between it and members of the nuclear industry for S&T service and with all existing licensing obligations of CNL.
- 1.5.4 CNL shall develop and build the portfolio of S&T products and services across the nuclear and non-nuclear sectors, nationally and internationally including products and services such as the provision of engineering and technical services, advanced nuclear energy research, and licensing and partnerships.
- 1.5.5 CNL shall continue exploration of commercial opportunities related to targeted alpha therapy and other medical isotopes as per accepted plans.
- 1.5.6 CNL shall act as AECL's marketing and sales agent for AECL's heavy water inventory, and perform all applicable services for or on behalf of AECL or its heavy water customers.

#### 1.6 Nuclear Innovation and Lab Directed Investment

- Via both margin on commercial work and through other funds that may be made available, CNL is to invest in S&T initiatives that will advance and accelerate nuclear and clean energy innovation and research, including fundamental or applied science, technology development, deployment and/or commercialization, for the future benefit of both CNL and Canadians. These investments leverage AECL resources and CNL capabilities and consider new areas or opportunities for growth for the benefit of Canada.
- 1.6.2 CNL's plans for nuclear and clean energy innovation activities shall be developed in collaboration with AECL. Where additional funding is available from private or public sector sources, beyond margin on CNL commercial work, that funding can be proposed for use by CNL, where the specific and funded investments are aligned with CNL's Primary Missions, and ownership of the relevant investment and resulting product is consistent with the CNL Agreement. Any proposed investments shall be subject to AECL acceptance and requirements of the project gating and sanctioning procedure.
- 1.6.3 Nuclear and clean energy innovation efforts will be largely focused on contributing to better health outcomes through advancements in nuclear medicine, to achieving net zero goals through clean and sustainable energy systems, environmental protection and protecting the safety and security of Canadians.
- 1.6.4 Nuclear and clean energy innovation work includes building the networks and reputation as well as creating the opportunities for cooperation, collaboration and co-development across academia, industry, research networks, Indigenous



Peoples that will allow CNL to be an influential member of the Canadian and international nuclear industry and/or scientific community.

- 1.6.4.1 CNL shall strengthen relationships with academia via research collaborations, supporting fundamental research, innovation or technology readiness at the university and college level, establishing co-op and other work programs as well as close recruitment ties. Enhanced collaboration is intended to build capacity in Canada to feed the technological readiness level pipeline that will turn research into reality.
- 1.6.5 CNL shall continue to advance opportunities for nuclear technology development and deployment, hydrogen, fusion and nuclear medicine based on accepted plans, and shall propose new areas of opportunity, as appropriate, for consideration by AECL.
- 1.6.6 At minimum, CNL shall invest 5 percent of all non-waste revenues in low technology readiness level S&T capability or research activities to position CNL for the future (including commercial opportunities or anticipated federal needs). This can be modified with agreement from AECL on an annual basis.

# 1.7 Internal Laboratories Support

1.7.1 CNL shall provide the S&T products and services needed for CNL to perform its other obligations under this Statement of Work.

# 1.8 Obligations to Maintain and Enhance Capabilities

CNL shall manage the maintenance and readiness of its capabilities and collaborations, and the management of AECL resources as well as commercialization efforts, nuclear innovation and clean technology efforts and internal laboratory research, described herein.

#### 1.8.1 Capabilities

1.8.1.1 CNL shall manage its S&T capabilities to retain operational S&T capacity to fulfill the S&T obligations across the entire scope of this Statement of Work in a safe and cost-effective manner.

CNL shall work with AECL and the federal interdepartmental committee(s), as well as review industry direction, to discuss and update the S&T Capability Plan on an annual basis or as requested by AECL.

1.8.1.2 CNL shall ensure that the necessary S&T capabilities, assets and know-how remain ready and able to provide the expert technical support required in the event of a nuclear emergency, both at a CNL-managed site and other nuclear sites in Canada.

#### 1.8.2 Facilities





- 1.8.2.1 CNL shall, on an annual basis, review all existing S&T facilities in consideration of their long-term mission and sustainability, taking into account capabilities needed to support the FNST Work Plan and commercial work, and make recommendations to AECL on their maintenance, renewal, shutdown, or replacement as part of CNL's proposed Annual Program of Work and Budget and the S&T Capability Plan.
- Where appropriate, CNL will recommend to AECL the transfer of 1.8.2.2 buildings and assets to the DWM program, such that the ongoing S&T commitments are as cost effective as possible, and identify the longterm financial implications of these recommendations showing their risk and benefit. CNL shall then implement the approved actions.

#### 1.8.3 People

- CNL shall recruit, develop, and maintain the necessary qualified 1.8.3.1 scientists, technologists, technicians and engineers at all levels in CNL as required to meet the obligations of this Statement of Work and promote technical excellence that is recognized nationally and internationally.
- 1.8.3.2 CNL shall review, as needed or as requested by AECL, the key technical personnel capabilities required to support future S&T activities, and capture this in the S&T Capability Plan along with an action plan to build, reinforce, refocus, or deemphasize key capabilities in CNL.
- 1.8.3.3 CNL, through its S&T activities and collaborations, shall support development of highly qualified and skilled personnel.

#### 1.8.4 Collaborations

CNL shall manage, grow, and strengthen S&T collaborations with academia and industry in line with CNL's expected direction for S&T and the accepted plans.

#### 1.8.5 Commercialization

- 1.8.5.1 CNL shall support exploitation of AECL's licensed technology, including through intellectual property licensing or other innovative means.
- 1.8.5.2 CNL shall encourage technology exploitation within the nuclear laboratories through a reasonable system of recognitions and rewards for personnel who are responsible for the development and commercial application of new knowledge and technologies.

#### 1.9 **Full Cost Recovery of S&T Services**

CNL shall ensure that the pricing for federal, commercial, and internal S&T services is established in a manner to ensure that, in aggregate, at a minimum the



- full costs of the provision of S&T services and the sustainability of CNL's capabilities are covered by total non-DWM funding and revenues, excluding revenues and costs associated with heavy water activities.
- 1.9.2 As an exception to the above, internal S&T services to support non-third party DWM will be covered through DWM funding allocated to CNL by AECL.
- 1.9.3 CNL shall review annually the full-cost recovery methodology described in 1.9.1 and define its pricing approach in its annual program of work.

# 2. <u>Decommissioning and Waste Management (DWM)</u>

#### 2.1 General

- 2.1.1 DWM generally refers to the following activities:
  - 2.1.1.1 <u>Deactivation</u>: performing isolation, re-routing of the utilities, removal of holdup materials, removal of equipment, etc.;
  - 2.1.1.2 <u>Decontamination</u>: characterization, radioactive and hazardous material abatement activities, Site clean-up, verification;
  - 2.1.1.3 <u>Demolition</u>: demolishing structures including building slabs and belowgrade features within the immediate building footprint area where necessary;
  - 2.1.1.4 <u>Waste management</u>: consists of the characterization, removal, retrieval, sorting, drying, conditioning, size reducing, processing, packaging, labeling, inventory-management of wastes and of the management of waste stores, including surveillance programs, maintaining them in a fit-for-service condition, and transportation and disposal of all types of radioactive waste and non-radioactive waste;
  - 2.1.1.5 Environmental Remediation (also known as environmental restoration): consists of the clean-up of contaminated lands and water, the removal of remaining hazards that pose an unacceptable risk or that do not meet the Site-specific Release and Clean-up Criteria, the verification of meeting Site-specific Release and Clean-up Criteria, and the restoration to a condition specified in the Site-specific Release and Clean-up Criteria;
  - 2.1.1.6 Performance of all activities required to establish Long-Term Care, as required and interim performance of required Long-Term Care activities until Closure is formally achieved; and
  - 2.1.1.7 Obtaining all permits, licences, approvals and agreements.
- 2.1.2 CNL shall perform the DWM requirements of this Statement of Work in a manner that provides best value to AECL and Canada. CNL shall aim to substantially reduce Decommissioning liabilities and hazards in a risk-based, output-oriented,



- cost-efficient and effective manner that focuses on acceleration of Decommissioning scope and reducing maintenance and storage with surveillance costs. This work is to be carried out in a manner that is safe, compliant and ensures the long-term safety and security of the public and the environment.
- 2.1.3 CNL shall maintain a priority list and schedule of all existing and assigned DWM facilities and projects.
- 2.1.4 CNL shall perform DWM work that has been accepted by AECL as reflected in the accepted plans, including obtaining and maintaining all required permits, licences, approvals and agreements and complying with all other applicable Governmental Authority requirements.
- 2.1.5 In undertaking DWM activities under this Statement of Work, CNL shall work and collaborate with Local Communities, Host Communities and Indigenous Peoples in a manner that is cooperative, including taking into account Indigenous Knowledge, and fulfilling its obligations and commitments under existing (and any new) relationships and other agreements with Indigenous Peoples.
- 2.1.6 CNL shall integrate Decommissioning and environmental activities within and across the Sites, optimizing use of available CNL capabilities. This includes activities related to the Port Hope Area Initiative, Whiteshell Laboratories, Nuclear Power Demonstration reactor, Low-level Radioactive Waste Management Office, Gentilly-1 Prototype reactor and Douglas Point Prototype reactor. Capabilities and resources should be leveraged to achieve measurable on-the-ground advances and outputs (e.g. acceleration, pollution prevention, waste management and minimization, optimal waste storage, and disposal, and deployment of new technologies among others), productivity improvements and cost efficiencies.

#### 2.2 Planning and Decommissioning Liabilities

- 2.2.1 CNL shall maintain performance baselines and forecasts, as it relates to DWM activities, with appropriate governance such that plans, including the Annual Program of Work and Budget and multi-year plans, may be updated as required or as directed by AECL. These performance baselines will provide an appropriate level of detail as it relates to cost, schedule and risk to support performance reporting and forward-looking planning, including funding requirements.
- 2.2.2 CNL shall maintain the life cycle estimates of AECL's Decommissioning liabilities which include the Decommissioning and Waste Management Provision (Liability Cost Estimate) and the Contaminated Sites Liability. CNL shall update such estimates as required on an ongoing basis. These lifecycle estimates will be aligned with the performance baselines.
  - 2.2.2.1 Any DWM Work must consider Canada's fiscal position with respect to its current provision for decommissioning liabilities. Any proposals, plans or projects will be done in a manner that is fiscally responsible.
  - 2.2.2.2 To the extent that a proposed scope of work will impact the Decommissioning liabilities, the anticipated impact shall be



documented via a performance baseline change proposal and seek the appropriate approval authorities as laid out in current CNL processes.

At AECL's request, CNL shall deliver a complete lifecycle re-estimate of the Decommissioning and Waste Management Provision and/or Contaminated Sites Liability.

- 2.2.3 CNL shall develop and keep up to date any required plans related to DWM, including, but not limited to, an integrated waste strategy, overview decommissioning and cleanup plans and land-use and end-state plans. CNL shall engage AECL, Local Communities, Host Communities, stakeholders and Indigenous Peoples in the development, update and/or communication of these plans.
- 2.2.4 Individual Decommissioning projects will be subject to appropriate governance via the project gating & sanctioning procedure and subject to AECL approval commensurate with the project's level of risk, complexity and cost or as governed by liability cost estimate requirements.

#### 2.3 Chalk River Laboratories

# 2.3.1 <u>Infrastructure Decommissioning</u>

- 2.3.1.1 Liability and risk reduction are the key drivers for infrastructure decommissioning at the Chalk River Laboratories, involving the planning, characterization, regulatory requirements, and physical Decommissioning of facilities and structures, which have been identified to being part of the DWM Mission (no longer needed for operational purposes and slated for Decommissioning).
- 2.3.1.2 CNL shall ensure that infrastructure Decommissioning activities at the Chalk River Laboratories are appropriately prioritized with other DWM programming, strategically advancing, where appropriate, specific projects which will maximize the value to AECL by reducing health, safety, security and environmental risks, reducing the liability, reducing maintenance and surveillance costs, increasing benefits to other missions (e.g. creating space or changing footprint of the controlled area) or any combination of the foregoing.
- 2.3.1.3 Decommissioning of infrastructure includes the planning, characterization, regulatory requirements and physical decommissioning of the structure. Infrastructure Decommissioning scope of significant priority during the term of the CNL Agreement includes, but is not limited to:
  - (a) Complete Decommissioning of the former tritium laboratory building;
  - (b) Complete Decommissioning of the former thorium recovery building, the former de-ionization water plant, the former fuel rod storage bays and the former plutonium recovery laboratory.



- (c) Complete Decommissioning of the former corrosion laboratory buildings.
- (d) Significant advancement of Decommissioning of the National Research Universal facilities.
- (e) Significant advancement of Decommissioning of the National Research Experimental facilities.
- (f) An integrated and optimized plan for Decommissioning facilities ready to be decommissioned once the Advanced Nuclear Materials Research Centre is operational.

# 2.3.2 Environmental Remediation

- 2.3.2.1 Through environmental remediation work, CNL is responsible for risk reduction and remediation of contaminated lands and provides long-term monitoring and surveillance of contaminated groundwater, consistent with the Overview Decommissioning and Cleanup Plan. Activities include the remediation of Waste Management Areas and other affected lands, requiring feasibility and characterization studies where necessary to determine the most appropriate remediation of ground contamination. The Waste Management Areas include areas where waste was directly buried in trenches, pits, standpipes or tile holes, or in areas surrounding above or below ground structures and plumes. This waste is to be retrieved, characterized, sorted and stored or disposed in the appropriate manner, as per the accepted plans.
- 2.3.2.2 CNL will maintain a groundwater monitoring and surveillance program, including monitoring of associated plumes and on-site treatment as required, in compliance with the requirements of Governmental Authorities.
- 2.3.2.3 Remediation of Chalk River lands includes the planning, characterization, regulatory requirements, and physical remediation of the various Waste Management Areas and other affected lands. Environmental remediation scope of significant priority during the term of the CNL Agreement includes, but is not limited to:
  - (a) Conditional on regulatory approval, permanent disposal of Low-Level Radioactive Waste currently in storage and being generated at the various Sites;
  - (b) Remediation of Waste Management Area A;
  - (c) Construction of shielded facilities to handle legacy waste from 6,000+ bunkers and tileholes in Waste Management Area B. The constructed facilities will have capabilities to retrieve, condition and repackage High Level Waste, cemented target material, and co-stored Intermediate Level Waste inventories



- into storage and disposal-ready states in support of decommissioning Waste Management Area B; and
- (d) Advance progress on retrieval, conditioning and packaging of waste from WMA B to the extent possible.

# 2.3.3 Waste Management

- 2.3.3.1 Waste management activities include the processing, storage and disposal of waste from other Sites as needed. CNL shall be responsible for waste management and disposition of all materials and wastes generated by CNL, whether during normal operations or cleanup, all Historic Low-Level Waste and Legacy Waste, all radioactive waste accepted from third parties under commercial terms, and all radioactive waste as requested by AECL from time to time.
- 2.3.3.2 CNL shall execute this program, prioritized on a risk basis. CNL shall ensure that all waste streams are identified, updating and maintaining the Integrated Waste Strategy as needed.
- 2.3.3.3 CNL shall assess and implement ways to: minimize waste generation, process/treat waste, recycle, package or re-package, provide short-and long-term waste storage, and pursue on- and off-site waste disposal options that are cost effective and efficient, protective of the environment and consider the views of Local Communities, Host Communities and Indigenous Peoples (including any existing or new commitments or agreements to Indigenous Peoples). Activities should focus on long-term solutions that reduce and minimize AECL's decommissioning liability and maximize reduction and recycling opportunities in accordance with the principles of waste hierarchy (prevention, reduction, re-use, recycling and disposal).
- 2.3.3.4 CNL shall ensure that all waste management services provided to internal waste producers (e.g. Science and Technology Mission) and third-party commercial customers are undertaken on a full-cost recovery basis. CNL shall maintain a cost model pertaining to waste storage and disposal to support charge rates used to support full cost recovery.
- 2.3.3.5 Waste management scope of significant priority during the term of the CNL Agreement includes, but is not limited to:
  - (a) <u>Clean Waste</u>: Current practices shall be continued or optimized to segregate clean waste from contaminated waste in an effort to reduce waste management costs. Efforts should be made to maximize the recycling of clean waste where possible, with a view to reducing the volume of clean waste that is being disposed in on- or off-site landfills.
  - (b) Low-Level Waste:





- A near surface disposal facility ("NSDF") is currently (i) planned for disposal of Low-Level Waste, pending regulatory approval. Conditional on regulatory approval, it is expected that CNL will have to continue and complete construction and commissioning as well as obtain regulatory approval to operate the NSDF following the Commencement Date.
- Until such a time as NSDF is able to accept waste, Low-(ii) Level Waste will be safely stored in interim storage, with this interim storage expanded as necessary to allow for continued progress of decommissioning activities at the Sites.
- (iii) Upon availability of the NSDF, CNL shall transfer all waste destined for the NSDF from interim storage locations to the NSDF, consistent with the Waste Acceptance Criteria.

#### (c) **Intermediate-Level Waste:**

- CNL shall continuously review and evaluate its practices (i) for consolidation, treatment, volume reduction, handling and storage of Intermediate-Level Waste in order to achieve long-term management and cost efficiencies.
- (ii) CNL shall consolidate all Intermediate-Level Waste (except that which is covered through current in situ disposal proposals) from across AECL Sites at the Chalk River Laboratories for storage, based on accepted plans and other applicable agreements. This includes planning and implementation for any infrastructure or facilities required to transport, handle and store the waste in a safe and compliant manner.
- (iii) CNL shall work with the Nuclear Waste Management Organization and industry to support and advance the Integrated Waste Strategy for Canada, which aims at developina a disposal solution for Canada's Intermediate-Level Waste, including AECL's.

#### (d) High-Level Waste:

(i) A key component of the High-Level Waste program is to maintain oversight and management of interim (>50 years) High-Level Waste storage facilities, in the most cost-effective manner while continuing to maintain safety and the protection of the environment. As of the Commencement Date, High-Level Waste does not have a final disposition site and therefore must be safely





- stored on the Chalk River Laboratories Site until a national geologic repository is eventually sited, constructed, and operational for receipt.
- CNL shall work with the Nuclear Waste Management (ii) Organization, to ensure that CNL will be prepared to meet the Waste Acceptance Criteria ultimately required of High-Level Waste.
- Heavy Water Detritiation: Commission and operate the (e) Modernized Combined Electrolysis and Catalytic Exchange (CECE) facility to separate tritiated heavy water into virgin-level heavy water and minimize the need for ongoing waste management and associated burden on future generations.
- (f) Complete the stored liquid waste project and make available the tanks and facilities for Decommissioning and remediation.

# 2.3.4 Material Repatriation

2.3.4.1 CNL shall pursue opportunities for repatriation of materials to their country of origin. Based on outcomes of analysis for disposition, those materials conducive to repatriation will be processed, packaged and transported to country of origin or elsewhere as required.

# 2.3.5 Third Party WM Services

- 2.3.5.1 CNL shall accept radioactive materials in accordance with CNL's existing business practices as of the Commencement Date, subject to the provisions of the CNL Agreement and other applicable agreements.
- 2.3.5.2 CNL may only consider material changes to its waste volumes of Low-Level Waste and Intermediate-Level Waste or take on new lines of waste for storage, treatment and/or disposal, upon acceptance by AECL of a satisfactory proposal. The proposal must include detailed considerations for risks, opportunities and benefits to AECL, demonstrate that all applicable agreements have been followed (including any commitments to or agreements with Indigenous Peoples), and include contributions to the Long-Term Disposal of Radioactive Waste Fund to cover any associated increase in long-term liabilities.

#### 2.4 Whiteshell Laboratories

- CNL shall carry out all DWM and related activities to safely achieve Closure of the Whiteshell Laboratories Site.
- CNL shall perform the DWM work that is being undertaken at the Whiteshell 2.4.2 Laboratories Site as of the Commencement Date in a risk-based, output-oriented, cost-efficient and effective manner, to achieve timely Closure of the Whiteshell



- Laboratories Site, thereby substantially reducing AECL's radioactive waste and Decommissioning liabilities, and ensuring the long-term safety and security of the public and the environment.
- 2.4.3 CNL shall be responsible for the management, storage, disposal, in-situ disposal and/or shipment for off-site disposal of radioactive and non-radioactive wastes generated. All Low-Level Waste, Intermediate-Level Waste and High-Level Waste not meeting Site-specific Release and Clean-up Criteria shall be shipped to the Chalk River Laboratories.
- 2.4.4 CNL shall be responsible for ensuring that all services that are required to enable all activities necessary to perform the work and achieve Closure of the Whiteshell Laboratories Site are in place. CNL shall undertake all nuclear and non-nuclear services required to enable DWM at the Whiteshell Laboratories Site and the provision of any new structures which may be required in connection with such DWM activities, including, but not limited to, a groundwater monitoring and surveillance program.
- 2.4.5 It is expected that as of the Commencement Date there will be ongoing work including, but not limited to, the waste retrievals of the standpipes and Intermediate-Level Waste bunkers, the Environmental Assessment approval process with the Canadian Nuclear Safety Commission for the in-situ disposal of the WR-1 research reactor, the transportation of High-Level Waste to the Chalk River Laboratories for storage, and all other decommissioning activities to enable the Closure of the site.
- 2.4.6 Following Closure, CNL will be responsible for Long-Term Care of the Site.

# 2.5 Nuclear Power Demonstration Prototype Reactor Site

- 2.5.1 CNL shall carry out all DWM and related activities to safely achieve Closure of the Nuclear Power Demonstration Site.
- 2.5.2 CNL shall perform this work in a risk-based, output-oriented, cost-efficient and effective manner to achieve timely Closure of the Nuclear Power Demonstration Site, thereby substantially reducing AECL's radioactive waste and Decommissioning liabilities, and ensuring the long-term safety and security of the public and the environment.
- 2.5.3 CNL shall be responsible for the management, storage, disposal, in-situ disposal or shipment for off-site disposal of radioactive and non-radioactive wastes generated. All radioactive waste (High-Level Waste, including Used Fuel, Intermediate-Level Waste and Low-Level Waste) not meeting Site-specific Release and Clean-up Criteria shall be shipped to the Chalk River Laboratories.
- 2.5.4 CNL shall be responsible for ensuring that all services that are required to enable all activities necessary to perform the work and achieve Closure of the Nuclear Power Demonstration Site are in place. CNL shall undertake all nuclear and nonnuclear services required to enable DWM at the Nuclear Power Demonstration



- Site and the provision of any new structures which may be required in connection with such DWM.
- 2.5.5 In working to achieve the Closure of the Nuclear Power Demonstration Site, CNL shall endeavor to work and collaborate with Local Communities and Indigenous Peoples in a manner that is cooperative, including taking into account Indigenous Knowledge, and fulfilling its obligations and commitments under existing (and any new) relationships and other agreements with Indigenous Peoples.
- 2.5.6 It is expected that as of the Commencement Date there will be ongoing work including, but not limited to, the Environmental Assessment approval process with the Canadian Nuclear Safety Commission for the in-situ disposal of the reactor, and all other Decommissioning activities to enable the Closure of the Nuclear Power Demonstration Site.
- 2.5.7 Following Closure, CNL will be responsible for the Long-Term Care of the Site.

# 2.6 Port Hope Area Initiative (PHAI)

- 2.6.1 CNL shall be responsible for overall conduct and execution of the PHAI as set out in the Legal Agreement or otherwise required by AECL.
- 2.6.2 Work under the PHAI encompasses two projects: (1) the Port Hope Project and (2) the Port Granby Project. As part of each project, a Long-Term Waste Management Facility has been constructed.
- 2.6.3 Work involves but is not limited to the construction of waste management facilities, completion of survey and design work, excavation of Low-Level Waste, transfer of wastes to waste management facilities, completion of site-specific risk assessments, completion of remediation and restoration on residential, commercial, industrial, municipal and other sites, closure of the facilities and establishment of passive recreation areas, and establishing required long-term monitoring and maintenance.
- 2.6.4 CNL shall be responsible for addressing and carrying out activities to fulfill the long-term obligations of AECL and Canada, at AECL's request, including the required long-term operation, monitoring, and maintenance of AECL's facilities.
- 2.6.5 CNL shall be responsible for the Property Value Protection Program and the Municipal Tax Revenue Loss Program (as such terms are defined in the Legal Agreement) and any other programs required by the Legal Agreement or by AECL.
- 2.6.6 CNL shall sustain and pursue opportunities for strengthening the existing relationships with the PHAI municipalities, Indigenous Peoples, Local Communities, stakeholders and the public.
- 2.6.7 CNL shall complete phase 2 (active remediation and Closure) work as part of the Port Hope Project. It is expected that as of the Commencement Date, there will be ongoing work to complete remediation of the harbour front, private and municipal properties (known as small-scale sites) and management and operation of the Port



- Hope Long-Term Waste Management Facility. Once completed and the facility closed and capped, CNL shall be responsible for transitioning and implementing phase 3 (Long-Term Care).
- 2.6.8 CNL shall continue the implementation/execution of phase 3 (Long-Term Care) at the Port Granby Project, including the ongoing long-term monitoring and maintenance of the Port Granby Long-Term Waste Management Facility, operation of the wastewater treatment plant, and its eventual decommissioning.

# 2.7 Low-Level Radioactive Waste Management Office

- 2.7.1 Through the Low-Level Radioactive Waste Management Office, CNL is responsible for managing and reducing Historic Low-Level Waste liabilities on behalf of AECL in compliance with any applicable Governmental Authority requirements.
- 2.7.2 CNL shall perform environmental remediation at Sites contaminated with Historic Low-Level Waste and/or uranium ore contamination, at AECL's request, and as per accepted plans.
- 2.7.3 As of the Commencement Date, it is expected that there will be work ongoing as part of the Northern Transportation Route and in certain areas of the Greater Toronto Area. It is expected these scopes of work will be fully remediated and complete during the term of the CNL Agreement.
- 2.7.4 CNL shall work with Indigenous Peoples in developing its remediation plans as part of the Northern Transportation Route, including consideration for integrating Indigenous Knowledge, building capacity, and enabling jobs and economic opportunities for Indigenous Peoples. CNL shall consider any obligations of the Government of Canada as part of applicable Modern Treaties, Comprehensive Land Claim Agreements, Self Government Agreements and any other applicable agreements with Indigenous Peoples.
- 2.7.5 CNL shall collect and take charge of historic artefacts and other historic radioactive materials at AECL's request.

#### 2.8 Douglas Point Prototype Reactor Site

- 2.8.1 CNL shall engage Bruce Power, Ontario Power Generation, other Site stakeholders, local communities and Indigenous Peoples to achieve cost-effective Decommissioning of the Douglas Point Prototype Reactor Site and to propose options for doing so to AECL for its consideration. Any options are subject to the acceptance of AECL.
- 2.8.2 CNL shall seek the optimal, most cost-effective way(s) of executing Decommissioning of this Site in a safe manner.

# 2.9 Gentilly-1 Prototype Reactor Site



- 2.9.1 CNL shall engage Hydro-Québec, other Site stakeholders, Local Communities and Indigenous Peoples to explore opportunities to achieve cost-effective Decommissioning and remaining DWM activities to achieve Decommissioning of the Gentilly-1 Prototype Reactor Site and to propose options for doing so to AECL for consideration. Any options are subject to the acceptance of AECL.
- 2.9.2 CNL shall seek the optimal, most cost-effective way(s) of executing Decommissioning of this Site in a safe manner.

# 2.10 La Prade Heavy Water Storage Facility

- 2.10.1 CNL shall operate the La Prade Heavy Water Storage Facility, which is located near the Gentilly-1 Prototype Reactor.
- 2.10.2 CNL shall consider best use of the facility and present any change in use to AECL for acceptance.

# 3. Chalk River Revitalization (Capital)

#### 3.1 General

- 3.1.1 CNL shall continue the revitalization of the Chalk River Laboratories with a view to transforming the Site into a modern and attractive campus that meets current and future requirements and contributes to AECL's and CNL's sustainability objectives as set out in the environmental, social and governance ("ESG") Strategy.
- 3.1.2 CNL shall manage, operate, protect, maintain and enhance the CNL's ability to function as a multi-Mission organization, assure right-sized and adequate infrastructure, and provide support activities for the accomplishment of the work.
- 3.1.3 CNL shall coordinate and integrate Site development and infrastructure activities with those of the DWM and S&T Missions to ensure the most effective, efficient and appropriate use of supporting infrastructure.
- 3.1.4 CNL shall integrate the concept of continuous improvement into all work performed in supporting DWM and S&T Missions and continuously challenge practices and policies that do not provide a favorable cost-benefit return to those Missions.

# 3.2 Planning

3.2.1 CNL shall maintain performance baselines and forecasts, as it relates to capital activities, with appropriate governance such that plans, including the Annual Program of Work and Budget and multi-year plans, may be updated as required or as directed by AECL. These performance baselines will provide an appropriate level of detail as it relates to cost, schedule and risk to support performance reporting and forward-looking planning, including funding requirements. As part of planning activities, CNL shall prioritize improving and maintaining facility conditions, taking into account AECL's and the Government of Canada's fiscal considerations, as well as AECL's and CNL's ESG sustainability objectives. The



culmination of planning for Site development and investment activities will be maintained in a "Site Master Plan".

- 3.2.1.1 CNL shall leverage the asset management program and plans, complete with building and infrastructure assessments, to support prioritization of capital investments and development of the Site Master Plan.
- 3.2.1.2 CNL shall work closely with Site maintenance and asset management groups to ensure the accepted plans and Site Master Plan consider all aspects of maintaining and improving the facilities and assets and that all relevant information is considered prior to making investments.
- 3.2.1.3 In developing and implementing accepted plans, CNL shall ensure that the necessary capabilities are available to keep the development of the facilities and assets current with AECL's current and future needs and to allow CNL to successfully deliver the work.
- 3.2.1.4 Through the accepted plans and Site Master Plan, CNL will seek to: (1) improve the condition and reliability of the operating facilities and assets in a prioritized manner; (2) right size the physical footprint of the operating facilities and assets; (3) maximize the effectiveness of the S&T Mission; and (4) ensure the transfer of unnecessary facilities and assets to the DWM program, as appropriate. In this optimization, CNL shall seek to contain and reduce the cost of maintenance of aged facilities at the Sites, including consideration for achieving AECL's and CNL's ESG sustainability objectives.
- 3.2.1.5 Individual capital investments will be subject to appropriate governance via project gating & sanctioning procedure and subject to AECL approval commensurate with the project's level of risk, complexity and cost.
- 3.2.1.6 CNL shall have in place an ESG sustainability strategy which is aligned with AECL's Sustainability Strategy. Proposed capital investments should be aligned with the ESG sustainability strategy.
- 3.2.1.7 The Site Master Plan will be updated as needed or as required by AECL.
- 3.2.1.8 CNL shall work to enhance the engagement of Local Communities, Host Communities, and Indigenous Peoples in the development, update and/or communication of these plans.

# 3.3 Site Development & Investment

3.3.1 CNL shall implement the approved capital investments in an efficient manner, leveraging the supply chain, internal resources and project management capabilities to ensure effective delivery that is on time and on budget.



- 3.3.2 CNL will be responsible for project development including consideration of:
  - 3.3.2.1 Health, Safety, Security, Environment and Quality Assurance/Control;
  - 3.3.2.2 Regulatory compliance;
  - 3.3.2.3 Alignment with overall asset management plans and priorities;
  - 3.3.2.4 Constraints and opportunities related to site logistics and coordination; and
  - 3.3.2.5 Baseline development, including documentation supporting scope, cost, schedule and risks.
- 3.3.3 CNL shall be responsible for project delivery and performance of Site development and investment activities, with performance monitored via the project management system.
- 3.3.4 CNL will perform project design and construction management, including but not limited to: (1) design and risk analysis, value engineering, configuration management and control, conceptual designs, preliminary designs, material testing, and surveying in support of architectural and engineering designs; (2) final designs and construction drawings; and (3) as-built drawings pursuant to construction inspections, surveying, and material-testing services for all activities that support AECL and other customer needs. All of the above shall be done in accordance with the obligations of Site and facility license requirements, including the applicable permits, licenses, approvals and agreements.
- 3.3.5 CNL shall provide the skills necessary to incorporate the appropriate safety and quality level requirements for all facilities up to and including nuclear facilities, while meeting project cost and time constraints and milestones.
- 3.3.6 Site development & investment scope of significant priority during the term of the CNL Agreement includes, but is not limited to:
  - 3.3.6.1 Construction completion and commissioning of the Advanced Nuclear Materials Research Centre;
  - 3.3.6.2 Replacement of electrical transformer station (switchyard), feeds and distribution lines where required;
  - 3.3.6.3 Improved facility condition of the facilities which are being kept, where required, with a specific focus on strategic science and technology facilities;
  - 3.3.6.4 Improvement or replacement of site heating infrastructure where required;
  - 3.3.6.5 A replacement solution for active liquid waste management;





- 3.3.6.6 Maintaining information technology capabilities; and
- 3.3.6.7 Maintaining renewal of strategic equipment where required.

#### 4. **General Services**

#### 4.1 **Corporate Services**

CNL shall perform integrated long-range planning and manage and administer comprehensive enterprise business systems and internal controls for all business and administrative operations necessary to operate CNL, based on sound management practices and good industry practice, and in compliance with all applicable regulatory requirements. This shall include integrating common systems of internal controls across CNL and implementing business processes that are risk-based, cross-functional, cost effective, optimize and streamline operations, increase efficiency and enhance productivity.

# 4.1.1 <u>Human Resources</u>

- In carrying out the work under this Statement of Work, CNL shall be 4.1.1.1 responsible for the employment or contracting of all personnel engaged by CNL in the work hereunder.
- 4.1.1.2 CNL shall maintain human resources management system(s) and processes to attract, retain and develop a highly qualified workforce and promote workforce diversity (including increasing representation from under-represented groups and Indigenous employees).
- 4.1.1.3 CNL shall establish and/or maintain an integrated workforce planning system across the enterprise to determine the number and types of employees required to competently perform its Mission and function areas. Planning shall occur on a multi-year basis and feed annual plans for recruitment, retention, and development. The plan shall be updated on an annual basis.
- 4.1.1.4 CNL shall present to AECL any significant number of new hires (including those that happen over time in the aggregate), or workforce reductions, and the implications and liabilities associated with those prior to significant decisions or announcements being made.
- 4.1.1.5 CNL shall manage specific initiatives aimed at workforce transformation, culture, and any associated change management resulting from the integrated workforce planning system, associated annual plans, operational requirements and the needs of each of the Missions.
- 4.1.1.6 CNL shall be responsible for all employment matters, including, but not limited to, compensation, pension and benefit arrangements, collective bargaining negotiations and the signing of all agreements.



- 4.1.1.7 In connection with the expiration of each collective agreement, CNL will prepare a written mandate (i) setting out the principles, goals and objectives of CNL for amendments, variations or modifications to such collective agreement, and (ii) providing a detailed assessment of the relevant factors impacting such goals and objectives, including cost efficiency, short and long-term affordability, and other factors which may affect such goals and objectives, benchmarked against market trends.
- 4.1.1.8 CNL shall conduct all activities in compliance with collective labour agreements governing the CNL employees.
- 4.1.1.9 CNL shall develop and maintain HR planning documents that highlight areas identified by AECL as important to Canada, align with CNL's Primary Missions and sustain the long-term capabilities of the nuclear laboratories. The HR planning documents will be reviewed with AECL at least annually for alignment with the Primary Missions and priority areas. The HR planning documents will include elements on recruitment, total compensation and benefits, collective bargaining, training and development, succession planning, and workplace inclusion and diversity. The plans will also identify any adjustments needed to optimize the workforce necessary to fulfill the Primary Missions.
- 4.1.1.10 CNL shall conduct comprehensive pre-employment screening(s) as part of its talent acquisition planning and processes.
- 4.1.1.11 CNL shall implement a training and qualification program including: general training and orientation; employee development; educational and professional advancement; regulatory and facilities-specific training and qualification; and training related to succession planning.
- 4.1.1.12 CNL training and qualification program(s) shall be an element of CNL's integrated safety management process and include the HSSE safeguards and security aspects of job and position responsibilities. CNL shall ensure the continuing involvement by senior management in directing and evaluating the training and qualification program.
- 4.1.1.13 For sites where CNL is working towards Closure, CNL shall develop and implement a workforce transition program for all employees in advance of the termination of the DWM activities at the Sites. This transition program shall be structured to support employee retention at the Sites while work is ongoing to complete the execution of the work and to assist in the transition of employees to new employment as the work is completed.

# 4.1.2 Program/Project Management Office

4.1.2.1 CNL shall drive excellence in project management performance through the effective use of a Project Management System and Earned





Value Management System ("EVMS") that is consistent with good industry practices across all CNL's programs and operations to deliver projects on schedule, within budget, and enabling mission performance. CNL will utilize EVMS across the enterprise, providing reliable data for management of the various projects and Sites. The Project Management System will include forecasts (estimates at completion) for all projects.

- 4.1.2.2 CNL shall maintain the appropriate capabilities to develop, implement and monitor projects, including sufficient and effective project planning and project management resources. CNL shall demonstrate a robust quality assurance process is in place, both in project planning and execution, to increase the likelihood of successful outcomes.
- 4.1.2.3 CNL shall maintain insightful performance reporting that succinctly and efficiently captures project performance as it relates to cost, schedule, risk, milestone performance and forecasts.
- 4.1.2.4 CNL shall manage and monitor all projects, on a graded approach, to ensure on time and within cost completion to planned requirements.
- CNL shall implement good industry practices for managing and 4.1.2.5 providing general oversight of contractors selected to perform any major projects, including any design-build contracts. This includes ensuring appropriate contractor safety practices.

#### 4.1.3 Corporate Planning

- 4.1.3.1 CNL shall maintain project baselines and forecasts such that short and long-term planning exercises can be efficiently executed.
- 4.1.3.2 CNL will be responsible for the development of the Annual Program of Work and Budget and multi-year plans, and any other planning needs, as required. These planning exercises will be integrated across all functions of the organization and consider scope, cost, schedule, risk as well as human resource and supply chain constraints. These plans will be subject to AECL acceptance.
- 4.1.3.3 Separately, CNL shall maintain a CNL strategy as a public facing document that outlines the direction of the organization, and update it as required.
- 4.1.3.4 CNL shall maintain business intelligence systems and reporting such that performance can be monitored against plans on a cost, schedule and milestone basis, and to ensure funding compliance.
- 4.1.3.5 In consideration of proposed and accepted scopes of work, CNL will consider immediate and long-term funding compliance constraints, human resource and supply chain requirements, significant risks or





- opportunities to cost or schedule and impacts as they relate to longterm expected outcomes.
- CNL shall have in place an ESG sustainability strategy which is aligned 4.1.3.6 with AECL's Sustainability Strategy. CNL shall update this strategy on a regular basis, and report on its progress on an as needed basis.

# 4.1.4 Information Management and Technology

- 4.1.4.1 CNL shall maintain, and replace as required, the necessary information and operational systems for technical programs, organizational, business, legal and operations functions and for activities including general purpose programming, data collection, data processing, report generation, software, electronic and telephone communications, subject to the classified information requirements contained elsewhere in the CNL Agreement.
- 4.1.4.2 CNL shall provide computer resource capacity and capability sufficient to support: (1) CNL-wide information management requirements; and (2) CNL-wide classified computing infrastructure.
- CNL shall, with AECL acceptance as part of the Annual Program of 4.1.4.3 Work and Budget or other relevant work plan, standardize non-scientific software and hardware programs/platforms within CNL for generating and storing electronic information.
- 4.1.4.4 CNL shall, at all times, maintain or cause to be maintained those cyber security requirements as outlined in the CNL Agreement.
- CNL shall maintain appropriate record keeping practices and facilities 4.1.4.5 that meet all of the necessary record keeping needs of CNL and AECL, in accordance with the CNL Agreement.

#### 4.1.5 Supply Chain Management

- 4.1.5.1 CNL shall identify opportunities to maximize the benefits for Canada, including seeking delivery effectiveness and cost efficiencies, by using subcontractors in meeting the obligations of this Statement of Work.
- 4.1.5.2 CNL shall develop well defined statements of work when subcontracting portions of this Statement of Work that seek efficiencies in subcontracted program execution and seek to promote/develop a capable nuclear supply chain industry in Canada.
- 4.1.5.3 When considering enhanced subcontracting practices, CNL shall consider cost effectiveness as well as the overall objectives of this Statement of Work, which include ensuring the long-term capabilities of CNL.



- 4.1.5.4 CNL will be permitted to subcontract obligations under the CNL Agreement to other persons (including affiliates of CNL or the contractor), subject to certain standards and conditions relating thereto that may be specified in the CNL Agreement, including in order to address actual or potential conflicts of interest, with the intention of ensuring that all subcontracts appropriately reflect Canada's economic interests. For example, it is anticipated that such standards and conditions will include a requirement that CNL develop and maintain formalized procurement policies, practices and procedures that will result in fair, open and competitive procurement processes. In addition. with any proposed subcontract with an affiliate of CNL or an affiliate of the contractor, or that is a sole source, in either case involving payments above a specified monetary threshold, the terms of the subcontract will be subject to AECL's prior consent. All procurements will be subject to varying levels of oversight by AECL from time to time.
- 4.1.5.5 CNL shall have in place an Indigenous procurement strategy that aims at reducing barriers to procurement opportunities and enhance economic outcomes for Indigenous Peoples. The Indigenous procurement strategy should be developed and/or updated in partnership with Indigenous Peoples with which CNL engages, and aligned with any commitments made by CNL to Indigenous Peoples either through agreements or other mechanisms. Specific targets and set-asides for Indigenous procurements that are meaningful shall be included in the Indigenous procurement strategy, updated from time to time based on evolving market availability, and reflected in CNL's procurement policies for subcontracting.
- 4.1.5.6 CNL shall leverage the local supply chain where capabilities exist, with the view of bringing benefits to the Local Communities and Host Communities.
- 4.1.5.7 CNL shall implement good industry practices for subcontractor selection and management practices.
- 4.1.5.8 CNL shall deploy good industry practices regarding supply chain management in its system planning and execution.
- 4.1.5.9 CNL shall maintain an approved purchasing system to provide purchasing support and subcontract administration.
- 4.1.5.10 CNL shall deploy good industry practices regarding vendor management to ensure the compliant delivery of purchased products, goods and services at the requested quality standards.

#### 4.1.6 Finance

4.1.6.1 CNL shall maintain a financial management system that provides sound financial stewardship and accountability. The overall system shall: (1) be suitable to collect, record, and report all financial activities;





- (2) include a budgeting system for the formulation and execution of all resource requirements; (3) include a disbursements system for employee payroll and supplier payments; and (4) contain an effective internal control system for all expenditures.
- 4.1.6.2 CNL shall ensure the financial system remains integrated with performance monitoring systems (including the Earned Value Management System) and any other required business intelligence systems.

# 4.1.7 Legal and Compliance

- 4.1.7.1 CNL shall implement a due diligence program as required by Contractor.
- 4.1.7.2 CNL shall maintain a legal program to support CNL activities including, but not limited to, those related to: (1) use of AECL patents, licenses, and other intellectual property rights; (2) Subcontracts; (3) technology transfer; (4) environmental compliance and protection; (5) labour relations; (6) Indigenous engagement; and (7) litigation and claims.
- CNL shall maintain a compliance program that ensures appropriate 4.1.7.3 compliance with, but not limited to: (1) ethics and business conduct; (2) export and import requirements (trade agreements); (3) intellectual property operations; and (4) insurance.
- 4.1.7.4 To have an effective compliance and ethics program CNL will exercise due diligence and maintain standards and procedures to prevent and detect criminal conduct and otherwise promote an organization culture that encourages ethical conduct and a commitment to compliance with applicable law.
- 4.1.7.5 CNL shall establish an audit program which provides capabilities for both internal and subcontracted audits and supports external audits, reviews, and appraisals, including those from AECL.

#### 4.1.8 Property Management

- 4.1.8.1 CNL shall have an approved management system for overall integrated planning, acquisition, maintenance, operation, control, accountability, utilization, and disposal of AECL-owned property.
- 4.1.8.2 CNL shall manage real property, including facilities and infrastructure, both leased and acquired, to perform assigned mission work to meet the short-term and long-term objectives of this Statement of Work at lower net cost to AECL.
- 4.1.8.3 Real property management shall include providing appropriate office space for AECL and the Canadian Nuclear Safety Commission, as requested by AECL.





- 4.1.8.4 CNL shall perform overall integrated planning, acquisition. maintenance, operation, management and disposition of the CNLmanaged real property and CNL-leased facilities and infrastructure used by CNL. While performing this responsibility, CNL shall align its actions with the development and approval of the Site Master Plan.
- 4.1.8.5 CNL shall use a performance-based approach to real property life-cycle asset management to perform overall integrated planning, acquisition, upgrades, and management of owned, leased or controlled facilities and real property accountable to CNL. CNL shall employ leading facilities management practices that are integrated with Mission assignments and business operations.

# 4.1.9 Asset Management

- 4.1.9.1 CNL will develop and maintain asset information to support strategic investment decisions with the aim to ensure assets are optimized, with minimal time at risk, to ensure Mission activities are fulfilled through the lifecycle of assets.
- 4.1.9.2 CNL will maintain a prioritized list of investments, based on inputs such as building and infrastructure condition assessments and investment impact on desired outcomes. This prioritized list of investments will use to inform capital investments.

#### 4.2 Health, Safety, Security and Environment (HSSE)

#### 4.2.1 General HSSE

- CNL shall conduct a Health, Safety, Security and Environment 4.2.1.1 ("HSSE") program, including environmental protection and compliance. and safety and health management that (1) achieves an institutionalized HSSE conscious culture that embraces conduct of operations and allows work to be performed safely, (2) assigns unambiguous roles, responsibilities, authorities, develops appropriate work controls and ensures accountability for the performance of work in a manner that ensures protection of workers, the public and the environment, (3) integrates excellence in HSSE into all CNL activities, and (4) meets all applicable laws.
- 4.2.1.2 CNL shall take necessary actions to prevent serious injuries and/or fatalities, keep worker exposure and environmental releases below established limits, minimize the generation of waste, and maintain or increase protection to the environment, public and worker safety and health.
- 4.2.1.3 To ensure the safe performance of all CNL work, CNL shall maintain a Management System that establishes integrated safety management and sound HSSE management processes as well as formal work control and work performance processes. The Management System



and program of processes shall be comprehensive in nature, covering all work performed under this Statement of Work.

- 4.2.1.4 CNL shall ensure that the implementation of the Management System addresses nuclear safety requirements including, but not limited to: (1) a robust safety authorization basis process, (2) system engineering and configuration management of structures, systems and components important to safety, (3) quality assurance, (4) stabilization and disposition of used fuel and nuclear materials, and (5) startup and restart of nuclear facilities.
- 4.2.1.5 CNL shall have in place an HSSE performance measurement program that ensures comprehensive gathering of operational data, adequate causal analysis, risk analysis, trending, comparison to metrics, includes leading and lagging indicators, dissemination of operational data, and measures both employee and subcontractor performance.
- 4.2.1.6 CNL shall perform timely HSSE occurrence/event investigation ensuring that root cause analysis is performed, corrective actions address the systemic problems identified at CNL, and use a lessons-learned program to implement improvements to CNL's operations.
- 4.2.1.7 CNL shall provide oversight of contractual HSSE standards and requirements appropriate to Subcontractors and other entities performing work at CNL.

### 4.2.2 Safeguards and Security

- 4.2.2.1 As required to comply with permits, licenses, approvals and agreements, CNL shall have in place a safeguards and security program. This program fosters an institutionalized security conscious culture that performs work securely and assigns unambiguous roles, responsibilities, authorities, and accountability while integrating excellence in safeguards and security into all CNL activities. The safeguards and security program includes, but may not be limited to: (1) physical security; (2) protection of the CNL-managed property; (3) classification, declassification and protection of information; (4) cyber security; (5) nuclear materials protection, accounting and control; (6) safeguards compliance; and, (7) personnel security including access control for employees and visitors.
- 4.2.2.2 CNL shall support Canada's overarching security and non-proliferation initiatives including safeguards and security technology deployment efforts as directed by AECL.
- 4.2.2.3 CNL shall consider in its Site planning the cost implications of the safeguards and security programs and optimize the programs to reflect regulatory requirements and the nature, scope, and scale of the operations conducted by CNL.



- 4.2.2.4 CNL shall maintain, train, test, equip and deploy a nuclear response force at the CNL-managed sites.
- 4.2.2.5 CNL shall provide any support requested by AECL in relation to the issuance of security clearances.

#### 4.2.3 Fire Protection

4.2.3.1 CNL shall maintain capabilities in fire protection that include fire protection, emergency response, fire engineering compliance, oversight and verification of fire systems inspection, testing and maintenance. CNL shall maintain compliance with Site licence requirements at all times.

# 4.2.4 Emergency Preparedness

- 4.2.4.1 CNL shall have in place an emergency management program to include: (1) emergency preparedness plans and procedures to support safety and an appropriate response in emergencies; (2) an occurrence notification and reporting system; (3) operation of an emergency operations centre and emergency response capabilities for local, provincial, and national missions; (4) a radiological assistance program; and (5) support to the nuclear emergency support team and accident response group in the areas of nuclear expertise and surety, environment, safety and health, waste management, transportation and other areas requiring specialized planning, training, and responses to nuclear accidents or incidents.
- 4.2.4.2 CNL shall have on site at all times a sufficient number of qualified employees for both normal operation and to respond to accident and emergency conditions.
- 4.2.4.3 As required to comply with permits, licences, approvals and agreements, CNL shall develop, implement and maintain a comprehensive set of emergency operating procedures for accidents, and guidelines for severe accident management.
- 4.2.4.4 CNL shall provide all necessary support to AECL's responsibilities under the Federal Nuclear Emergency Plan (including administrative work, exercises, and with any other needs), and shall cooperate with AECL to establish/maintain a protocol to set out respective roles, responsibilities, processes, procedures protocols and expectations related to Federal Nuclear Emergency Plan.

# 4.2.5 Occupational Health & Safety

4.2.5.1 CNL shall promote a safe and healthy working environment through a comprehensive occupational health and safety program that is integrated with the HSSE program.



4.2.5.2 The occupational health and safety program shall identify and prevent hazards that could lead to injury and illnesses at CNL-managed sites, consistent with good industry practice and aligned with applicable law.

#### 4.2.6 Environmental and Cultural Protection

- 4.2.6.1 CNL shall have in place a comprehensive environmental protection program that integrates environmental protection into all of CNL's activities and aims at pollution prevention and responsible environmental management.
- 4.2.6.2 The environmental protection program shall meet all regulatory requirements for Sites as well as ISO 14001 certification requirements, for the Sites where CNL has received this certification.
- 4.2.6.3 CNL shall continue all environmental monitoring activities at its Sites, and integrate Indigenous Knowledge into its activities. CNL shall facilitate the work of Indigenous monitors (e.g. from Guardian Programs) based on its commitments and obligations under existing (and any new) relationships and other agreements with Indigenous Peoples.
- 4.2.6.4 CNL shall communicate the results of its environmental monitoring activities with the public, stakeholders and Indigenous Peoples. In doing so, CNL shall collaborate with Indigenous Peoples (and others as appropriate) to improve, adjust and/or tailor its communication of risk.
- 4.2.6.5 CNL shall implement an environmental management system (environmental monitoring, waste minimization, pollution prevention, etc.) within the Management System.
- 4.2.6.6 CNL shall, as appropriate, conduct natural and cultural resource compliance and protection programs including: (1) monitoring, surveillance, and reporting with respect to all natural and cultural resources; (2) obtaining and maintaining required permits and licences from regulatory agencies; and (3) applicable certification and training programs. CNL shall work with Indigenous Peoples to integrate Indigenous Knowledge into these programs.

#### 4.2.7 Radiation Protection

4.2.7.1 CNL shall maintain a radiation protection program to ensure the health and safety of workers, the public and the environment. This program shall be optimized to reflect the requirements of Governmental Authorities and the nature, scope, and scale of the operations conducted by CNL.

# 4.3 Site Operations



# 4.3.1 General Site Operations

- 4.3.1.1 CNL shall ensure that all of the AECL resources are maintained in accordance with the provisions of the CNL Agreement.
- 4.3.1.2 CNL shall ensure the provision of Site services such as energy management, site utilities, utilities distribution, site maintenance and logistics in a manner as to ensure the safety of personnel and to enable performance of the Work.
- 4.3.1.3 CNL shall manage, operate and maintain in good repair and condition all real property, buildings, landscaping, forestry, roadways, equipment and other physical assets necessary to perform the activities of this Statement of Work, including environmental management services, energy, utility services and site infrastructure maintenance.
- 4.3.1.4 CNL shall ensure that the maintenance management program is based on good industry practices to maintain property in a manner which: (1) promotes and continuously improves nuclear safety, operational safety, environmental protection and compliance, property preservation and cost effectiveness; (2) ensures continuity and reliability of operations, fulfillment of program requirements and protection of life and property from potential hazards; (3) ensures the condition of all assets will be maintained, or will continuously improve where necessary for the ongoing delivery of the mandate, over the period of performance; and (4) improves energy efficiency and contributes to CNL's ESG sustainability objectives where applicable and appropriate.
- 4.3.1.5 CNL shall manage the provision of Site services such as food, laundry, transportation, fleet management, stores, and shipping and handling in an efficient and cost-effective manner.

#### 4.3.2 Nuclear Site Operations

- 4.3.2.1 CNL shall maintain nuclear safety as the overriding priority.
- 4.3.2.2 CNL shall oversee, manage, operate and maintain all the nuclear facilities in compliance with permits, licences, approvals and agreements.
- 4.3.2.3 CNL shall ensure that nuclear materials are managed and transported safely, minimizing risk to nuclear workers, the environment, and the public.
- 4.3.2.4 In managing these facilities, CNL shall review buildings and operations maintained in a storage with surveillance or maintenance and surveillance condition for opportunities to Decommission and reduce cost of operations.

### 4.3.3 Central Technical Authority



- 4.3.3.1 CNL shall maintain a regulatory compliance and affairs program that:
  - (a) Includes company-wide standards, oversight, and support for all regulatory and licencing activities;
  - (b) Ensures that regulatory compliance requirements, and international safeguard obligations, are met for all handling, storage, transportation, and use of nuclear materials;
  - (c) Develops and maintains strategic licensing plans for each CNL-managed Site; and
  - (d) Interfaces with the Canadian Nuclear Safety Commission and other Governmental Authorities on required aspects of CNL regulatory, permitting and licencing activities.
- 4.3.3.2 CNL shall maintain a quality assurance and quality management program that enables the corporation to provide effective and efficient product delivery in full compliance with statutory, regulatory, and customer requirements through the provision of quality services.
- 4.3.3.3 CNL shall maintain access to engineering capabilities to manage CNL engineering activities, including but not limited to:
  - (a) Ensuring safe boundaries of operations are established and aligned with national and international standards, including regulatory requirements;
  - (b) Supporting the safe design, commissioning and operation of CNL-managed facilities; and
  - (c) Providing nuclear criticality safety support to CNL projects.

# 4.4 Information Access, Audits and Assessments

- 4.4.1 CNL shall provide any requested information and access to AECL and support any requested audit by AECL, as may be required for AECL to assess compliance with all responsibilities and obligations of CNL set out in the CNL Agreement including any financial, operational, legal or any other aspect of conduct of the work described in this Statement of Work.
- 4.4.2 CNL shall retain all the records necessary for AECL to assess compliance with the CNL Agreement and to enable CNL to maintain the management and operations of CNL beyond the duration of the CNL Agreement.
- 4.4.3 CNL shall maintain a robust cyber security program that minimizes the threats to CNL operation and that does not compromise critical business or personnel information.

#### 4.5 Self-Assessment Program



4.5.1 CNL shall conduct a self-assessment program that will be used, in part, to assess: (1) the overall performance in operating and administrating CNL, (2) delivery of DWM work, (3) performance related to S&T programs, and (4) delivery of capital projects.

#### 4.6 Other Administrative Services

4.6.1 CNL shall provide other administrative services, including: (1) operating communications systems; (2) managing and operating a records management system; and (3) operating a system of records for individuals including those related to personnel radiation exposure information, medical, safety and health. Logistics support to AECL's site office can be provided when approved by the contracting officer.

# 4.7 Reports and Other Deliverables

4.7.1 CNL shall prepare, submit, disseminate, or otherwise publish the financial, schedule, scientific, or technical documentation including plans, performance reports, or other information and deliverables consistent with the needs of the various programmatic sponsors and other customers as required by the CNL Agreement, and/or as specifically required by AECL.

# 5. <u>Indigenous Engagement, Communications, Public Affairs, and Community Engagement</u>

# 5.1 Indigenous Engagement and Reconciliation

It is a priority of AECL and CNL to advance reconciliation and build collaborative relationships with Indigenous Peoples based on recognition of rights, respect, truth, cooperation, trust, and partnership. All CNL activities in this area shall be done in collaboration with AECL to ensure alignment, coordination and best use of resources.

- 5.1.1 CNL shall continue to strengthen relationships with Indigenous Peoples based on meaningful engagement, finding sustainable long-term benefits from economic development, and opportunities for collaboration (which could include, but are not limited to, risk perception and risk communication, innovation and the establishment of equity partnerships, and the application of Indigenous Knowledge throughout CNL's work).
- 5.1.2 CNL shall have in place a Reconciliation Action Plan satisfactory to AECL that outlines CNL's commitment to reconciliation and specific areas of action. The Reconciliation Action Plan shall, at a minimum:
  - 5.1.2.1 be developed and updated in collaboration with Indigenous Peoples, as well as with AECL;
  - 5.1.2.2 describe how such Reconciliation Action Plan was developed with, and took into account feedback provided by, Indigenous Peoples with whom CNL engages;





- 5.1.2.3 set out how CNL plans to advance reconciliation with Indigenous Peoples;
- 5.1.2.4 establish a work plan for advancing reconciliation with Indigenous Peoples, including timelines and specific actions; and
- 5.1.2.5 be revised and updated no less than every two years following engagement on its implementation with Indigenous Peoples with whom CNL engages.
- 5.1.3 CNL shall enhance staff and management knowledge and understanding about the history of Indigenous Peoples, including cultural awareness training (and specifically training delivered by Indigenous Peoples on whose traditional territories CNL operates) and participation in Indigenous celebration and/or commemoration events when appropriate.
- 5.1.4 CNL shall work with Indigenous Peoples to find opportunities to increase Indigenous representation within its employees, including supporting advancement and increasing representation in management positions.
- 5.1.5 CNL shall develop and update annually an Indigenous Engagement Plan for each of the main sites it manages, setting out:
  - 5.1.5.1 the applicable Indigenous Peoples to be engaged in respect of each Site, including key contacts and positions held by such contacts, and how such determination was made by CNL; and
  - how CNL will fulfill its Indigenous obligations in accordance with 5.1.5.2 applicable law.

#### 5.2 **Communications and Public Affairs**

- In coordination with and approval of AECL, CNL shall develop and conduct 5.2.1 communications, information dissemination, public involvement, and public affairs programs with a view to supporting the Missions, building trust and growing CNL's stature in Canada and abroad. The programs shall include, but not be limited to:
  - (a) internal communications;
  - (b) external communications;
  - (c) community involvement and outreach;
  - (d) support for educational and STEM (science, engineering, technology and mathematics) initiatives, particularly at the local level;
  - (e) interactions with the media, businesses, and the scientific and technical community; and,
  - (f) liaison with local, provincial, and federal levels of government.



- 5.2.2 CNL shall develop initiatives to bring benefits to the Local Communities, including specifically the Host Communities. CNL shall be an active member of the community, including participation in community initiatives and events, as well as supporting community and local development.
  - 5.2.2.1 CNL shall identify and consider additional opportunities for collaboration with the Host Communities to provide mutual benefit, enable sustainability of the Host Communities, and support strong relationships.
- 5.2.3 CNL shall coordinate with Contractor in delivering Contractor's Community Commitment Plan, so that CNL's community engagement and outreach activities are complementary to Contractor's Community Commitment Plan.
- 5.2.4 For any new projects at the Sites that require regulatory approval(s) beyond the current licensing basis, CNL shall establish a proactive community engagement and communication program to facilitate CNL's ability to engage the public, communities and stakeholders and move forward with any proposed initiatives. The program shall be supported by a plan, updated annually and submitted to AECL for acceptance, which shall at a minimum:
  - 5.2.4.1 set out how CNL plans to actively communicate and engage with Host Communities, Local Communities, stakeholders and the public, including timelines and any specific actions; and
  - 5.2.4.2 identify how such plan takes into account the feedback provided by the Host Communities, Local Communities, stakeholders and the public.
- 5.2.5 CNL shall have in place communications and public affairs strategies for each of the sites it manages, unless otherwise accepted by AECL. Such strategies shall be updated on an annual basis and submitted to AECL for acceptance.
- 5.2.6 For all aspects of communications, stakeholder engagement and community engagement, CNL shall work with AECL to coordinate communications and relations activities to align the consistency and intention of the messaging.
- 5.2.7 CNL shall offer external communication products and information on its website(s) in both official languages.
- 5.2.8 CNL shall manage a nuclear artefacts program that considers the need to preserve and showcase Canada's nuclear history broadly and AECL's history (and artefacts) in particular in a reasonable and cost-effective manner. The program shall include consideration for interaction with other organizations and stakeholders with similar goals, and consider specific strategies to link to the DWM mission. Considerations for memory preservation and communication with the Local Communities and Host Communities for Closure Sites shall be included in CNL's communications and public affairs strategies for those Sites.

# 5.3 Community Engagement at Closure Sites



- 5.3.1 At the Whiteshell Laboratories Site, CNL shall develop economic development initiatives in the local area to help mitigate the impacts of the Site Closure to the Host Community and Local Communities.
- 5.3.2 At Sites where CNL is working towards Closure, CNL shall have in place a community and Indigenous engagement program to define end states, and evaluate the potential for next land uses that takes into account Host Communities (where applicable), Local Communities, and Indigenous Peoples' input, and local economic development, as applicable. Any plans for future land uses shall be developed with, and ultimately accepted by, AECL as the landowner.
- 5.3.3 At the Whiteshell Laboratories and Nuclear Power Demonstration Sites, CNL shall work with the Local Communities (including the Host Community where applicable) and AECL to develop options for history preservation, and knowledge sharing with the community and the public on historical activities at the Site, as well as clean-up activities. CNL shall develop a plan for ongoing communication of the history of the Site beyond Closure, for consideration and approval by AECL.