



**FROM
PLANNING
TO
REALITY**

AECL overview

As a federal Crown corporation, AECL's mandate is to enable nuclear science and technology and fulfill Canada's radioactive waste and decommissioning responsibilities.

AECL receives federal funding to deliver on its mandate and reports to Parliament through the Minister of Natural Resources. It also leverages the unique capabilities at its sites to support industry and other third parties on commercial terms.

AECL delivers its mandate through long-term contracts with the private-sector for the management and operation of its sites.

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Fiscal year 2016-17 (April 1, 2016 to March 31, 2017) was the first full year of operation of AECL under a new Government-owned, Contractor-operated model (GoCo). We are now focused on the future, one which will see important environmental remediation projects completed and the Chalk River site renewed.

From planning to reality, the future of nuclear science and technology is bright.

Above: The Chalk River Laboratories, in Ontario, are expected to undergo a significant revitalization in the coming years. Several old facilities will be decommissioned and R&D facilities and site infrastructure will be renewed.

AECL is a Crown corporation whose mandate – to enable nuclear science and technology and fulfill Canada’s radioactive waste and decommissioning responsibilities – is delivered through a Government-owned, Contractor-operated model.



Our sites

The Chalk River site is AECL’s main laboratory campus and Canada’s largest research and development complex. This science campus boasts multiple highly-specialized and unique laboratory facilities, testing equipment and a large research reactor, the National Research Universal (NRU), all of which are used to leverage nuclear science and technology for peaceful purposes. Scientific activities have important applications in the areas of health, safety, security, energy, non-proliferation, environmental protection and emergency response that benefit Canada and Canadians.

AECL’s radioactive waste and decommissioning responsibilities stem from decades of nuclear research and development activities at the Chalk River Laboratories, the Whiteshell Laboratories in Manitoba, as well as other sites in Ontario and Quebec. AECL is responsible for the proper and safe clean-up, remediation and long-term management of the radioactive waste at its sites. AECL also oversees similar work at sites where the Government has assumed responsibility for historic, low-level radioactive waste, such as in the municipalities of Port Hope and Clarington, in Ontario.

Looking to the Future

AECL has given Canadian Nuclear Laboratories (CNL), the private-sector contractor which manages our sites on our behalf, the explicit mandate to leverage our facilities and assets to build a world-class nuclear science campus at the Chalk River Laboratories. AECL has also asked CNL to significantly advance decommissioning and waste management projects in order to clean-up and remediate legacy buildings and sites for which we are responsible.

In response, CNL has put forward an ambitious 10-year plan, which will include significant transformation of our sites over the coming decade. This plan was accepted by AECL. Highlights include:

An investment of more than \$1.2 billion over ten years in the facilities and infrastructure of the Chalk River Laboratories. This investment will enable:

- The construction of an Advanced Nuclear Materials Research Centre, a complex which will include new shielded facilities and many advanced active laboratories for research involving active or irradiated materials;
- A new electrical switchyard, expanded natural gas service, potable water lines, and sanitary sewer system, all of which improve the safety and reliability of the current systems; and
- Construction of modern, energy efficient facilities to accommodate maintenance and operations activities, logistics and security, and a new business centre.

An exciting program in science and technology which includes ambitious goals such as:

- The siting of a new, small modular reactor by 2026;
- The development and demonstration of a suite of targeted alpha therapy compounds (an emerging medical isotope technology) by 2022;
- An expansion of CNL's program in hydrogen, with a stated goal for CNL to play a leading role in the demonstration of hydrogen-based bulk transport by 2020;
- The demonstration of a new advanced fuel fabrication concept by 2020; and
- The development, commercialization, and deployment of a nuclear industrial control cyber intrusion detection and mitigation system by 2022.

An accelerated program that will protect Canada's environment by responsibly managing AECL's nuclear liabilities. This will include:

- Improving integration of decommissioning and waste management activities;
- Constructing and operating the proposed Near Surface Disposal Facility;
- Establishing an Integrated Waste Strategy for all CNL-managed waste;
- Aligning decommissioning and environmental remediation to international best practices;
- Accelerating the remediation of Waste Management Areas and other affected areas at the Chalk River Laboratories;
- Consolidating intermediate-level waste and used fuel for long-term storage;
- Repatriating special nuclear material to the United States; and
- Completing the Port Hope Area Initiative, with only long-term maintenance and monitoring activities remaining.



Message from the Chair of the Board

AECL has proudly been leading innovation for more than six decades. It was in Chalk River, Ontario, that our own Canadian-grown CANDU technology was developed. Our nuclear innovations have brought us into fields that have benefited not only Canada but the world, such as medical isotopes and advancements in safety, security and non-proliferation. Two of Canada’s Nobel laureates have been recognized for work that started in Chalk River.

Today the Chalk River Laboratories are Canada’s largest science campus, and its history of scientific achievements and innovation will continue to grow. Indeed, through the restructuring of AECL, completed in 2015, the Government of Canada confirmed a clear, long-term mandate for our organization: to deliver nuclear science and technology and to manage Canada’s radioactive waste and decommissioning responsibilities. This was supported by significant investments to clean-up our nuclear waste legacy liabilities and to revitalize the Chalk River site. With \$1.2B of capital funding over ten years for infrastructure renewal at the Chalk River Laboratories alone (excluding any decommissioning and waste projects), Canada’s largest science campus has a bright future.

We will continue to support government objectives to enable clean technology and innovation and grow Canada’s green economy. Through the work of Canadian Nuclear Laboratories (CNL), we help meet the government’s obligations and responsibilities in the areas of health, energy, safety and security, the environment and emergency preparedness. And as CNL grows its commercial offerings, we will foster industry innovation in areas as varied as energy production, manufacturing and new nuclear technologies.

Importantly, the revitalization of the Chalk River Laboratories can only be achieved by addressing decommissioning and waste management responsibilities. CNL has several initiatives and projects underway, some of which are currently undergoing environmental assessments. These initiatives and projects are vital to enabling a reduction in decommissioning and site remediation obligations. In the case of Chalk River, the removal of old buildings will allow for new ones to be erected. Cleaning-up our nuclear legacy and historical liabilities is the responsible thing to do, for today’s generation and future ones. It is also absolutely necessary in order to transform and revitalize the Chalk River Laboratories for the future.

There are exciting things happening at AECL sites across Canada, and I very much look forward to a bright future - one of environmental stewardship and innovative science.

Claude Lajeunesse, *Chair of the Board*



Message from the President and Chief Executive Officer

As we embark on the second full fiscal year under our new operating model – the GoCo model – I am very enthusiastic about the future of CNL and the Chalk River Laboratories. Looking at the transformation that has occurred at CNL over the past year, I can confidently say that the GoCo model has made a difference. While any transformation of this magnitude takes time, there has been significant progress on many fronts.

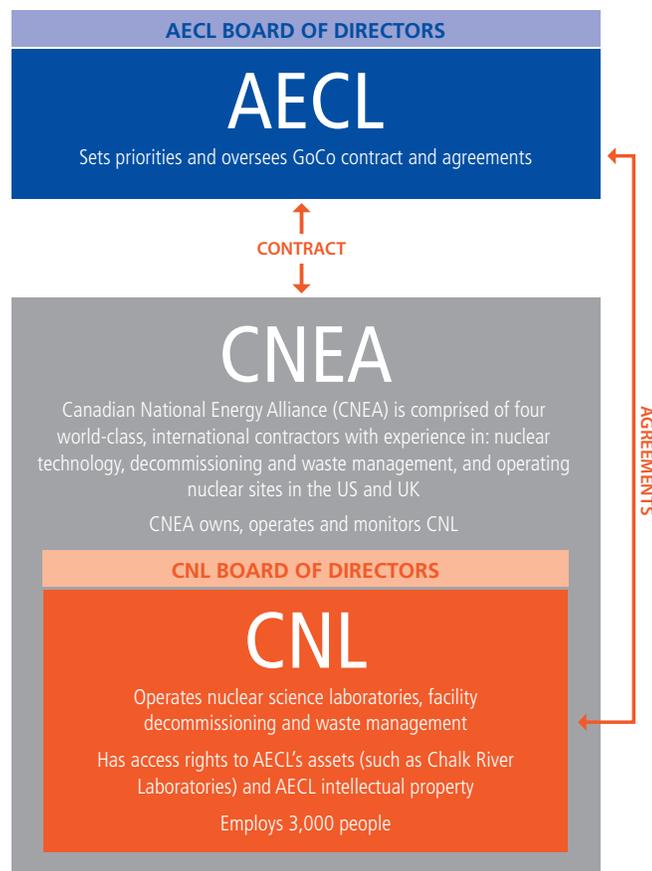
Indeed, the 2016-17 fiscal year has been one of important changes – some visible, and some behind the scenes. CNL has effectively and efficiently delivered important nuclear science and technology for the federal government; launched strategic waste management projects, which will enable safe and responsible management of AECL’s nuclear legacy liabilities; started construction on two large clean-up projects for the safe, long-term management of low-level radioactive waste in the municipalities of Port Hope and Clarington, in Ontario; implemented new processes and procedures to provide safe, efficient and effective day-to-day operations; and started optimizing support functions and integrating the various missions to enhance project execution and sustain safe performance.

Most notably, AECL accepted CNL’s 10-year plan that outlines the long-term vision of CNL. The plan details how decommissioning, science and technology, and capital investments will be integrated and delivered in a strategic manner. This plan is a testament to how things are shaping up, and it is really exciting.

As we implement this long-term plan in the coming years, AECL will continue to play its oversight role, being a ‘smart buyer’ to bring value for money for Canadians, contain costs and risks, and protect the Government’s interests. As we set priorities and oversee CNL’s performance, we bring to bear considerations for long-term sustainability and environmental stewardship for CNL and our assets.

While we will only be able to fully measure the true benefits of the GoCo model a few years from now, we certainly believe that we are on the right track for success. CNL’s success means advances in science, innovation, and environmental remediation. This is positive for the local communities, for the government and for all Canadians.

Richard Sexton, *President and CEO*





A CNL senior chemical scientist works on the 100 mm exchange catalyst test rig. It is used to determine the performance of CNL's wetproofed catalyst for isotope exchange between hydrogen and water.



Reporting on Results

The focus of this section is to report on the performance measures which were set out in AECL's fiscal 2016-17 Corporate Plan Summary and which were targeted to be achieved within that year.



As part of decommissioning activities, outdated buildings are being decontaminated and demolished at the Chalk River Laboratories. Contaminated materials are being safely stored on site while other material are recycled where possible or disposed of.

Decommissioning and waste management

A yellow tracked excavator is shown in a construction or industrial setting. The excavator is positioned on a sandy or dirt ground. In the background, there is a white building and a clear blue sky. The excavator's arm is partially visible on the left side of the frame.

AECL holds radioactive waste and decommissioning liabilities associated with its sites, which is the result of decades of nuclear activities including science and technology activities which have benefited Canadians in the areas of energy, health, safety, security, environmental protection and non-proliferation. This liability represents the estimated costs of cleaning up existing waste areas, as well as safely decontaminating, demolishing and disposing of contaminated facilities. AECL's objective is to safely address hazards in order to reduce risks and costs for Canada in a manner consistent with international best practices. Cleaning-up AECL's liabilities is aligned with the organization's commitment to environmental stewardship, with the objective of leaving a positive legacy for future generations.

In addition, AECL is responsible for fulfilling Canada's responsibilities with respect to historic low-level waste at sites where the original owner cannot be held liable or no longer exists, and for which the Government has accepted responsibility. This includes the cleanup and safe management of certain historic, low-level radioactive waste in the municipalities of Port Hope and Clarington, in Ontario.



Left: Workers are conducting gamma testing as part of the Port Hope Area Initiative, a large-scale cleanup and safe management of historic low-level radioactive waste initiative in the municipalities of Port Hope and Clarington, in Ontario.

Below: Environmental monitoring is part and parcel of the operations of CNL. At the Chalk River Laboratories, monitoring is undertaken at more than 400 sampling locations with approximately 30,000 analyses performed each year. At the Whiteshell Laboratories site, 18,000 analyses are performed each year based on 130 sampling locations.



The implementation of the GoCo model provides an opportunity for AECL to leverage the experience and expertise of the private-sector attained elsewhere in the world to optimize work and increase efficiency and effectiveness. This includes taking action to address risks sooner and advancing the commissioning of waste disposal facilities, in order to reduce the long-term costs of maintenance and surveillance. The objective is to responsibly clean-up radioactive waste liabilities in order to leave a positive legacy for future generations. This accelerated approach to decommissioning is aligned with international best practices.

Work in this regard started immediately following the implementation of the GoCo model and continued into fiscal year 2016-17. Priorities for fiscal year 2016-17 were focused on building momentum for CNL's Decommissioning and Waste Management programs by demonstrating progress on facility decommissioning and waste shipments. A key focus for the organization was the development and submission of long-term plans to advance AECL's decommissioning and waste management responsibilities. At the end of fiscal year 2016-17, AECL accepted CNL's 10-year plan which outlines its decommissioning and waste management efforts, integrated with planned capital investments and expected strategic growth in nuclear science and technology.

With respect to specific decommissioning and waste management performance measures which were set out in AECL's 2016-17 Corporate Plan Summary and which were targeted to be achieved within the 2016-17 fiscal year, results are as follows:

Priorities	Measures of success	Results
Waste management practices are transformed based on a strategic, integrated and cost-effective long-term vision for the management of AECL's liabilities	CNL issues the first comprehensive Integrated Waste Strategy document by March 31, 2017	Achieved
	AECL's acceptance of CNL's 5- and 10-year plans for decommissioning and waste management by March 31, 2017	Achieved
	Waste management areas have new accommodation and dedicated crafts are assigned to projects by March 31, 2017	Achieved
The decommissioning and waste management program at the Chalk River site is accelerated to reduce AECL's liabilities	CNL engages stakeholders and the regulator in preparation for a near surface disposal facility	Achieved. Efforts are ongoing
	Four structures associated with skyline changes at the Chalk River Laboratories are decommissioned as per CNL's Annual Program of Work and Budget and Performance Evaluation and Measurement Plan	Achieved ahead of schedule. Thirty structures have been decommissioned as of March 31, 2017
	Operate Chalk River's Fuel Packaging and Storage Facility and transfer fuel from 10 tile holes in 2016-17	Achieved ahead of schedule by leveraging a new innovative approach. Thirty fuel transfers were completed
	Contract awarded for the design and construction of the Stored Liquid Waste Cementation project by March 31, 2017	The contract was not awarded; however the Stored Liquid Waste Cementation project remains on track following a change in strategy for the project, whereby CNL is using existing operational capabilities. This new approach has resulted in a reduction in the life cycle estimate underpinning the waste liability
The Port Hope Area Initiative is delivered efficiently and effectively in order to reduce AECL's liability	Port Hope waste water treatment plant declared in service	Achieved
	Award contract for construction and operation of the Port Hope long-term waste management facility	Achieved



A CNL mechanical research scientist utilizing the laser flash apparatus. It is used to measure thermal diffusivity and conductivity of materials.



Nuclear laboratories

AECL's mandate is to enable nuclear science and technology in order to sustain and develop Canada's capabilities in a cost-effective manner. Through the activities of CNL, the expertise and capabilities at the Chalk River Laboratories are used to support the needs and responsibilities of the Government of Canada through the Federal Nuclear Science and Technology Work Plan, and technical services are provided to third parties on a commercial basis. CNL also operates the National Research Universal reactor until March 31, 2018, as announced by the Government in February 2015.

In fiscal year 2016-17, AECL's priorities were centred on overseeing CNL as it transformed its operations to increase effectiveness and efficiency, increased commercial revenues and reduced the overall administrative and management cost (overhead) of its programs. This included a review of existing processes and procedures to enhance and sustain safety, efficiency and effectiveness in day-to-day operations.

Below: A CNL hot cell technician uses the master-slave manipulators to perform work within one of the shielded facilities in the fuel and material cells.

Right: A CNL chemical technician prepares samples for analysis in a fume hood as a part of the analytical chemistry branch.



Of particular importance, AECL accepted CNL's long-term plan which outlines its strategic approach to delivering an integrated, effective, project-based and customer-focused science and technology mission that serves the needs of the federal government as well as those of external customers. The plan presents an integrated view of how CNL will grow its science and technology stature, which will be enabled by new infrastructure investments as the Chalk River site is being revitalized.

CNL's vision is to achieve a cost-effective, modern campus-like site with new and refurbished facilities to support the future growth of CNL. The targeted and strategic capital investments that are presented in CNL's long-term plan will allow the laboratories to grow a unique complement of science and technology capabilities, while remaining flexible to quickly adapt to the emerging opportunities of nuclear and energy-related cutting edge innovation.

This vision was implemented in fiscal year 2016-17 with the inauguration of the Harriet Brooks building, named after Canada's first female nuclear physicist, which will enable innovative nuclear research and development, and house the Chemistry and Corrosion Materials Loops Facility, Decontamination and Chemical Cleaning Facility, and the Chemical and Corrosion Autoclave Test Facility.

With respect to specific performance measures related to the operation of the nuclear laboratories which were set out in AECL's 2016-17 Corporate Plan Summary and which were targeted to be achieved within the 2016-17 fiscal year, results are as follows:

Priorities	Measures of success	Results
Federal priorities are met on time and with a high standard of quality	Research projects as set out in the Federal Nuclear Science and Technology Work Plan are delivered on time and with high quality	Achieved / Ongoing
Grow commercial opportunities for the laboratories	Revenues from new customers are more than \$10M	Achieved
CNL transforms ongoing nuclear operations and prepares for the shutdown of the NRU while maintaining related experimental and production facilities in order to deliver research projects up to the March 2018 shutdown	High quality NRU Shutdown Transition Project Execution Plan developed and submitted to AECL by January 31, 2017	Achieved
	NRU operates at high power for at least 228 days during 2016-17	Achieved
Management and operations (including nuclear operations) of CNL are transformed to enhance efficiency and reduce costs	10% reduction in indirect costs in 2016-17 as measured against an agreed upon baseline established from 2015-16 actuals	Achieved
CNL's project and safety performance is improved	Improved health, safety, security and environmental performance relative to good industry practice	Achieved. CNL has established industry standard statistical methods to establish baseline metrics to monitor progress towards good industry practice
CNL's company-wide security posture and performance is improved	Planned physical security upgrades and IT system upgrades are completed as per milestones established	Achieved
	Annual reduction in security breaches (physical, cyber), reduction in reportable events to the regulator through annual CNSC performance ratings for CNL sites and CNSC ratings of major training exercises	Achieved
CNL delivers 5 and 10 year plans that integrate its vision for the site and enable a revitalization of the Chalk River Laboratories	CNL delivers 5-year Strategic Plan and 10-year Plans by September 2016	Achieved behind schedule. Draft plans were delivered by target date and were finalized by March 31, 2017
	CNL delivers an integrated baseline across all missions through the Earned Value Management System by March 31, 2017. The integrated baseline is to be at maturity level III (as per the American National Standards Institute/Electronic Industries Alliance standard 748)	Behind Schedule. It is anticipated that this will be achieved within the 2017 calendar year
CNL delivers infrastructure projects in support of a long-term vision for the Chalk River Laboratories	CNL completes infrastructure projects on time and on budget, as set out in its annual plan	Achieved

Management Discussion and Analysis

Forward looking statements

This Management Discussion and Analysis (MD&A) has been reviewed by AECL's Audit Committee and approved by AECL's Board of Directors. It provides comments on the performance of AECL for the year ended March 31, 2017 and should be read in conjunction with the consolidated financial statements and accompanying notes included in this Annual Report.

This MD&A contains forward-looking statements with respect to AECL based on assumptions that management considers reasonable as at June 13, 2017, when AECL's Board of Directors approved this document. These forward-looking statements, by their nature, necessarily involve risks and uncertainties that could cause future results to differ materially from current expectations. We caution the reader that the assumptions regarding future events, many of which are difficult to predict, may ultimately require revision.

Organization

AECL is an agent Crown corporation reporting to Parliament through the Minister of Natural Resources. AECL's operations are funded through Parliamentary Appropriations and third-party revenues which result from commercial work that CNL undertakes, as a contractor of AECL, principally in the areas of nuclear science and technology as well as the sale of heavy water and medical and industrial isotopes.

AECL Operations include all of the activities associated with the management and oversight of the GoCo model, including Decommissioning and Waste management activities as well as the Nuclear Laboratories.

Risks and Opportunities

This section highlights AECL's key risks which may have potential impact on AECL's financial results, and shows the trend compared to the previous year

Contractual Risks

The GoCo model represents a new structure that relies on the expertise brought about by Canadian National Energy Alliance, the private-sector contractor which was selected to take ownership of Canadian Nuclear Laboratories, as well as proper oversight by AECL to achieve value for money for Canada. The success of the model relies, in part, on the strength of the relationship established, the level of trust and confidence between the two organizations, as well as the proper level of contractual oversight. As the contractual relationship matures, CNEA, CNL and AECL will be looking to continue to establish work processes based on both contractual requirements and other formal and informal collaboration and communication needs. AECL will continue to work to strike the right balance between providing sufficient oversight so that it has a line of sight into activities and can play a proper challenge function, but not too onerous oversight such that unnecessary administrative requirements and processes result. Indeed, AECL's role is to direct the 'what', not the 'how'.

To mitigate this risk, protocols and management processes have been established in an effort to foster the proper sharing of information at all levels and to facilitate oversight and collaboration, including a Contractor Assurance System (a system that allows the contractor to manage performance consistent with contractual requirements) and a standard-based Earned Valued Management System (a system to manage projects and track performance) which is available to AECL. AECL has also put in place plans, methods and processes to perform effective contract oversight.

Internal Risks

AECL's operational success, including the provision of effective contractual oversight, depends in large part on the organization's ability to attract and retain a small workforce comprised of highly qualified and specialized employees. In particular, AECL has had to recruit international experts with experience in working under GoCo models in the United States and United Kingdom (where this model has been used specifically at nuclear sites) in order to have the right knowledge and competencies in place to help it implement the GoCo model. The retention of these international experts, along with the on-the-job training of other staff, continues to be critical to enable the organization to continue to sustain operations.

CNL Project Risks

AECL has identified several high-priority projects and is closely tracking CNL's progress in advancing this work. In all cases where AECL has identified such projects, closer oversight of projects is being applied. AECL's oversight includes the requirement that project plans appropriately reflect the identified risks and necessary mitigating actions, engaging with other stakeholders, as required, and monitoring performance.

Opportunities

Canada's expertise in nuclear technology provides a unique commercial opportunity to bring Small or very Small Modular Reactor technology to bear. The application of this type of technology could serve a wide variety of potential customers, including the mining and gas industry. It could bring energy to northern, more remote communities, and it provides an opportunity for exports, as supported by our already strong nuclear supply chain. As one of the challenges facing Small Modular Reactors is the number of designs (there are currently over 100 different designs), AECL believes that expertise at the Chalk River Laboratories could be leveraged to advise both the government and commercial companies on the technology. The Chalk River Laboratories provide a site, the technology and the capabilities to help identify the viable and most appropriate technologies to meet Canada's domestic and export needs. CNL has identified an opportunity to play an important role in advancing Small Modular Reactors or very Small Modular Reactors, and is taking steps in fiscal year 2017-18 to further explore this opportunity.

Financial Review

<i>(\$ millions)</i>	2016-17	2015-16
	\$	\$
Revenues		
Parliamentary appropriations	784	491
Commercial revenue	111	117
Interest income	5	6
Other funding	-	100
	900	714
Expenses		
Cost of sales	84	86
Operating expenses	68	202
Contractual expenses	332	164
Decommissioning, waste management and contaminated sites expenses	26	512
Wrap-Up Office activities	5	9
	515	973

Parliamentary Appropriations

AECL recognized \$784 million of Parliamentary appropriations in fiscal year 2016-17, an increase of \$293 million compared to the prior year. This increase primarily relates to an increase in spending on decommissioning and waste management activities with AECL receiving Parliamentary appropriations directly for delivering on this work. In 2015-16, this funding was provided to AECL by Natural Resources Canada and was recognized by AECL as 'Other funding'.

Commercial Revenue

In 2016-17, revenue decreased to \$111 million (2015-16: \$117 million). Revenue included isotope sales, commercial technology sales, nuclear waste management and research and development activities performed by CNL for commercial customers. This decrease can be attributed primarily to decreased isotope sales, consistent with the Government's decision to cease production of molybdenum-99 in October 2016, that was not offset fully by an increase in other commercial revenue referenced above.

Interest Income

Interest income is earned on cash, short-term investments from appropriations and investments held in trust. Income earned is comparable to the prior year.

Other Funding

AECL fulfills Canada's obligations to address legacy waste liabilities associated with AECL sites and historic low-level radioactive wastes for which Canada has accepted responsibility through the Low-Level Radioactive Waste Management Office and the Port Hope Area Initiative. Up to September 13, 2015, when the Government-owned, Contractor-operated model came into effect, AECL received funding from Natural Resources Canada for the related work being delivered by CNL and reported the funding received as 'Other funding'. As of September 13, 2015, AECL assumed responsibility for fulfilling the Government's obligations with respect to these various waste liabilities. In 2016-17, funding for those activities was provided directly to AECL through Parliamentary appropriations.

Cost of Sales

Cost of sales are consistent with the Commercial revenue noted above.

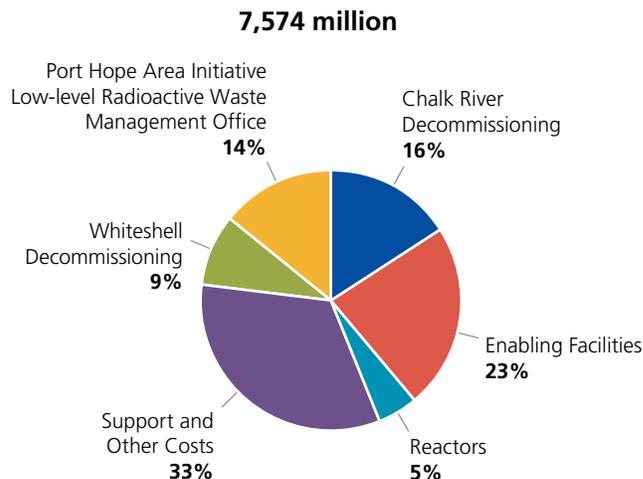
Operating Expenses and Contractual Expenses

With the implementation of the Government-owned, Contractor-operated model in 2015, AECL now delivers its mandate through a long-term contract with CNL for the management and operation of its sites. Prior to that date, CNL expenditures were reported as Operating expenses as CNL was, at the time, a wholly-owned subsidiary of AECL. Subsequent to that date, CNL-related expenditures are reported by AECL as Contractual expenses. Expenditures in this category for the year, which also include AECL's own oversight expenses, total \$400 million, compared to expenses of a similar nature of \$366 million in 2015-16.

Decommissioning, Waste Management and Contaminated Sites Expenses

Decommissioning, waste management and contaminated sites expenses consist of financial expenses and the revaluation (gain) loss on decommissioning and waste management provision and the contaminated sites liability. Financial expenses reflect the increase in the net present value of the decommissioning and waste management and the contaminated sites provisions. The 2016-17 decommissioning, waste management and contaminated sites expenses of \$26 million represents a \$486 million decrease over the expenses in 2015-16. The decrease in the expenses in 2016-17 over the prior year is primarily a result of the fact that, in 2015-16, increases were reflected in various project estimates totalling approximately \$225 million while in 2016-17 there was a reduction in the estimate of almost \$236 million related to future capital expenditures not directly attributable to decommissioning and remediation activities.

Decommissioning and Contaminated Sites Liabilities 2016-2017



Wrap-Up Office Activities

At the date of the divestiture of the assets of its commercial division to Candu Energy Inc. in 2011, AECL retained certain liabilities. These have been managed by the Wrap-up Office which was established specifically to address and resolve such liabilities. Operating expenses for the Wrap-up Office include the cost of the remaining staff and third-party service providers to address the retained liabilities. These activities continue to be wound down as planned.

Outlook

AECL will continue to deliver on its commitments based on its 2017-18 Corporate Plan. As part of the implementation of the GoCo model, AECL has placed significant emphasis on CNL to review existing plans and propose new plans that will contribute to advancing AECL’s decommissioning and waste management responsibilities. This includes, for example, accelerating the development, design and construction of a near-surface disposal facility at the Chalk River Laboratories, which will serve as a final resting place for a large volume of AECL waste, as well as the acceleration of the decommissioning and closure of the Whiteshell Laboratories and Nuclear Power Demonstration reactor (located in Manitoba and Ontario, respectively). There is also a focus on renewing the site infrastructure at the Chalk River Laboratories, including new and renewed science buildings, which will allow CNL to grow its nuclear science and technology mission.

Funding

Total funding recognized in 2016-17 for operating and capital activities was \$784 million (2015-16: \$591 million).

The 2016-17 funding included:

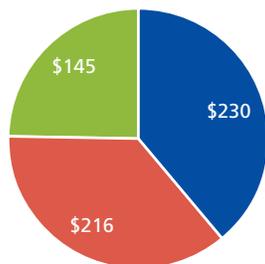
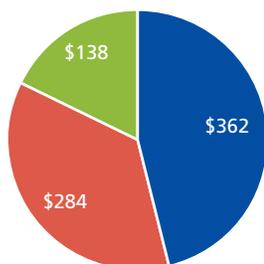
- \$284 million to support nuclear science and technology activities as well as ongoing safe operations at the Chalk River Laboratories
- \$362 million for decommissioning and waste management activities at the Chalk River and Whiteshell sites and environmental remediation programs primarily in Port Hope
- \$138 million for capital infrastructure renewal

Funding 2016–17

Funding	\$ 784
Operating:	\$ 646
Capital:	\$ 138

Funding 2015–16

Funding	\$ 591
Operating:	\$ 446
Capital:	\$ 145



- Decommissioning and Waste Management
- Nuclear Laboratories
- Capital Infrastructure Renewal

Results compared to 2016-17 Corporate Plan

<i>(\$ millions)</i>	2017 Actual	2017 Corporate Plan
	\$	\$
Parliamentary appropriations	784	689
Commercial revenue	111	68
Operating expenses	68	47
Contractual expenses	332	327
Surplus (deficit) for the year	384	145

AECL reported a surplus of \$384 million comprised of appropriations received for capital infrastructure renewal and decommissioning and waste management activities for which the related expenditures are reported on the statement of financial position, as well as the reduction in the estimates underlying the Decommissioning and waste management provision. The increase of \$239 million compared to the corporate plan is mostly related to increased expenses from write-downs required to certain tangible capital assets as well as adjustments to the Decommissioning and waste management provision.

Consolidated cash flow

<i>(\$ millions)</i>	2016-17	2015-16
	\$	\$
Cash provided by operating activities	91	144
Cash applied to capital activities	(139)	(135)
Cash		
Increase (Decrease)	(48)	9
Balance at beginning of the year	85	76
Balance at end of the year	37	85

Operating Activities

Operating activities resulted in a net cash inflow of \$91 million compared to a net inflow of \$144 million in 2015-16. This variance is mainly due to increased cash paid for decommissioning activities and to suppliers and employees partly offset by increased receipts from appropriations.

Capital Activities

The \$139 million cash used in capital activities in 2016-17 was comparable to the \$135 million in the prior year.

Overall, AECL's 2016-17 year end closing cash position decreased by \$48 million to \$37 million from the previous year's balance of \$85 million.

Highlights of the Consolidated Statements of Financial Position

(\$ millions)	March 31, 2017	March 31, 2016	Variance in \$	Variance in %
	\$	\$	\$	%
Financial Assets	475	481	(6)	-1
Liabilities	8,053	8,324	(271)	-3
Non-Financial Assets	596	506	90	18
Accumulated Deficit	(6,982)	(7,337)	355	-5

The decrease in Liabilities of \$271 million can be attributed primarily to a decrease in the decommissioning and waste management provision and contaminated sites liability as a result of liabilities settled and revisions in estimate.

The increase in Non-Financial Assets of \$90 million is mainly a result of increased spending toward tangible capital assets.

Off Balance sheet arrangements

In the normal course of business, AECL enters into the following off-balance sheet arrangements:

Bank Guarantees and Liquidated Damages

These instruments were historically used in connection with performance guarantees on major contracts related to AECL's Wrap-Up Office. The guarantees generally related to project and product performance and advance payments. None continue in existence at this time. In addition, AECL guaranteed that certain projects would be completed within a specified time, and if AECL did not fulfil its obligations, it would potentially be responsible for liquidated damages under the applicable contract. The aggregate amount of AECL's potential exposure as at March 31, 2017 was \$60 million (2015-16: \$60 million) related to liquidated damages under a contract with a former customer of AECL and which is not covered by guarantees. Management has assessed the impact of potential liquidated damages penalties on the former life extension projects and incorporated it in the calculation of liabilities in the financial statements.

Indemnification Arrangements

These arrangements are part of the standard contractual terms to counterparties in transactions such as service agreements, sale and purchase contracts. These indemnification agreements may require AECL to compensate the counterparties for costs incurred as a result of certain events. The nature of these indemnification agreements prevents AECL from making a reasonable estimate of the likely maximum amount to be paid out by AECL.

Accounting policy changes

Standards and Guidelines Issued to be Adopted at a Later Date

Certain standards and amendments to the existing standards have been issued by the Public Sector Accounting Board and have been assessed as having a possible effect on AECL in the future.

AECL is currently evaluating the impact of adopting these standards and amendments on its financial statements and intends to adopt these standards when they become effective, as described in Note 3(r) of the Consolidated Financial Statements.

Critical accounting estimates and policies

AECL's consolidated financial statements include estimates, assumptions and judgments made by management that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised, if the revision affects only that period, or in the period of the revision and future periods, if the revision affects both current and future periods.

Asset Write-downs

AECL reviews its assets whenever events or changes in circumstances indicate that the carrying amount of the asset may not be fully recoverable. This includes conditions that indicate that an asset no longer contributes to the organization's ability to provide goods and services, or that the value of future economic benefits associated with the asset is less than its net book value. Write-downs are indicative of a loss in value that reflects the expectation that the underlying economic resource has diminished in a manner that is other than temporary. A write-down is recognized if the carrying amount of an asset exceeds its estimated recoverable amount. Losses arising from write-downs and changes in valuation allowances are recognized as expenses in the statement of operations in the accounting period.

Parliamentary Appropriations

Parliamentary appropriations that are not in the nature of contributed capital are recorded as funding in the year for which they are appropriated, except as follows:

- Appropriations restricted by legislation and related to expenses of future periods are deferred and recognized as funding in the period in which the related expenses are incurred.
- Appropriations used for operating activities are recognized as funding in the statement of operations as costs are incurred.

Commencing in 1996-1997, and pursuant to a 10-year arrangement with the Treasury Board for funding decommissioning activities, AECL retains the net proceeds from the sale or lease of Government of Canada-funded heavy water inventory. This funding arrangement, however, expired on April 1, 2006, and an amount equivalent to the proceeds has been recorded as a provision on AECL's statement of financial position.

Decommissioning and Waste Management and Contaminated Sites

The cost to address decommissioning and waste management and contaminated sites obligations are recorded as a liability. The liability is recorded based on the discounted value of the estimated future decommissioning and waste management expenditures and contaminated sites expenditures to the extent that they can be reasonably estimated. The provisions are reviewed quarterly to reflect actual expenditures incurred and changes in management's estimate of the future costs and timing thereof.

Five year consolidated financial summary

Unaudited

	2017	2016 restated	2015*	2014*	2013*
<i>(millions of dollars)</i>					
	\$	\$	\$	\$	\$
Parliamentary Appropriations					
Operating	646	346	206	274	279
Statutory	-	-	36	34	213
Capital	138	145	85	77	60
	784	491	327	385	552
Operations					
Commercial revenue	111	117	141	130	96
Interest income	5	6	9	7	8
Other funding	-	100	209	194	165
Decommissioning, waste management and contaminated sites expenses	(26)	(512)	(2,408)	21	(2,427)
Operating, contractual and other expenses	(484)	(452)	(479)	(382)	(475)
Wrap-Up Office activities	(5)	(9)	4	(99)	33
Surplus (deficit) for the year	384	(259)	(2,265)	192	(2,094)
Financial position					
Cash	37	85	76	49	35
Long-term disposal of waste fund	17	4	-	-	-
Appropriations receivable	94	19	-	-	-
Heavy water inventory	201	213	221	305	290
Tangible capital assets	595	505	417	345	288
Due to Canadian Nuclear Laboratories	112	114	-	-	-
Decommissioning and waste management provision and Contaminated sites liability	7,574	7,873	9,974	7,750	7,970
Other					
Number of full-time employees	44	42	3,318	3,291	3,285

* Certain amounts have been reclassified to conform to the 2017 Financial Statement presentation. 2015, 2014 and 2013 numbers were prepared under International Financial Reporting Standards

Consolidated Financial Statements

Management's Responsibility

The consolidated financial statements, all other information presented in this Annual Report and the financial reporting process are the responsibility of management. These statements have been prepared in accordance with Public Sector Accounting Standards and include estimates based on the assumptions, experience and judgment of management. Financial information presented elsewhere in this Annual Report is consistent with the consolidated financial statements.

AECL and its subsidiaries maintain books of account, financial and management control, and information systems, together with management practices designed to provide reasonable assurance that reliable and accurate financial information is available on a timely basis, that assets are safeguarded and controlled, that resources are managed economically and efficiently in the attainment of corporate objectives, and that operations are carried out effectively.

These systems and practices are also designed to provide reasonable assurance that transactions are in accordance with Part X of the *Financial Administration Act* (FAA) and its regulations, as well as the *Canada Business Corporations Act*, the articles, and the by-laws and policies of AECL and its subsidiaries. AECL has met all reporting requirements established by the FAA including submission of a Corporate Plan, an operating budget, a capital budget and this Annual Report. AECL's internal auditor has the responsibility of assessing the management systems and practices of AECL and its subsidiaries. AECL's independent auditor, the Auditor General of Canada, conducts an audit of the consolidated financial statements of AECL and reports on its audit to the Minister of Natural Resources.

The Board of Directors is responsible for ensuring that management fulfills its responsibility. To accomplish this, the Board has two standing committees: Audit and Human Resources & Governance. The Audit Committee, composed of independent directors, has a mandate for overseeing the independent audit, directing the internal audit function and assessing the adequacy of AECL's business systems, practices and financial reporting. The Audit Committee meets with management, the internal auditor and independent auditor on a regular basis to discuss significant issues and findings, in accordance with their mandate.

The independent auditor and internal auditor have unrestricted access to the Audit Committee, with or without management's presence. The Audit Committee reviews the consolidated financial statements and the Management's Discussion and Analysis report with both management and the independent auditor before they are approved by the Board of Directors and submitted to the Minister of Natural Resources. The Board of Directors, on the recommendation of the Audit Committee, approves the consolidated financial statements. The Chair of the Audit Committee signs the audited consolidated financial statements.


Richard Sexton
President and Chief Executive Officer
June 13, 2017


David J. Smith
Chief Financial Officer
June 13, 2017



Office of the
Auditor General
of Canada

Bureau du
vérificateur général
du Canada

Independent Auditor's Report

To the Minister of Natural Resources

Report on the Consolidated Financial Statements

I have audited the accompanying consolidated financial statements of Atomic Energy of Canada Limited, which comprise the consolidated statements of financial position as at 31 March 2017, 31 March 2016 and 1 April 2015, and the consolidated statements of operations and accumulated deficit, consolidated statements of remeasurement gains and losses, consolidated statements of change in net debt and consolidated statements of cash flows for the years ended 31 March 2017 and 31 March 2016, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

My responsibility is to express an opinion on these consolidated financial statements based on my audits. I conducted my audits in accordance with Canadian generally accepted auditing standards. Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by

management, as well as evaluating the overall presentation of the consolidated financial statements.

I believe that the audit evidence I have obtained in my audits is sufficient and appropriate to provide a basis for my audit opinion.

Opinion

In my opinion, the consolidated financial statements present fairly, in all material respects, the financial position of Atomic Energy of Canada Limited as at 31 March 2017, 31 March 2016 and 1 April 2015, and the results of its operations, its remeasurement gains and losses, changes in its net debt, and its cash flows for the years ended 31 March 2017 and 31 March 2016 in accordance with Canadian public sector accounting standards.

Report on Other Legal and Regulatory Requirements

As required by the *Financial Administration Act*, I report that, in my opinion, the accounting principles in Canadian public sector accounting standards have been applied, after giving retroactive effect to the adoption of the new standards as explained in Note 4 to the consolidated financial statements, on a basis consistent with that of the preceding year.

Further, in my opinion, the transactions of Atomic Energy of Canada Limited and its wholly-owned subsidiaries that have come to my notice during my audits of the consolidated financial statements have, in all significant respects, been in accordance with Part X of the *Financial Administration Act* and regulations, the *Canada Business Corporations Act*, the articles and by-laws of Atomic Energy of Canada Limited and its wholly-owned subsidiaries, and the directive issued pursuant to section 89 of the *Financial Administration Act*.

Robert Wilson, CPA, CA
Principal
for the Auditor General of Canada

13 June 2017
Ottawa, Canada

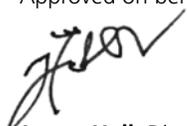
Consolidated Statements of Financial Position

As at March 31

<i>(thousands of Canadian dollars)</i>	Notes	2017	2016	April 1, 2015
		\$	\$	\$
Financial Assets				
Cash		37,024	84,553	75,912
Long-term disposal of waste fund	5	16,556	3,538	-
Investments held in trust	6	50,329	49,320	47,805
Trade and other receivables	7	70,909	103,731	159,375
Appropriations receivable	18	94,430	19,400	-
Inventories held for resale	8	4,369	7,242	7,689
Heavy water inventory	8	201,153	212,968	221,283
		474,770	480,752	512,064
Liabilities				
Accounts payable and accrued liabilities	9	71,511	62,928	133,666
Employee future benefits	10	25,160	27,898	35,798
Due to Canadian Nuclear Laboratories	11	111,663	114,287	-
Deferred decommissioning and waste management funding	12	269,512	245,011	220,510
Decommissioning and waste management provision	13	6,492,243	6,763,423	6,487,228
Contaminated sites liability	14	1,081,866	1,109,493	-
Customer advances and obligations		545	909	3,165
		8,052,500	8,323,949	6,880,367
Net Debt		(7,577,730)	(7,843,197)	(6,368,303)
Non-Financial Assets				
Tangible capital assets	15	594,674	505,487	410,558
Inventories held for consumption	8	-	-	18,195
Prepaid expenses		842	430	3,486
		595,516	505,917	432,239
Accumulated Deficit		(6,982,214)	(7,337,280)	(5,936,064)
Accumulated deficit is comprised of:				
Accumulated operating deficit		(6,983,092)	(7,338,581)	(5,938,884)
Accumulated remeasurement gains		878	1,301	2,820
		(6,982,214)	(7,337,280)	(5,936,064)
Contractual obligations	16			
Contingent liabilities	17			

The accompanying notes are an integral part of these consolidated financial statements

Approved on behalf of the Board


James Hall, Director


Richard Sexton, President and Chief Executive Officer

Consolidated Statements of Operations and Accumulated Deficit

For the year ended March 31

<i>(thousands of Canadian dollars)</i>	Notes	2017 Budget	2017	2016 Budget	2016
		\$	\$	\$	\$
Revenues					
Parliamentary appropriations	18	689,049	784,133	464,311	491,064
Commercial revenue		67,500	110,730	106,700	116,921
Interest income		5,800	4,867	7,400	6,469
Other funding	18	-	-	-	99,840
		762,349	899,730	578,411	714,294
Expenses					
Cost of sales		37,125	84,240	58,685	86,368
Operating expenses		47,000	67,803	184,726	201,767
Contractual expenses	11	327,347	331,887	169,900	163,795
Decommissioning, waste management and contaminated sites expenses	19	198,592	26,095	206,543	512,400
Wrap-Up Office activities		6,800	5,431	12,600	8,869
		616,864	515,456	632,454	973,199
Surplus (Deficit) for the year prior to transfer of liability from government					
		145,485	384,274	(54,043)	(258,905)
Transfer of liability from government	14, 15	-	-	-	(1,106,182)
Surplus (Deficit) for the year after transfer of liability from government					
		145,485	384,274	(54,043)	(1,365,087)
Accumulated operating deficit, beginning of year					
		(7,338,581)	(7,338,581)	(5,938,884)	(5,938,884)
Transfer to deferred decommissioning and waste management funding	12	(24,501)	(24,501)	(24,501)	(24,501)
Transfer to repayable contributions	12	-	(4,284)	-	(10,109)
Accumulated operating deficit, end of year					
		(7,217,597)	(6,983,092)	(6,017,428)	(7,338,581)

The accompanying notes are an integral part of these consolidated financial statements

Consolidated Statement of Remeasurement Gains and Losses

For the year ended March 31

<i>(thousands of Canadian dollars)</i>	2017	2016
	\$	\$
Accumulated remeasurement gains, beginning of year	1,301	2,820
Remeasurement losses arising during the year		
Unrealized losses on Investments held in trust	(80)	(778)
Reclassifications to the Consolidated Statements of Operations and Accumulated Deficit		
Realized gains on Investments held in trust	(343)	(741)
Net remeasurement losses for the year	(423)	(1,519)
Accumulated remeasurement gains, end of year	878	1,301

The accompanying notes are an integral part of these consolidated financial statements

Consolidated Statements of Change in Net Debt

For the year ended March 31

<i>(thousands of Canadian dollars)</i>	Notes	2017 Budget	2017	2016 Budget	2016
		\$	\$	\$	\$
Surplus (Deficit) for the year after transfer of liability from government		145,485	384,274	(54,043)	(1,365,087)
Tangible capital assets					
Acquisition of tangible capital assets	15	(153,600)	(132,959)	(141,000)	(145,341)
Amortization of tangible capital assets	15	24,000	31,813	24,000	26,011
Write-down of tangible capital assets	15	-	14,312	-	26,871
Other changes	15	-	(2,353)	-	(2,470)
		(129,600)	(89,187)	(117,000)	(94,929)
Non-financial assets					
Changes in inventories held for consumption		-	-	-	18,195
Changes in prepaid expenses		-	(412)	-	3,056
		-	(412)	-	21,251
Net remeasurement losses for the year		-	(423)	-	(1,519)
Decrease (increase) in net debt		15,885	294,252	(171,043)	(1,440,284)
Net debt at beginning of year		(7,843,197)	(7,843,197)	(6,368,303)	(6,368,303)
Transfer to deferred decommissioning and waste management funding		(24,501)	(24,501)	(24,501)	(24,501)
Transfer to repayable contributions		-	(4,284)	-	(10,109)
Net debt at end of year		(7,851,813)	(7,577,730)	(6,563,847)	(7,843,197)

The accompanying notes are an integral part of these consolidated financial statements

Consolidated Statements of Cash Flows

For the year ended March 31

<i>(thousands of Canadian dollars)</i>	2017	2016
	\$	\$
Operating transactions		
Cash receipts from Parliamentary appropriations	709,103	471,664
Cash receipts from customers	145,997	163,362
Cash receipts for decommissioning and waste management activities	-	111,368
Cash paid to suppliers	(404,178)	(175,611)
Cash paid to employees	(14,860)	(190,317)
Cash paid for decommissioning activities	(345,493)	(237,326)
Interest received	1,064	838
Cash provided by operating transactions	91,633	143,978
Capital transactions		
Acquisition of tangible capital assets	(139,162)	(135,337)
Cash applied to capital transactions	(139,162)	(135,337)
Increase (decrease) in cash	(47,529)	8,641
Cash at beginning of year	84,553	75,912
Cash at end of year	37,024	84,553

The accompanying notes are an integral part of these consolidated financial statements

Notes to the Consolidated Financial Statements

For the year ended March 31, 2017

1. General Information

Atomic Energy of Canada Limited (AECL) is a federal Crown corporation whose mandate is to enable nuclear science and technology and manage Canada's radioactive waste and decommissioning activities. AECL delivers its mandate through a long-term contract with Canadian National Energy Alliance (CNEA) for the management and operation of Canadian Nuclear Laboratories (CNL) under a Government-owned, Contractor-operated model. This contract came into effect on September 13, 2015. Prior to this date, CNL operated as a wholly-owned subsidiary of AECL.

AECL also manages the retained liabilities associated with its former CANDU Reactor Division (Commercial Operations), which were sold to Candu Energy Inc., a wholly-owned subsidiary of SNC-Lavalin, on October 2, 2011.

AECL was incorporated in 1952 under the provisions of the *Canada Corporations Act* (and continued in 1977 under the provisions of the *Canada Business Corporations Act*), pursuant to the authority and powers of the Minister of Natural Resources under the *Nuclear Energy Act*.

In July 2015, AECL was issued a directive (P.C. 2015-1111) pursuant to section 89 of the *Financial Administration Act* to align its travel, hospitality, conference and event expenditure policies, guidelines and practices with Treasury Board policies, directives and related instruments on travel, hospitality, conference and event expenditures in a manner that is consistent with its legal obligations, and to report on the implementation of this directive in AECL's next Corporate Plan. As at March 31, 2017, AECL remains compliant with the requirements of the directive.

AECL is a Schedule III Part I Crown corporation under the *Financial Administration Act* and an agent of Her Majesty in Right of Canada. As a result, AECL's liabilities are ultimately liabilities of Her Majesty in Right of Canada. AECL receives funding from the Government of Canada and is exempt from income taxes in Canada.

2. Restructuring and Corporate Plan

The Government of Canada has restructured AECL to reduce risks and costs to Canadian taxpayers. The first phase of the restructuring was completed in 2011 with the sale of AECL's CANDU Reactor Division (Commercial Operations) to Candu Energy Inc., a wholly-owned subsidiary of SNC-Lavalin.

The second phase of the restructuring focused on AECL's Nuclear Laboratories, with the objective of implementing a Government-owned, Contractor-operated business model. As part of the implementation of this model, AECL incorporated a wholly-owned subsidiary, CNL. In November 2014, virtually all of AECL's employees were transferred to CNL, and CNL became the operator of the Nuclear Laboratories. AECL proceeded to establish itself as a small organization to provide oversight of the contractual arrangement under this model.

In June 2015, following a procurement process led by Natural Resources Canada and Public Works and Government Services Canada, the Government of Canada announced that CNEA had been selected as the preferred bidder to manage and operate CNL. The contract with CNEA came into effect on September 13, 2015, and the shares of CNL

were transferred from AECL to CNEA. Under this contractual arrangement AECL retains ownership of the sites, facilities and assets and provides funding to CNL to manage and operate the sites and to undertake the program of work to fulfill AECL's mandate. This includes the provision of services to third party customers on behalf of AECL. Upon transferring the shares, AECL recorded a loss of \$2.8 million in operating expenses in the Consolidated Statements of Operations and Accumulated Deficit associated with the investment in CNL. No portion of the loss is attributable to measuring the investment at fair value.

AECL's 2017-2018 to 2021-2022 Corporate Plan received Governor in Council approval in the fourth quarter of the 2016-17 fiscal year. The Corporate Plan is aligned with the restructuring direction provided by the Shareholder and reflects AECL's priorities under the Government-owned, Contractor-operated model.

3. Significant Accounting Policies

a) Adoption of New Accounting Framework

Effective April 1, 2016, AECL adopted the Public Sector Accounting Standards (PSAS) as issued by the Public Sector Accounting Board (PSAB). See Note 4 for more details.

b) Basis of Accounting

These consolidated financial statements have been prepared in accordance with Canadian Public Sector Accounting Standards (PSAS) established by the Public Sector Accounting Board (PSAB), and reflect the policies below.

Both financial and non-financial assets are reported on the Consolidated Statements of Financial Position. Non-financial assets are normally employed to provide future services, and are charged to expense through amortization or upon utilization. Non-financial assets are not taken into consideration when determining the net financial assets (or debt), but rather are added to the net financial assets (or debt) to determine the accumulated surplus (deficit).

Measurement Uncertainty

The preparation of the consolidated financial statements in accordance with PSAS requires management to make estimates and assumptions that affect the reported amounts of financial assets, liabilities and non-financial assets at the date of the financial statements, and the reported amounts of revenue and expenses during the reporting period. Items requiring the use of significant estimates and assumptions include those related to the fair value of financial instruments, useful life and write-down of tangible capital assets, employee future benefits, contingent liabilities and provisions including the decommissioning and waste management provision and contaminated sites liability. Estimates and assumptions are based on the best information available at the time of preparation of the consolidated financial statements and are reviewed annually to reflect new information as it becomes available. Where actual results differ from these estimates and assumptions, the impact will be recorded in future periods when the difference becomes known.

Budget Figures

The 2016-17 and 2015-16 budgets are reflected in the Consolidated Statements of Operations and Accumulated Deficit and the Consolidated Statements of Change in Net Debt. Budget data for 2016-17 presented in these consolidated financial statements is based upon the 2016-17 projections and estimates contained within the 2016-17 to 2020-21 Corporate Plan. The 2015-16 data is based upon the 2015-16 projections and estimates contained within the 2015-16 to 2019-20 Corporate Plan.

As a result of the transition to PSAS, certain items that were in the above Corporate Plans required adjustment to align with the change in reporting. The main adjustments are as follows:

<i>(thousands of Canadian dollars)</i>	Previously approved 2017	As adjusted 2017	Previously approved 2016	As adjusted 2016
	\$	\$	\$	\$
Summary of Adjustments - Consolidated Statements of Operations and Accumulated Deficit				
Operating expenses	17,000	47,000	13,000	184,726
Contractual expenses	327,347	327,347	311,626	169,900
Surplus (Deficit) for the year	175,485	145,485	(24,043)	(54,043)
Summary of Adjustments - Consolidated Statements of Change in Net Debt				
Amortization of tangible capital assets	-	24,000	-	24,000
Decrease (increase) in net debt	21,885	15,885	(165,043)	(171,043)

c) Basis of Consolidation

Subsidiaries are entities controlled by AECL. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases. The accounting policies of subsidiaries have been changed when necessary to align them with the policies of AECL. These consolidated financial statements include the accounts of AECL's wholly-owned subsidiaries, Canadian Nuclear Laboratories Limited, incorporated in Canada in 2014 (for the period up to September 13, 2015, after which CNL ceased to be a wholly-owned subsidiary of AECL); AECL Technologies Inc., incorporated in the state of Delaware, U.S.A. in 1988 (for the period up to January 7 2016, after which the corporation was dissolved); and AECL Technologies B.V., incorporated in the Netherlands in 1995.

d) Foreign Currency Translation

Transactions denominated in a foreign currency are translated into Canadian dollars at the exchange rate in effect at the date of the transaction. Monetary assets and liabilities, not denominated in the functional currency of AECL, outstanding at the balance sheet date are adjusted to reflect the exchange rate in effect at that date. Realized exchange gains and losses arising from the translation of foreign currencies are included in the Consolidated Statements of Operations and Accumulated Deficit.

e) Financial Instruments

AECL's cash, trade and other receivables, long-term disposal of waste fund, trade and other payables, customer advances and obligations, and due to Canadian Nuclear Laboratories are measured at amortized cost. Transaction costs are a component of cost for financial instruments measured using cost or amortized cost.

AECL has elected to measure investments held in trust at fair value, to correspond with how they are evaluated and managed. These financial instruments are not reclassified for the duration of the period they are held. Unrealized gains and losses from changes in the fair value of financial instruments are recognized in the Consolidated Statements of Remeasurement Gains and Losses. Upon settlement, the cumulative gain or loss is reclassified from the Consolidated Statements of Remeasurement Gains and Losses and recognized in the Consolidated Statements of Operations and Accumulated Deficit. Transaction costs are expensed for financial instruments measured at fair value.

Interest and dividends attributable to financial instruments are reported in the Consolidated Statements of Operations and Accumulated Deficit.

f) Long-term Disposal of Waste Fund

Cash has been invested in a fund for the future disposal of radioactive waste generated after September 13, 2015. This fund, established and maintained by AECL, is intended to provide funding for the future disposal costs associated with radioactive waste generated from ongoing operations.

Interest earned is included in Interest income in the Consolidated Statements of Operations and Accumulated Deficit.

g) Investments Held in Trust

The Trust Fund is a special fund established pursuant to the *Nuclear Fuel Waste Act* to finance the implementation of an approach for the long-term management of nuclear fuel waste. While AECL does not have any direct or indirect shareholdings in this entity, Management has determined that AECL, in substance, controls the Trust Fund. Accordingly, the Trust Fund has been consolidated into AECL's consolidated financial statements.

Interest earned is included in Interest income in the Consolidated Statements of Operations and Accumulated Deficit.

h) Inventory

Heavy water, spare parts and store supplies and reactor fuel are measured at the lower of cost and net realizable value. Cost includes amounts for improvements to prepare the assets for sale. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses. Where cost exceeds net realizable value, a write-down is recorded.

i) Employee Future Benefits

Substantially all of the employees of AECL are covered by the Public Service Pension Plan (PSPP), a contributory defined benefit plan established through legislation and sponsored by the Government of Canada. Contributions are required by both the employees and AECL to cover current service cost.

Pursuant to legislation currently in place, AECL has no legal or constructive obligation to pay further contributions with respect to any past service or funding deficiencies of the PSPP. Consequently, contributions are recognized as an expense in the year when employees have rendered service and represent the total pension obligation of AECL.

AECL provides employee benefits such as voluntary termination compensation benefits and other benefits, including continuation of health and dental benefits during long-term disability, and self-insured workers' compensation.

AECL reimburses Employment and Social Development Canada for workers' compensation claims in accordance with the *Government Employees Compensation Act* for current payments billed by the provincial compensation boards.

Non-Pension Post-Employment Benefit Plans

AECL's net obligation with respect to its non-pension post-employment defined benefit plans is the amount of future benefit that employees have earned in return for their service in the current and prior periods. That benefit is discounted to determine its present value. The calculation is performed annually by a qualified actuary using the projected benefit method prorated on service and Management's best estimate of salary escalation, retirement ages of employees, mortality and expected employee turnover.

The discount rate is based on AECL's cost of borrowing as determined based on long-term Government of Canada bond yields. AECL amortizes any actuarial gains and losses arising from non-pension defined benefit plans into the Consolidated Statements of Operations and Accumulated Deficit over the expected average remaining service life.

Other Long-Term Employee Benefits

AECL's net obligation with respect to other long-term employee benefits is the amount of future benefit that employees have earned in return for their service in the current and prior periods. These benefits include self-insured workers' compensation benefits and health and dental care benefits during long-term disability.

That benefit is discounted to determine its present value. The discount rate is based on AECL's cost of borrowing as determined based on long-term Government of Canada bond yields. The calculation is performed using a combination of the Projected Unit Credit Method prorated on service and event-driven calculations for Workers' Compensation. Any actuarial gains and losses are amortized into the Consolidated Statements of Operations and Accumulated Deficit over the expected average remaining service life.

Short-Term Employee Benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided. A liability is recognized for the amount expected to be paid under short-term incentive plans if AECL has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee, and if the obligation can be estimated reliably.

j) Decommissioning and Waste Management Provision

AECL has obligations to decommission nuclear facilities and to manage radioactive waste in order to protect the environment and satisfy regulatory requirements. The best estimate of an obligation is recognized in the period in which a reasonable estimate can be determined and it is probable that an outflow of economic benefits will be required to settle the obligation.

The provision takes into account current technological, environmental and regulatory requirements and is determined by discounting the expected future cash flows at a rate that reflects current market assessments of the time value of money and the risks specific to the provision. The estimated future cash forecasts are adjusted for inflation using a rate that is derived on the basis of Consensus forecasts and Bank of Canada historical and target inflation rates.

As the provision is recorded based on a discounted value of the projected future cash flows, it is increased quarterly to reflect the passage of time by removing one quarter's discount. The unwinding of the discount is charged to Decommissioning, waste management and contaminated sites expenses in the Consolidated Statements of Operations and Accumulated Deficit.

The provision is reduced by actual expenditures incurred. The cost estimate is subject to periodic review and any material changes in the estimated amount or timing of the underlying future cash flows are recorded as an adjustment to the provision. The provision includes future construction costs associated with certain enabling facilities, such as disposal facilities for nuclear waste.

Decommissioning costs of new assets are added to the carrying amount, where they are determined to provide a future economic benefit to AECL, and amortized over the related assets' useful lives. The effect of subsequent changes in estimating an obligation for which the provision was recognized as part of the cost of the asset is adjusted against the asset.

k) Contaminated Sites Liability

AECL recognizes a provision for contaminated sites when all of the following conditions are prevalent: an environmental standard exists; the level of contamination has been determined to exceed the environmental standard and AECL is directly responsible or accepts responsibility; it is expected that future economic benefits will be given up; and a reasonable estimate of the amount can be made at that time. The liability includes all costs directly attributable to remediation activities including post remediation operations, maintenance and monitoring.

l) Trade and Other Receivables, Customer Advances and Obligations

Certain contracts may have revenue recognized in excess of billings (unbilled revenues) and other contracts may have billings in excess of revenue recognized (customer advances and obligations). Unbilled revenues are recorded as an asset and included in Trade and other receivables. Billings collected in excess of revenue recognized on contracts and advances for which the related work has not started are recognized as Customer advances in accordance with AECL's revenue recognition policy.

m) Tangible Capital Assets

Tangible capital assets are recorded at cost less accumulated amortization, which includes amounts that are directly related to the acquisition, design, construction, development, improvement or betterment of the assets. Cost includes overhead directly attributable to the construction and development, as well as the costs of dismantling and removing the items and restoring the site on which they are located.

Contributions in Aid of Construction relate to the contributions made for a pipeline to deliver natural gas to the Chalk River Site.

The cost of tangible capital assets in use is amortized on a straight-line basis over the estimated useful life, as follows:

Asset	Rate
Land Improvements	10-20 years
Buildings	20-40 years
Reactors, Machinery & Equipment	3-40 years
Contributions in Aid of Construction	40 years

Construction in progress represents assets that are not yet available for use and therefore are not subject to amortization. When complete, the constructed asset is transferred to the appropriate category of tangible capital asset and amortized at the rate applicable to that category. Amortization commences when the asset is put into use and ceases when it no longer provides any further economic benefit to AECL or when it is no longer in service.

When conditions indicate that a tangible capital asset no longer contributes to AECL's ability to provide goods and services, or that the value of future economic benefits associated with the tangible capital asset is less than its net book value, the cost of the tangible capital asset is reduced to reflect the decline in the asset's value. The net write-down is then accounted for as an expense in the Consolidated Statements of Operations and Accumulated Deficit.

Useful lives are assessed annually and revisions to the useful life are made as required.

Intangible assets are not recognized in the financial statements.

n) Revenue Recognition

Revenue is derived from sales of services and products. Revenue is recognized in the period in which the transactions or events occurred that gave rise to the revenues. All revenue is recorded on an accrual basis, except when the accruals cannot be determined with a reasonable degree of certainty or when their estimation is impracticable. Revenue related to fees or services received in advance of the fee being earned or the service is performed is deferred and recognized when the fee is earned or service performed.

Cost-reimbursement contracts

Revenue under cost-reimbursement contracts is recognized as reimbursable costs are incurred and includes a proportion of fees earned.

Other service contracts

When services are performed over a specified period of time, revenue is recognized on a straight-line basis unless there is evidence that some other method better represents the stage of completion. For waste management services, revenue is recognized based on the contractual arrangements specified in a contract for disposal with the customer.

Supply of product

Revenue is recognized when the risks and rewards of ownership have been transferred to the customer, which generally coincides with the transfer of title. When goods require significant tailoring, modification or integration, the revenue is recognized using the percentage-of-completion method.

Royalty revenue

Revenue from licensing of intellectual property is recorded as revenue in accordance with the terms of the specific agreement. These arrangements entitle AECL to receive payment from the sale to the licensee of CANDU and CANDU-related technologies for future new build, life extension and other projects.

o) Parliamentary Appropriations

AECL receives Parliamentary appropriations for operating expenditures and tangible capital assets. These Parliamentary appropriations are free of any stipulations limiting their use, and are recorded as funding from the Government of Canada in the Consolidated Statements of Operations and Accumulated Deficit, up to the authorized amount, where eligibility criteria have been met.

p) Interest Income

Interest income earned on cash, short-term investments from appropriations and Investments held in trust is recognized in the Consolidated Statements of Operations and Accumulated Deficit.

q) Contingent Liabilities

Contingent liabilities are potential liabilities which may become actual liabilities when one or more future events occur or fail to occur. To the extent that the future event is likely to occur or fail to occur, and a reasonable estimate of the obligation can be made by AECL, an estimated liability is accrued and an expense recorded. If the likelihood is not determinable, or an amount cannot be reasonably estimated, the contingency is disclosed in the notes to the financial statements.

r) Standards and Guidelines Issued to be Adopted at a Later Date

The following standards and guidelines have been issued by the PSAB and have been assessed as having a possible effect on AECL in the future:

PS 2200 Related party disclosures

This new Section defines a related party and establishes disclosures required for related party transactions. Disclosure of information about related party transactions and the relationship underlying them is required when they have occurred at a value different from that which would have been arrived at if the parties were unrelated, and they have, or could have, a material financial effect on the financial statements.

This Section applies to fiscal years beginning on or after April 1, 2017.

PS 3210 Assets

This new Section provides guidance for applying the definition of assets set out in Financial statement concepts, Section PS 1000, and establishes general disclosure standards for assets. Disclosure of information about the major categories of assets that are not recognized is required. When an asset is not recognized because a reasonable estimate of the amount involved cannot be made, the reason(s) for this should be disclosed.

This Section applies to fiscal years beginning on or after April 1, 2017.

PS 3320 Contingent assets

This new Section defines and establishes disclosure standards on contingent assets. Disclosure of information about contingent assets is required when the occurrence of the confirming future event is likely.

This Section applies to fiscal years beginning on or after April 1, 2017.

PS 3380 Contractual rights

This new Section defines and establishes disclosure standards on contractual rights. Disclosure of information about contractual rights is required including description about their nature and extent and the timing.

This Section applies to fiscal years beginning on or after April 1, 2017.

PS 3420 Inter-entity transactions

This new Section establishes standards on how to account for and report transactions between public sector entities that comprise a government's reporting entity from both a provider and recipient perspective. The main features of the new Section are:

- Under a policy of cost allocation, revenues and expenses are recognized on a gross basis.
- Transactions are measured at the carrying amount, except in specific circumstances.
- A recipient may choose to recognize unallocated costs for the provision of goods and services and measure them at the carrying amount, fair value or other amount dictated by policy, accountability structure or budget practice.
- The transfer of an asset or liability for nominal or no consideration is measured by the provider at the carrying amount and by the recipient at the carrying amount or fair value.
- Inter-entity transactions are considered in conjunction with Related party disclosures, Section PS 2200.

This Section applies to fiscal years beginning on or after April 1, 2017.

PS 3430 Restructuring transactions

This new Section defines a restructuring transaction and establishes standards for recognizing and measuring assets and liabilities transferred in a restructuring transaction. The main features of the new Section are:

- A restructuring transaction is a transfer of an integrated set of assets and/or liabilities, together with related program or operating responsibilities without consideration based primarily on the fair value of the individual assets and individual liabilities transferred.
- The net effect of a restructuring transaction should be recognized as revenue or as an expense by entities involved.
- A recipient should recognize individual assets and liabilities received in a restructuring transaction at their carrying amount with applicable adjustments at the restructuring date.
- A transferor and a recipient should not restate their financial position or results of operations.
- A transferor and a recipient should disclose sufficient information to enable users to assess the nature and financial effects of a restructuring transaction on their financial position and operations.

This Section applies to restructuring transactions occurring in fiscal years beginning on or after April 1, 2018.

AECL intends to adopt these standards when they become applicable. While AECL is currently evaluating the impact of adopting these standards on its consolidated financial statements, they are not expected to have a significant impact on AECL's financial reporting.

4. Transition to Public Sector Accounting Standards

Effective April 1, 2016, AECL adopted Canadian Public Sector Accounting Standards (PSAS). These standards were adopted with retrospective restatement, and therefore the 2015-16 comparative figures have been restated. Key adjustments resulting from the adoption of these accounting standards are as follows:

a) Tangible Capital Assets

Computer software and contributions in aid of construction are included in the definition of a tangible capital asset under PSAS. The March 31, 2016 consolidated financial statements have been revised to reclassify computer software and contributions in aid of construction of \$18.3 million, previously recorded as an intangible asset, to tangible capital assets. This reclassification did not result in any adjustments to AECL's accumulated surplus (deficit) or annual surplus (deficit), or the Consolidated Statements of Cash Flow.

The discount rate applied to any Asset Retirement Obligations is based on the Government's cost of borrowing. The adjustment to the tangible capital assets is reflected in AECL's accumulated deficit upon transition.

AECL decided to use the first-time adopter exemption, and applied on a prospective basis from the date of transition, the condition for a write-down of a tangible capital asset. Following this application, no write-down was recognized.

b) Decommissioning and Waste Management Provision

The discount rate applied to determine the present value of the liability should be based on the Government's cost of borrowing. The adjustment to the decommissioning and waste management provision of \$3,487.0 million as of April 1, 2015 and \$3,255.1 million as of March 31, 2016 as a result of this change is reflected in AECL's accumulated deficit upon transition. For the fiscal year ended March 31, 2016, the discount rate applied under PSAS created adjustments to the Decommissioning, waste management and contaminated sites expenses totaling \$(218,759). This includes adjustments relating to the Contaminated Sites Liability.

c) Contaminated Sites Liability

The discount rate applied to determine the present value of the liability should be based on the Government's cost of borrowing. The adjustment to the contaminated sites liability of \$10.6 million as a result of the change in discount rate is reflected in AECL's accumulated deficit upon transition. In addition, \$1,109.5 million previously recorded in the March 31, 2016 consolidated financial statements as part of the decommissioning and waste management provision has been reclassified to the contaminated sites liability. Under IFRS, the transfer of the liability associated with the Port Hope Area Initiative was reported as an adjustment to equity. Under PSAS, the transfer of the liability has been reported as an adjustment to the annual deficit for the year ended March 31, 2016 on the Consolidated Statements of Operations and Accumulated Deficit.

d) Employee Future Benefits

According to PSAS, the actuarial gains and losses should be amortized over the expected average remaining service life of the related employee group. AECL has decided to use the first-time adopter exemption to recognize all cumulative actuarial gains and losses as at the date of transition to PSAS directly in accumulated deficit and as such has adjusted the balances as of April 1, 2015 and March 31, 2016.

The discount rate for the non-funded benefits should be established by reference to AECL's cost of borrowing. As AECL does not borrow money, information on AECL's cost of borrowing is not readily available, and therefore, the average yield on Government of Canada long-term bonds is used as a proxy for the cost of borrowing. An actuarial valuation has been undertaken as at April 1, 2015 and a \$2.8 million loss associated with the change in the borrowing rate recognized directly into accumulated deficit. As at March 31, 2016 a loss of \$4.2 million was recognized relating to the change in the borrowing rate. The adjustments related to changes in Employee Future Benefits for the fiscal year ended March 31, 2016 were adjusted through Operating expenses.

e) Deferred Capital Funding

Based on AECL's previous basis of accounting, Parliamentary appropriations used for the purchase of capital and intangible assets were recorded as deferred capital funding and amortized on the same basis and over the same periods as the related asset. Under PSAS, Parliamentary appropriations used for the purchase of tangible capital assets are recognized as revenue when authorized since the appropriations are not considered to have stipulations which meet the definition of a liability. As a result, the amount previously reported as deferred capital funding at April 1, 2015 of \$372.2 million is reflected within AECL's opening accumulated deficit at April 1, 2015. Amortization of deferred capital funding for the fiscal year ended March 31, 2016, previously included in Parliamentary appropriations of \$45.8 million, is not recognized under PSAS. Parliamentary appropriations received by AECL during the fiscal year ended March 31, 2016 for future capital acquisitions in the amount of \$145.3 million are now included in Parliamentary appropriations. The amount recorded as deferred capital funding at March 31, 2016 of \$471.7 million is also reflected in AECL's accumulated deficit at March 31, 2016.

f) Investments Held in Trust

Adjustments relating to Investments held in trust were recorded for the year ended March 31, 2016. There were adjustments of \$0.8 million recorded through Interest income and \$0.7 million recorded through Operating expenses. These entries related to recording a portion of the Investments held in trust as Accumulated remeasurement gains (losses).

g) Statement of Cash Flows

The presentation of AECL's Consolidated Statements of Cash Flows has been revised to be consistent with PSAS, and reflect the change during the year in cash and cash equivalents.

Cash paid to suppliers and to the employees is presented separately. Therefore, the cash paid to suppliers during the year ended March 31, 2016, under IFRS, which amounted to \$513.1 million has been presented separately as cash paid to suppliers and cash paid to employees.

The acquisition of tangible capital assets, previously reflected as an investing activity, has been revised to be presented as a capital activity. The Consolidated Statements of Cash Flow have also been amended to be consistent with other presentation changes to the Consolidated Statements of Financial Position and the Consolidated Statements of Operations and Accumulated Deficit as stated above in *Deferred Capital Funding*, of this note.

h) Reclassification

Current assets and liabilities are not presented under PSAS. Therefore, the current portion of the other non-financial assets previously presented with the accounts receivable and the current portion of employee future benefits previously presented with the accounts payable and accrued liabilities were reclassified to the appropriate basis.

i) Summary of Financial Adjustments

<i>(thousands of Canadian dollars)</i>	Notes	\$
Accumulated deficit as at April 1, 2015, as previously reported per IFRS		(9,785,854)
Adjustment to Tangible capital assets	a)	(6,530)
Adjustment to Decommissioning and waste management provision	b)	3,486,985
Adjustment to Employee future benefits	d)	(2,840)
Adjustment to Deferred capital funding	e)	372,175
Accumulated deficit as at April 1, 2015, as restated per PSAS		(5,936,064)
Accumulated deficit as at March 31, 2016, as previously reported per IFRS		(11,066,562)
Adjustment to Tangible capital assets	a)	(3,842)
Adjustment to Decommissioning and waste management provision	b)	3,255,082
Adjustment to Contaminated sites liabilities	c)	10,569
Adjustment to Employee future benefits	d)	(4,217)
Adjustment to Deferred capital funding	e)	471,690
Accumulated deficit as at March 31, 2016, as restated per PSAS		(7,337,280)
Annual deficit for the year ended March 31, 2016, as previously reported per IFRS		(139,916)
Adjustment to Parliamentary appropriations for capital funding	e)	145,328
Adjustment to Parliamentary appropriations for amortization of deferred capital funding	e)	(45,843)
Adjustment to Decommissioning, waste management and contaminated site expenses	b)	(218,759)
Adjustment to Operating expenses	d),f)	(493)
Adjustment to Interest income	f)	778
Adjustment for transfer of liability from government	c)	(1,106,182)
Annual deficit for the year ended March 31, 2016, as restated per PSAS		(1,365,087)

5. Long-Term Disposal of Waste Fund

AECL is required to invest cash in a fund to cover the costs related to the future disposal of radioactive waste arising from ongoing operations. This fund is intended to cover the future disposal costs associated with radioactive waste generated after September 13, 2015. The cash dedicated to this purpose is not expected to be used in the upcoming fiscal year. The fund is comprised of the following:

(thousands of Canadian dollars)	Maturities	March 31		March 31		April 1	
		2017	Yield	2016	Yield	2015	
		\$	%	\$	%	\$	
Cash equivalents	Not applicable	16,556	0.0	3,538	0.0	-	-
		16,556		3,538		-	-

6. Investments Held In Trust

The *Nuclear Fuel Waste Act* requires Canadian nuclear utilities to form a waste management organization, the Nuclear Waste Management Organization (NWMO), to provide recommendations to the Government of Canada on the long-term management of nuclear fuel waste and to implement the approach selected. The legislation also requires that each nuclear fuel waste owner establish a trust fund to finance implementation of the approach. The liability for AECL's nuclear fuel waste is recorded in the decommissioning and waste management provision (Note 13).

Each individual trust fund is held in order to meet the requirements of the Act and only the NWMO may withdraw monies from it in accordance with the provisions of the Act, Section II. As required by the Act, AECL's initial deposit to its Trust Fund was \$10 million on November 25, 2002. Subsequent annual deposits averaging approximately \$1.5 million have been made as required, and will continue until the full lifecycle costs of managing the nuclear fuel waste over the long-term are set aside.

The Trust Fund, managed by CIBC on behalf of AECL, invests in fixed income instruments, with various maturities. The fund has been consolidated and the investments held by the fund are measured at fair value. Quoted market values for the instruments or similar instruments, in the case of the bonds, are estimated at \$50.3 million as at March 31, 2017 (March 31, 2016 – \$49.3 million; April 1, 2015 – \$47.8 million). Interest earned on trust assets accrues to the Trust Fund. Interest earned on these instruments is fixed, whereas the fair values of the instruments vary according to the prevailing market rate of interest. These investments are comprised of the following:

(thousands of Canadian dollars)	Maturities	March 31		March 31		April 1	
		2017	Yield	2016	Yield	2015	Yield
		\$	%	\$	%	\$	%
Cash equivalents*	Not applicable	102	0.0	1,192	0.0	1,187	0.0
Canadian government bonds**	April 2021 - June 2036	24,946	2.7	27,422	2.5	32,361	2.8
Corporate bonds	February 2020 - December 2026	25,281	2.2	20,706	2.3	14,257	2.8
		50,329		49,320		47,805	

*Cash equivalents consist mainly of short-term money market instruments with original maturities less than 90 days.

**Canadian government bonds include federal, provincial and municipal bonds.

7. Trade and Other Receivables

<i>(thousands of Canadian dollars)</i>	March 31		April 1
	2017	2016	2015
	\$	\$	\$
Trade receivables	18,058	16,094	29,805
Less: allowance for doubtful accounts	(3,419)	(3,419)	(544)
Net trade receivables	14,639	12,675	29,261
Other receivables:			
Unbilled revenue	7,632	10,407	23,055
Consumption taxes receivable	11,825	9,911	3,502
Contract receivables from customers in respect of the financing of products and services, maturing through 2019 at fixed repayment amounts	28,096	55,130	80,670
Finance lease receivable	7,619	13,449	19,124
Other receivables	1,098	2,159	3,763
	70,909	103,731	159,375

The contract receivables primarily relate to heavy water sales in prior years. The amount is repayable to AECL based on a fixed repayment schedule through 2019. The implicit interest rate in the receivable is 5.77% per annum. There is no valuation allowance currently recorded and no security held in respect of this receivable.

AECL is exposed to normal credit risk with respect to its Trade and other receivables and maintains allowances for specific potential credit losses. The allowance for doubtful accounts represents Management's estimate of the expected credit losses to be incurred and is based on past experience with similar receivables and economic conditions. Should actual credit losses differ from Management's current estimates, future earnings will be affected. AECL is working to collect its outstanding trade receivables in accordance with the terms of the sales contracts.

AECL's exposure to credit risks related to Trade and other receivables, including unbilled revenue, is disclosed in Note 20.

The change in allowance for doubtful accounts was as follows:

<i>(thousands of Canadian dollars)</i>	March 31		April 1
	2017	2016	2015
	\$	\$	\$
Balance at beginning of year	(3,419)	(544)	(841)
Charges	-	(3,419)	-
Reversals	-	544	297
Balance at end of year	(3,419)	(3,419)	(544)

8. Inventory

<i>(thousands of Canadian dollars)</i>	March 31		April 1
	2017	2016	2015
	\$	\$	\$
Raw materials	-	242	1,631
Work in progress	-	1,431	7,713
Finished products	-	532	2,923
Reactor fuel	-	2,205	12,267
Spare parts and store supplies	4,369	5,037	13,617
Inventory	4,369	7,242	25,884
Heavy water inventory	201,153	212,968	221,283

The cost of inventory for reactor fuel and spare parts and store supplies recognized as an expense and included in Cost of sales and Operating expenses was \$1.1 million (2016 – \$4.9 million). The total amount of inventory written down in 2017 was \$1.7 million (2016 – \$nil).

In addition to internal consumption of heavy water at the Chalk River Laboratories, which was \$0.3 million (2016 – \$0.1 million), the cost of inventory for heavy water recognized as an expense and included in Cost of sales was \$11.5 million (2016 – \$8.2 million). The total amount of heavy water written down in 2017 was \$nil (2016 – \$nil).

AECL had no inventory pledged as security for liabilities.

9. Accounts Payable and Accrued Liabilities

<i>(thousands of Canadian dollars)</i>	March 31		April 1
	2017	2016	2015
	\$	\$	\$
Trade payables	5,864	562	13,168
Other payables and accrued expenses	19,027	10,701	43,442
Accrued payroll liabilities	3,555	2,810	34,929
Amounts due to related parties	35,832	31,548	21,438
Amounts due to Shareholder	1,080	381	815
Provisions	6,013	15,851	16,784
Restructuring provision	140	1,075	3,090
	71,511	62,928	133,666

The carrying values of trade and other payables are considered to be a reasonable approximation of fair value due to their short-term nature.

The Amounts due to Shareholder represent Royalty revenues. The Amounts due to related parties represent cash proceeds from the sales of heavy water (Note 12).

Provision amounts are short-term in nature and are not discounted and include exposure to claims related to life extension projects as well as lawsuits and legal claims and disputes with suppliers.

10. Employee Benefits

a) Pension Plan

As described in Note 3(i), AECL's employees participate in the Public Service Pension Plan (PSPP). Contributions are made to three accounts: Public Service Superannuation Account, Public Service Pension Fund account, and the Retirement Compensation Arrangement account.

Total contributions made on account of current service are as follows:

<i>(thousands of Canadian dollars)</i>	March 31	
	2017	2016
	\$	\$
Payments by employees	761	11,431
Payments by employer	2,203	16,199

AECL's rate of contribution to the Public Service Superannuation Account (PSSA) equals the employee contributions and AECL's contributions to the Public Service Pension Fund account is a 1.01 multiple of the employee contributions (March 31, 2016 - 1.15). AECL's contribution to the Retirement Compensation Arrangement account for calendar year 2017 is a multiple of 7.74 of the employee contributions (calendar year 2016 - 6.67). The multiple is subject to change based on revaluation by the PSPP administration.

Substantially all of the employees of AECL are covered by the PSPP, a contributory defined benefit plan established through legislation and sponsored by the Government of Canada. Contributions are required by both the employees and AECL. The President of the Treasury Board of Canada sets the required employer contributions based on a multiple of the employees' required contribution. The general employer contribution rate effective during the year was 18.5% of employee salaries (2016 - 12.3%). Total contributions of \$2.2 million (2016 - \$16.2 million) were recognized as an expense in the year. The changes in contributions between 2015-16 and 2016-17 are due to the implementation of the Government-owned, Contractor-operated model, whereby the ownership of AECL's then-subsiidiary, CNL, was transferred to CNEA. As at the date of this transfer, employees of CNL became employees of a private-sector organization. While existing CNL employees are entitled to a three year transitional period in the PSPP, the employer contributions are being made by CNL. AECL's contributions noted above include CNL employees up to September 13, 2015.

The Government of Canada holds a statutory obligation for the payment of benefits relating to the PSPP. Pension benefits generally accrue up to a maximum period of 35 years at an annual rate of two per cent of pensionable service, times the average of the best five consecutive years of earnings. The benefits are coordinated with Canada/Québec Pension Plan benefits and they are indexed to inflation.

b) Employee future benefits

AECL provides certain voluntary termination compensation (VTC) and other post-employment benefits as described in Note 3(i). The defined benefit obligation is not funded, as funding is provided when benefits are paid. Accordingly, there are no plan assets and the defined plan deficit is equal to the defined benefit obligation.

The VTC is payable in instances of future voluntary resignations and retirements. Consistent with Government of Canada expectations of federal agencies or Crown corporations, AECL began eliminating this benefit in fiscal 2012-2013.

The VTC included in the 2017 Employee future benefits liability is \$10.5 million (2016 - \$12.7 million). This balance includes the amounts for employees who have chosen to defer payment to the time of the termination of their employment and those whose bargaining units have not negotiated or ratified agreements to eliminate the VTC as of March 31, 2017.

The measurement date of the Employee future benefits liability is March 31, 2017, and the latest actuarial valuation of these benefits was performed at that date. The weighted average duration of the defined benefit obligation at the end of the reporting period is 8.0 years (2016 - 7.3 years). The amortization period for post-employment benefits is 10 years. The amortization period for other long-term benefits is 13 years.

The following summarizes the activity in the post-employment and other long-term benefit plans:

<i>(thousands of Canadian dollars)</i>	March 31	
	2017	2016
	\$	\$
Accrued benefit obligation, beginning of year	26,266	35,798
Benefits earned	66	115
Interest on Accrued benefit obligation	474	552
Benefits paid	(3,176)	(4,869)
Actuarial gain	(1,502)	(1,630)
Disposal of subsidiary	-	(3,700)
Accrued benefit obligation, end of year	22,128	26,266
Less: Unamortized actuarial gain	(3,032)	(1,632)
Employee future benefits liability	25,160	27,898

The following summarizes expenses arising from AECL's post-employment and other long-term benefit plans in the Consolidated Statements of Operations and Accumulated Deficit and in the Consolidated Statements of Financial Position:

<i>(thousands of Canadian dollars)</i>	March 31	
	2017	2016
	\$	\$
Benefit and interest expense		
Benefits earned	66	115
Amortization of actuarial gain recognized	(127)	-
Total benefit expense	(61)	115
Interest on Accrued benefit obligation	474	552
Total benefit and interest expense	413	667

The Total benefit and interest expense relating to AECL employees is recognized in Cost of sales and Operating expenses in the Consolidated Statements of Operations and Accumulated Deficit.

The significant actuarial assumptions adopted in measuring AECL's Employee future benefits are summarized as follows:

	March 31	
	2017	2016
	%	%
Discount rate	2.20	1.90
Rate of increase in salaries	2.75	2.75
Health care cost trend	4.00	4.00

For the 2017 fiscal year, the mortality rates are those used by the Canadian Pensioners' Mortality for 2014. For the 2016 fiscal year, the mortality rates are those used by the Office of the Superintendent of Financial Institutions for the March 31, 2011 valuation of benefits provided under the PSSA. The disabled mortality rates are those used for the valuation of the benefit liabilities of the schedule 1 insurance fund of the WSIB of Ontario as of December 31, 2015.

The Employee future benefits liability and costs are subject to measurement uncertainty due to the use of actuarial assumptions. The impact of these factors on the remeasurement of the Employee future benefits liability can be significant and volatile at times.

Significant actuarial assumptions for the determination of the defined benefit obligation are discount rate, expected salary increase and mortality. The sensitivity analyses below have been determined based on possible changes to these assumptions occurring at the end of the reporting period. The sensitivity analyses provided in the table are hypothetical and should be used with caution. The sensitivities of each key assumption have been calculated independently of any changes in other key assumptions. Actual experience may result in a change in a number of key assumptions simultaneously. Changes in one factor may result in changes in another, which could amplify or reduce the impact of such assumptions.

	March 31
	2017
<i>(thousands of Canadian dollars)</i>	\$
1% increase in discount rate (3.2%)	20,329
1% decrease in discount rate (1.2%)	23,695
1% increase in rate of increase of salaries (3.75%)	22,560
1% decrease in rate of increase of salaries (1.75%)	21,288
Post-retirement mortality rates at 90% of mortality rates used	22,274
Post-retirement mortality rates at 110% of mortality rates used	21,552

A 1% increase or decrease in the Health care cost trend will not have a material impact on the Employee future benefits.

11. Contractual Arrangement

As of September 13, 2015, AECL has been delivering its mandate through a long-term contract with CNEA for the management and operation of CNL under a Government-owned, Contractor-operated model. Prior to this date, CNL operated as a wholly-owned subsidiary of AECL.

Under the Government-owned, Contractor-operated model, the assets, sites and facilities continue to be owned by AECL, but are being managed and operated by a private-sector company. As such, AECL makes payments to CNL and CNEA ("Contractual amounts paid or payable") as per the terms of the contractual arrangement.

The following contractual expenditures were incurred:

<i>(thousands of Canadian dollars)</i>	March 31	
	2017	2016
	\$	\$
Contractual amounts paid or payable	864,930	432,444
Less: Costs charged to Decommissioning and waste management provision and Contaminated sites liability	(331,982)	(149,308)
Less: Costs charged to Construction in progress	(132,959)	(75,032)
Less: Costs classified as Cost of sales	(68,102)	(44,309)
Contractual expenses	331,887	163,795

Contractual amounts paid or payable include fees paid to CNEA, in accordance with the long-term contractual arrangement between AECL and CNEA and CNL.

The balance due to CNL at March 31, 2017 was \$111.7 million (March 31, 2016 - \$114.3 million; April 1, 2015 - \$nil) and represents funding owing for allowable costs incurred by CNL. Amounts due to CNEA are included in Accounts payable and accrued liabilities.

12. Deferred Decommissioning and Waste Management Funding

From 1997 to 2006, a Decision by the Treasury Board directed AECL to hold the proceeds from the sale or lease of Government-funded heavy water in a segregated fund for use in decommissioning activities for the 10-year period following the Decision. As Government-funded heavy water was sold or leased, the cash proceeds were transferred from Accumulated deficit to Deferred decommissioning and waste management funding, which was used to fund ongoing decommissioning activities.

An annual amount equivalent to the proceeds from sales made during the 10-year arrangement received after April 1, 2006 is transferred from Accumulated deficit to Deferred decommissioning and waste management funding. However, the funds are not required to be segregated for use in decommissioning activities. Other cash proceeds from heavy water sales are recorded as amounts due to related parties and are presented in Accounts payable and accrued liabilities (Note 9) on the Consolidated Statements of Financial Position.

13. Decommissioning and Waste Management Provision

AECL has an obligation to decommission its nuclear facilities and other assets in order to address its liabilities, reduce risk, protect the environment and meet applicable regulatory requirements. These facilities include prototype reactors, heavy water plants, nuclear research and development, waste management and other facilities. Due to the variety of facilities, the decommissioning process may differ in each case. In some situations, decommissioning activities are carried out in stages, with intervals of several decades between them, to allow radioactivity to decay before moving on to the next stage. These activities include surveillance and monitoring, decontamination, demolition and the management of the associated waste. A portion of the liabilities relate to obligations that existed prior to the creation of AECL in 1952.

The decommissioning plan follows a hierarchy of activities to achieve:

- A controlled and controllable state for all redundant nuclear facilities that removes short-term risks.
- A sustainable, stable and safe state of the facilities under surveillance.
- Cost-optimized completion of actions to achieve a final end state that is an accepted completion of the decommissioning process as required by the regulator.

The Decommissioning and waste management provision is as follows:

	March 31	
	2017	2016
<i>(thousands of Canadian dollars)</i>		
	\$	\$
Carrying amount - Beginning of year	6,763,423	6,487,228
Liabilities settled	(250,002)	(208,143)
Unwinding of discount	262,387	251,672
Revision in estimate and timing of expenditures	(293,390)	223,536
Waste, decommissioning and site restoration costs from ongoing operations	9,825	9,130
Carrying amount - End of year	6,492,243	6,763,423

The undiscounted future expenditures, adjusted for inflation, for the planned projects comprising the liability are \$16,539.9 million (March 31, 2016 – \$17,613.6 million). The provision is re-valued at the current discount rate in effect at each balance sheet date.

Key assumptions used in determining the provision:

	March 31		April 1
	2017	2016	2015
Discount period	147 years	148 years	149 years
Discount rate	3.88%	3.88%	3.88%
Inflation rate	1.70%	1.70%	1.70%

The provision is highly sensitive to the interest rate used to discount the future expenditures. The following table outlines the sensitivity of a 1% change in the discount rate used to estimate the provision:

<i>(millions of Canadian dollars)</i>	March 31		April 1
	2017	2016	2015
	\$	\$	\$
1% increase	(981)	(1,051)	(1,113)
1% decrease	1,354	1,456	1,549

14. Contaminated Sites Liability

As part of the implementation of the Government-owned, Contractor-operated model, the responsibilities for the implementation of the Government of Canada's commitments with respect to the Port Hope Area Initiative and other historic low-level waste liabilities, including all of the assets and liabilities, were transferred to AECL in 2015-16. This included an order in council (P.C. 2015-1027) that transferred administration of the real property associated with the Port Hope Area Initiative from the Minister of Natural Resources to AECL.

AECL recognizes and estimates a liability of \$1,081.9 million (March 31, 2016: \$1,109.4 million; April 1, 2015: \$nil) for the Port Hope Area Initiative and the Low-Level Radioactive Waste Management Office using a net present value technique. The nature of the Port Hope Area Initiative liability is the clean-up and local, long-term, safe management of historic low-level radioactive waste in the municipalities of Port Hope and Clarington. This waste consists mainly of past process residues containing uranium and radium, and associated contaminated soils, the result of activities of a former federal Crown corporation and its private sector predecessors. The implementation phase is forecast to be complete in 2023-24, with long-term monitoring and maintenance expected to continue for 30 years after implementation. The liability is discounted using net present value techniques at a rate of 2.18%. The estimated total undiscounted expenditures are \$1,213.5 million (March 31, 2016: \$1,249.8 million; April 1, 2015: \$nil).

As part of the Government-owned, Contractor-operated model, responsibility for the Low-Level Radioactive Waste Management Office has also transferred from Natural Resources Canada to AECL and includes all activities to address and manage historic low-level waste at sites in Canada for which the Government has assumed responsibility (excluding the Port Hope Area Initiative). Historic low-level radioactive waste is material contaminated with radioactivity resulting from the processing and shipment of uranium and radium. This clean-up is forecast to be complete by 2027-28.

<i>(thousands of Canadian dollars)</i>	March 31	
	2017	2016
	\$	\$
Carrying amount - Beginning of year	1,109,493	-
Liabilities settled	(84,378)	(31,310)
Unwinding of discount	24,409	13,295
Revision in estimate and timing of expenditures	32,342	16,894
Transfer of liability from government	-	1,110,614
Carrying amount - End of year	1,081,866	1,109,493

15. Tangible Capital Assets

<i>(thousands of Canadian dollars)</i>	Construction in progress	Land and land improvements	Buildings	Reactors, Machinery and Equipment	Total
	\$	\$	\$	\$	\$
Cost at March 31, 2016	220,749	83,249	309,765	427,189	1,040,952
Additions and transfers	132,959	11,605	105,732	37,547	287,843
Disposals and transfers	(154,884)	(12,200)	(1,386)	(17,498)	(185,968)
Write-downs	(14,312)	-	-	-	(14,312)
Other changes	-	-	2,697	-	2,697
Cost at March 31, 2017	184,512	82,654	416,808	447,238	1,131,212
Amortization at March 31, 2016	-	41,617	187,824	306,024	535,465
Increase in amortization	-	5,371	6,741	19,701	31,813
Disposals	-	(12,223)	(1,254)	(17,263)	(30,740)
Amortization at March 31, 2017	-	34,765	193,311	308,462	536,538
Net carrying amount at March 31, 2016	220,749	41,632	121,941	121,165	505,487
Net carrying amount at March 31, 2017	184,512	47,889	223,497	138,776	594,674

<i>(thousands of Canadian dollars)</i>	Construction in progress	Land and land improvements	Buildings	Reactors, Machinery and Equipment	Total
	\$	\$	\$	\$	\$
Cost at April 1, 2015	192,219	78,837	257,391	391,902	920,349
Additions and transfers	145,341	2,855	54,077	39,641	241,914
Disposals and transfers	(96,573)	-	(6)	(348)	(96,927)
Write-downs	(20,238)	(2,627)	-	(4,006)	(26,871)
Transfer of asset from government (Note 14)	-	4,184	247	-	4,431
Other changes	-	-	(1,944)	-	(1,944)
Cost at March 31, 2016	220,749	83,249	309,765	427,189	1,040,952
Amortization at April 1, 2015	-	38,490	183,080	288,221	509,791
Increase in amortization	-	3,127	4,750	18,134	26,011
Disposals	-	-	(6)	(331)	(337)
Transfers	-	-	-	-	-
Amortization at March 31, 2016	-	41,617	187,824	306,024	535,465
Net carrying amount at April 1, 2015	192,219	40,347	74,311	103,681	410,558
Net carrying amount at March 31, 2016	220,749	41,632	121,941	121,165	505,487

Amortization of Tangible capital assets for the year ended March 31, 2017 was \$31.8 million (2016 – \$26.0 million). The amortization of Tangible capital assets is recognized in Operating expenses in the Consolidated Statements of Operations and Accumulated Deficit.

Write-downs of \$14.3 million were recorded in 2017 (2016 – \$26.9 million). The write-down charges are recognized in Operating expenses in the Consolidated Statements of Operations and Accumulated Deficit.

16. Contractual Obligations

a) Operating leases:

Non-cancellable operating lease rentals are payable as follows:

<i>(thousands of Canadian dollars)</i>	Leases
	\$
2017-2018	833
2018-2019	837
2019-2020	423
	2,093

AECL leases office space under operating leases with various expiration dates. The leases contain an escalation clause providing for additional rent. During the year ended March 31, 2017, an amount of \$0.5 million (2016 – \$2.4 million) was recognized as an expense in the Consolidated Statements of Operations and Accumulated Deficit.

The total of future sublease payments to be received is \$1.7 million.

b) Operating and capital commitments:

The nature of AECL's activities can result in multiyear contracts and obligations whereby AECL will be committed to make future payments. As at March 31, 2017, AECL has contractual arrangements with third party suppliers, including contracts that allow for termination with penalties, approximating \$412.2 million (2016 – \$312.9 million; April 1, 2015 – \$197.1 million). The majority of these commitments are held by CNL in accordance with the Government-owned, Contractor-operated model. Included in this amount are contracts related to the purchase of Tangible capital assets of approximately \$62.4 million (2016 – \$76.2 million; April 1, 2015 – \$58.6 million).

17. Contingent Liabilities

a) Performance guarantees and liquidated damages:

It is industry practice to use letters of credit, surety bonds and other performance guarantees on major contracts. Such guarantees may include guarantees that a project will be completed or that a project or particular equipment will meet defined performance criteria. Liquidated damages are provided for in contracts and provide for compensation to be paid upon a specific breach of that contract (e.g. late performance).

Liquidated damages penalties are estimated at \$60 million at March 31, 2017 (2016 – \$60 million; April 1, 2015 – \$60 million) and have been expensed previously in the consolidated financial statements. On an ongoing basis, management reviews the progress on long-term projects to determine if liquidated damages penalties will be incurred. When it is probable that these penalties will be incurred and they are measurable, liquidated damages penalties are included in the revised calculation of revenue and/or contract loss provisions on those projects.

b) Lawsuits and legal claims:

AECL is engaged in various legal proceedings and claims that have arisen in the ordinary course of business. The outcome of all of the proceedings and claims against AECL is subject to future resolution, including the uncertainties of litigation. Based on information currently known to AECL and after consultation with outside legal counsel, Management believes that the probable ultimate resolution of any such proceedings and claims, individually or in the aggregate, will not have a material adverse effect on the financial condition of AECL.

18. Funding

a) Parliamentary appropriations:

AECL segregates its Parliamentary appropriations, which included Statutory Funding, to ensure funds are spent in a manner consistent with the basis for which they were approved. Approved Main Estimates and Supplementary Estimates include amounts for the operations of the Nuclear Laboratories, including the safe operations of the Chalk River Laboratories. Statutory Funding relates to amounts associated with obligations pursuant to the divestiture of AECL's Commercial Operations in 2011.

During the year, Parliamentary appropriations were recognized as follows:

<i>(thousands of Canadian dollars)</i>	March 31	
	2017	2016
	\$	\$
Parliamentary appropriations for operating and capital expenditures		
Amount received during the year for operating and capital expenditures	689,703	471,664
Amount receivable at the end of the year	94,430	19,400
	784,133	491,064
Statutory funding		
Amount received during the year	-	-
Amount receivable at the end of the year	-	-
	-	-
Total Parliamentary appropriations recognized	784,133	491,064

There were Parliamentary appropriations receivable of \$94.4 million as at March 31, 2017 (2016 – \$19.4 million; April 1, 2015 – \$nil).

During the year, the above funding was received to support AECL and CNL planned activities. This funding was used in the following manner:

- Support ongoing Chalk River site operations and regulatory, health, safety and environmental needs, as well as science and technology activities.
- Decommissioning and waste management activities at the Chalk River and Whiteshell sites and environmental remediation programs primarily in Port Hope.
- Capital infrastructure renewal.

Following the implementation of the Government-owned, Contractor-operated model, AECL receives Parliamentary appropriations directly for delivering on its decommissioning and waste management mandate. In 2015-16, this funding was provided to AECL by Natural Resources Canada, and as such, was recognized by AECL as 'Other funding'.

The amounts approved for operating and capital expenditures for the years ending March 31, 2017 and 2016 totaled \$969 million and \$839 million, respectively.

Statutory funding approved for the years ending March 31, 2017 and 2016 totaled \$nil and \$17 million, respectively.

b) Other funding:

During the year, Other funding was recognized as follows:

<i>(thousands of Canadian dollars)</i>	March 31	
	2017	2016
	\$	\$
Cost recoveries from third parties and other	-	9,905
Decommissioning and waste management	-	89,935
	-	99,840

As of September 13, 2015, AECL's responsibility for fulfilling the Government's obligations with respect to legacy obligations associated with AECL sites as well as historic low-level radioactive wastes was transferred from Natural Resources Canada. Prior to this date, AECL received funding from Natural Resources Canada to undertake work with respect to legacy waste and historic low-level waste, which was recognized as 'Other funding'. After September 13, 2015, funding for those activities was provided directly to AECL through Parliamentary appropriations.

19. Additional Information by Type of Expense

<i>(thousands of Canadian dollars)</i>	March 31	
	2017	2016
	\$	\$
Payroll expenses	11,932	170,843
General and administrative expenses	2,793	15,298
Site and program operating costs	45,573	131,613
Amortization of tangible capital assets	31,814	26,011
Realized gain on Investments held in trust	(343)	(741)
Contractual amounts paid or payable less costs charged to Construction in progress (Note 11)	731,971	357,413
Finance expenses	286,796	264,967
Revaluation (loss) gain on decommissioning and waste management provision and other	(293,042)	230,539
Revaluation gain on contaminated site liabilities	32,342	16,894

Certain components of the costs (2016-17: \$334.4 million; 2015-16: \$239.5 million) have been utilized to settle Decommissioning and waste management and Contaminated sites liabilities (Note 13 and 14) and, as such, are not included in the Consolidated Statements of Operations and Accumulated Deficit. Payroll expenses include salaries and related legislated contributions.

20. Financial Instruments

AECL has exposure to the following risks from its use of financial instruments: credit risk, market risk and liquidity risk.

The Board of Directors ensures that AECL has identified its major risks and ensures that management monitors and controls them.

a) Credit risk

Credit risk is the risk of financial loss to AECL if a customer or counterparty to a financial instrument fails to meet its contractual obligations. Such risks arise principally from certain financial assets held by AECL consisting of cash, investments and trade and other receivables. The carrying amounts approximate fair value due to their short term to maturity.

AECL manages its credit risk surrounding its Trade and other receivables of \$70.9 million (2016 - \$103.7 million; April 1, 2015 - \$159.4 million) by dealing solely with reputable customers within a government regulated industry and evaluating customer creditworthiness before credit is extended. The risk is reduced by monitoring at the appropriate levels of management and applying a conservative investment strategy.

The maximum exposure to credit risk of AECL at March 31, 2017 is the carrying value of Cash, the Long-term disposal of waste fund, Investments held in trust and Trade and other receivables. The credit risk for Cash, the Long-term disposal of waste fund and Investments held in trust is minimized by ensuring these instruments are held with well-established financial institutions and invested in government and corporate bonds.

The aging of gross trade receivables was as follows:

	March 31		April 1
	2017	2016	2015
<i>(thousands of Canadian dollars)</i>			
	\$	\$	\$
Current	11,117	11,406	9,773
Past due 1 to 30 days	1,368	986	14,239
Past due 31 to 60 days	1,408	235	1,800
Past due 61 to 90 days	440	405	778
Past due more than 90 days	3,725	3,062	3,215
	18,058	16,094	29,805

b) Market risk

Market risk is the risk that changes in market prices, such as interest rates, will affect AECL's income or the value of its holdings of financial instruments. The objective of market risk management is to control market risk exposures within acceptable parameters while optimizing the return on risk.

AECL's consolidated financial statements are presented in Canadian dollars, but a portion of its business is conducted in other currencies, with the exposure to foreign currency transactions primarily related to the U.S. dollar. The objective of AECL's foreign exchange risk management activities is to minimize transaction exposure and the resulting volatility of AECL's earnings and commitments. As of March 31, 2017 and March 31, 2016, had the exchange rate (CAN\$/US\$) been 5% higher or lower, the impact on the Consolidated Statements of Operations and Accumulated Deficit for the year would have been insignificant.

Interest rate risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in the market interest rates. The objective of AECL's interest rate management activities is to minimize the volatility of AECL's earnings and expenses. AECL's exposure to interest rate risk is limited to changes in interest rates associated with its investments in bonds and discount rates associated with the Decommissioning and waste management provision and Contaminated sites liability.

Regulatory risk is the risk that changes in government policy may have an adverse impact on AECL's financial position. AECL operates in a highly regulated business environment. Changes in government policy may have an adverse impact on AECL's financial position. AECL's objective in managing regulatory risk is to actively monitor and implement changes on a timely basis to enable operations. In 2017, AECL's regulatory risk management objectives were unchanged from those in 2016.

c) Liquidity risk

Liquidity risk is the risk that AECL will not be able to meet its financial obligations as they become due. AECL is economically dependent on appropriations that are received from the Government of Canada.

AECL manages liquidity risk by cross-functional participation in project and business reviews, frequent communication with its Shareholder to manage ongoing cash requirements and secure appropriate funding, and maintaining a portfolio of highly liquid investments or instruments readily convertible into liquidity with high-quality counterparties.

The aging of gross accounts payables was as follows:

<i>(thousands of Canadian dollars)</i>	March 31		April 1
	2017	2016	2015
	\$	\$	\$
Current	5,022	258	8,395
1 to 30 days	542	4	558
31 to 60 days	-	-	1,288
61 to 90 days	-	-	1,903
More than 90 days	300	300	1,024
	5,864	562	13,168

All other financial liabilities, including Due to Canadian Nuclear Laboratories, are due within the year.

d) Fair value of financial instruments

Accounting standard guidance establishes a framework for measuring fair value and provides disclosure about fair value measurements. That framework provides a fair value hierarchy that gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements).

The carrying amounts of Cash, Trade and other receivables, Accounts payable and accrued liabilities and Customer advances and obligations approximate fair value because of the short-term nature of these items.

The following table analyzes financial instruments measured at fair value, by valuation method. AECL uses the following hierarchy to classify fair value measurements:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices).

Level 3: Inputs for the asset or liability that are not based on observable market data (unobservable inputs).

Changes in valuation methods may result in transfers into or out of levels 1, 2, and 3. For the reporting periods ended March 31, 2017 and March 31, 2016, there were no transfers between levels.

<i>(thousands of Canadian dollars)</i>	March 31, 2017			
	Level 1	Level 2	Level 3	Total
	\$	\$	\$	\$
Assets measured at fair value				
Investments held in trust - Cash equivalents	102	-	-	102
Investments held in trust - Bonds	-	50,227	-	50,227
	102	50,227	-	50,329

<i>(thousands of Canadian dollars)</i>	March 31, 2016			
	Level 1	Level 2	Level 3	Total
	\$	\$	\$	\$
Assets measured at fair value				
Investments held in trust - Cash equivalents	1,192	-	-	1,192
Investments held in trust - Bonds	-	48,128	-	48,128
	1,192	48,128	-	49,320

<i>(thousands of Canadian dollars)</i>	April 1, 2015			
	Level 1	Level 2	Level 3	Total
	\$	\$	\$	\$
Assets measured at fair value				
Investments held in trust - Cash equivalents	1,187	-	-	1,187
Investments held in trust - Bonds	-	46,618	-	46,618
	1,187	46,618	-	47,805

21. Related Party Transactions

AECL is related, in terms of common ownership, to all Government of Canada departments, agencies and Crown corporations. AECL enters into transactions with government entities in the normal course of business and on normal trade terms applicable to all individuals and enterprises. The transactions are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

In addition to the transactions disclosed in Notes 7, 9, 10, 12, 13, 14, 15 and 18, AECL, in the normal course of business, also entered into various transactions with the Government, its agencies and other Crown corporations.

AECL also has transactions with its key management personnel. Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of AECL, including AECL's directors and executive officers. The table below summarizes the amounts paid or payable to key management personnel on a comparative basis.

<i>(thousands of Canadian dollars)</i>	March 31	
	2017	2016
	\$	\$
Salaries and other short-term benefits	2,988	5,882
Termination benefits	961	2,876
Post-employment benefits	1,151	1,476
	5,100	10,234

As part of the transition to the Government-owned, Contractor-operated business model and the transition, over time, of AECL from a large Crown corporation to a small Crown corporation, AECL has, with the help of external compensation consultants, developed a compensation philosophy. AECL's compensation philosophy is to target total compensation at the market median of its comparator group with differentiation for hard-to-hire and/or specialized skills. Ultimately, AECL's compensation philosophy is focused on attracting and retaining the skills and expertise needed to fulfill its mandate, including important international expertise gained from similar Government-owned, Contractor-operated models in the United Kingdom and the United States. To this end, the compensation philosophy was recently formalized, with the input and advice of external compensation consultants, taking into account relevant factors such as appropriate market comparators, the geographical location of AECL employees and the internationally limited availability of the specialized key management personnel needed to provide effective oversight of this complex and unique to Canada contractual arrangement. As part of its approach to compensation, AECL will periodically review its compensation philosophy, including the appropriateness of its comparator group and employee compensation relative to market median, and propose adjustments, as appropriate, for Board of Directors' approval, consistent with AECL's governance requirements.

Corporate Governance

The corporate governance structure of AECL is similar to that of other corporations incorporated pursuant to the *Canada Business Corporations Act* with the following important exceptions:

- i. AECL is an agent and a parent Crown corporation and is subject to the provisions of Part X of the *Financial Administration Act* (“FAA”) of Canada;
- ii. The sole Shareholder of AECL is the Government of Canada as represented by the Minister of Natural Resources; and
- iii. AECL’s Board of Directors (“Board”), the Board Chair and the President and Chief Executive Officer are appointed by the Government of Canada by Order-in-Council.

AECL’s President and CEO was appointed by the Governor-in-Council in February 2017 on an interim basis to serve a term of one year, or until his replacement is appointed. The President and CEO leads AECL in achieving its mandate through a Government-owned, Contractor-operated model. All direct reports to the President and CEO are appointed by the Board of Directors through the Human Resources and Governance Committee on the recommendation of the President and CEO. Each of these direct reports is accountable for specific areas of business and operations as approved by the President and CEO and endorsed by the Board’s Human Resources and Governance Committee.

Board of Directors / Officers

AECL is governed by a Board of Directors, which provides strategic direction and advice to the President and Chief Executive Officer. The Board, through its Chair or Chair of a Board Committee, receives direction from AECL's single Shareholder, the Government of Canada, as represented by the Minister of Natural Resources. It is accountable to Parliament through the Minister of Natural Resources.

AECL's Board has two committees, the Audit Committee and Human Resources & Governance Committee, each having specific Charters that set out respective responsibilities for and on behalf of the Board.

In fiscal year 2016-17, the Board provided input, advice and perspectives on AECL's oversight role and contractual management of the GoCo model, oversaw AECL's Wrap-Up Office activities with respect to the resolution of legal liabilities that had been retained by AECL following the divestiture of its commercial operations, provided appropriate oversight over the management of corporate and business risks and continued to report to the Minister of Natural Resources with respect to the Board's fulfilment of its governance role and accountabilities.

As of March 31, 2017, the Board consisted of five Directors. Aside from the President and CEO of AECL, they were not members of AECL management nor did they receive compensation from AECL, other than director fees. Of note, Mr. Hamilton did not receive any fees. AECL's Directors, the Chair of the Board and the President and CEO are appointed by the Government of Canada by Order-in-Council. A list of Board members, along with their term expiry date, is presented below.



Dr. Claude Lajeunesse

Appointed to Board, March 2005

Appointed Chair of the Board August 2016

Member, Council of the Canadian Academies Expert Panel on the State of S&T and IR&D in Canada. Former Chair of the Board for the Green Aviation Research & Development Network; former President and CEO of the Aerospace Industries Association of Canada and the Association of Universities and Colleges of Canada; former President and Vice-Chancellor of Concordia University in Montreal and Ryerson University in Toronto. Past Board member of TD Insurance, Canada Science and Technology Museums Corporation Foundation, SOFINOV (Caisse de dépôt et placement du Québec) and of the Toronto East General Hospital. Holds a PhD in nuclear engineering from Rensselaer Polytechnic Institute in New York.

Committees: Human Resources & Governance (Chair), Audit



Mr. Bob Hamilton

Appointed to Board December 2014 – ending December 2015

(incumbent directors continue in office until their successors are appointed)

Commissioner of the Canada Revenue Agency. Former Deputy Minister, Natural Resources Canada; Former Deputy Minister of the Environment; Former Senior Associate Secretary of the Treasury Board and Lead on the Canada-United States Regulatory Cooperation Council; Former Associate Deputy Minister of the Environment; Former Associate Secretary of the Treasury Board. Occupied senior positions at Finance Canada, including Senior Assistant Deputy Minister of the Tax Policy Branch and Assistant Deputy Minister of Financial Sector Branch. Holds a Bachelor of Arts (Economics) and Masters of Economics from the University of Western Ontario.

Committees: Human Resources & Governance, Audit



Mr. James Hall

Appointed to Board August 2013

Reappointed December 2014 – ending December 2015

(incumbent directors continue in office until their successors are appointed)

Vice President of Callidus Capital Corporation. President and CEO of James Hall Advisors Inc. Current governance – a director of Immunovaccine Inc. and a trustee of an OMERS Trust. Former Chairman and Chief Executive Officer of Journal Register Company, Senior Vice President & Chief Investment Officer of Working Ventures Canadian Fund Inc., and Senior Vice President of Lloyds Bank Canada. A Chartered Accountant, Mr. Hall holds an H.B.A. from the Richard Ivey School of Business at the University of Western Ontario.

Committees: Human Resources & Governance and Audit (Chair)



Ms. Martha Tory

Appointed to Board October 2016

Retired Partner, Assurance Services, Ernst & Young. Board member; Chair, Finance, Audit and Risk Committee; and member, Governance and Human Resources Committee: MaRS Discovery District. Board Chair: Institute of Competiveness and Prosperity. Board Chair: PREVNet (a Network of Centres of Excellence). Board member; Vice-Chair, Business and Human Resources Committee; Governance and Nominating Committee member; and Chair, Chief of the Emergency Department Search Committee: Sunnybrook Health Sciences Centre. Board member and Chair, Finance, Audit and Property Committee: George Brown College. Board member; Treasurer and Finance and Audit Committee Chair, Governance and Nominating Committee Member and Member, CEO Search Committee: Dixon Hall Neighbourhood Services. Board member, GBSP Centre Corp. (Young Centre for the Performing Arts). Member, Standards Council and Finance Committee, Imagine Canada. Member, Finance Committee, Shaw Festival. Member, Audit and Risk Committee, Bermuda Hospital Board.

Committees: Human Resources & Governance and Audit

Director Attendance at Board & Committee Meetings (2016-17)

Director	Audit (7 meetings)	Human Resources & Governance (4 meetings)	Board of Directors (10 meetings)
C. Lajeunesse ¹	3/3	4/4	10/10
B. Hamilton ^{1,2}	2/3	2/2	8/10
G. Josey ³	2/2	2/2	4/4
J. Hall ²	7/7	2/2	10/10
M. Tory ^{1,2,4}	3/3	2/2	5/5

¹ Appointed to the Audit Committee November 2016

² Appointed to the Human Resources & Governance Committee November 2016

³ Resigned from the Board in September 2016

⁴ Appointed to the Board in October 2016

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