

## ATOMIC ENERGY OF CANADA LIMITED

# **Second Quarter Financial Report**

**Consolidated Financial Statements (Unaudited)** 

As at and for the three and six months ended September 30, 2016 and September 30, 2015

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#### MESSAGE FROM THE ACTING CHIEF TRANSITION OFFICER

A year ago, the restructuring of AECL was finalized with the implementation of a Government-owned, Contractor-operated (GoCo) model at our sites. This new model, similar to the one used in the United States and United Kingdom in the management of their nuclear sites, was meant to bring greater efficiencies and effectiveness, and reduce risks and costs for Canadian taxpayers. A year into this new governance model, we can see evidence of transformation at our sites, both from a skyline perspective – old buildings are coming down and new ones are being erected – as well as behind the scenes where streamlined processes are being implemented to improve efficiencies while ensuring continued safety.

By bringing on board private-sector companies with expertise in decommissioning and waste management, as well as science and technology, AECL is leveraging international best practices to improve the delivery of complex objectives, that of managing Canada's radioactive waste and decommissioning responsibilities and enabling nuclear science and technology.

Canadian Nuclear Laboratories (CNL), which operates AECL's sites on our behalf, continues to gather momentum as they transform the operations of the organization. This report highlights some of the significant progress accomplished during the second quarter of 2016-17. But beyond the key milestones, CNL continues to make progress to transform the culture of the organization by bringing in best practices in project management, safety performance, engineering, and procurement and human resources practices. The objective is to leverage the existing capabilities that our sites offer, along with the expertise that has been developed over many decades, to make CNL a world-class, nimble organization capable of tacking complex decommissioning and scientific challenges for the benefit of Canada and Canadians.

This one year anniversary is an important milestone in getting there, but it is really just the beginning. We will continue to work with CNL to renew, revitalize and transform our sites to reap long-term benefits for Canada.

Richard Sexton

**Acting Chief Transition Officer** 

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#### MANAGEMENT'S NARRATIVE DISCUSSION

#### Introduction

Management's Narrative Discussion is intended to provide the reader with a greater understanding of AECL's business, its business strategy and performance, its expectations for the future, and how it manages risk and capital resources. It is also intended to enhance the understanding of the unaudited consolidated financial statements for the second quarter of 2016-17 and accompanying notes. Management's Narrative Discussion should therefore be read in conjunction with these documents.

Unless otherwise indicated, all financial information presented in Management's Narrative Discussion, including tabular amounts, is in Canadian dollars and is prepared in accordance with Public Sector Accounting Standards (PSAS).

Management's Narrative Discussion was authorized for issue by the Board of Directors on November 15, 2016.

#### **Our Business**

AECL is a federal Crown corporation with the mandate to enable nuclear science and technology and fulfill Canada's radioactive waste and decommissioning responsibilities, reporting to Parliament through the Minister of Natural Resources. AECL delivers its mandate through a long-term, contractual arrangement with Canadian National Energy Alliance (CNEA) for the management and operation of Canadian Nuclear Laboratories (CNL) under a Government-owned, Contractor-operated model.

CNL employs over 3,500 employees at 12 AECL sites across Canada, with most employees located at the Chalk River Laboratories.

As of September 30, 2016, AECL employed around 40 employees located in Pinawa, Manitoba as well as Port Hope, Ottawa, Oakville and Chalk River, Ontario.

AECL's objective is to provide effective oversight of the Government-owned, Contractor-operated contract with the private-sector and to ensure that the objectives of government are met. It sets priorities for CNL, oversees the contract and assesses performance to ensure value for money for Canada. There are two main areas of focus:

Decommissioning and Waste Management
 To safely and efficiently reduce the Government of Canada's radioactive waste liabilities, including associated risks to health, safety, security and the environment, at AECL and other Government of Canada sites. The focus is to leverage CNL in bringing innovative solutions to infrastructure decommissioning, site remediation and waste management.

#### 2. Nuclear Laboratories

To enable CNL to sustain, develop, apply and build S&T capabilities in a cost-effective manner. This includes CNL's ability to provide technical and research and development products and services in

support of: (i) Canada's federal roles, responsibilities and priorities; (ii) commercial services for third parties, and (iii) the other activities of CNL. Activities at the Nuclear Laboratories also include capital investments to renew and revitalize the Chalk River site to enhance CNL's capabilities to provide safe and world-class nuclear science and technology and other nuclear services.

## **Second Quarter Highlights for 2016-17**

#### **Decommissioning and Waste Management**

CNL is addressing AECL's radioactive waste and decommissioning liability, which represents the estimated costs of cleaning-up existing waste areas, as well as safely decontaminating, demolishing and disposing of contaminated buildings and facilities. AECL's objective is to leverage the expertise and experience of CNL and its parent affiliate companies to cost effectively reduce risks and liabilities for Canada in a manner that is consistent with international best practices.

During the second quarter of 2016-17, planning for a Near Surface Disposal Facility at the Chalk River Laboratories continued. This facility will allow CNL to permanently dispose of contaminated materials, legacy wastes and reduce associated long-term monitoring and surveillance costs. CNL has completed the 30% design and continues to actively engage local stakeholders and First Nation communities. Archeological and environmental field work was completed over the summer and resulted in CNL recommending a particular location for siting at the Chalk River Laboratories.

As part of the transformation of the organization to improve efficiencies and effectiveness, CNL implemented organizational changes in the Decommissioning and Waste Management group with a view to improving line accountability and 'projectize' delivery. As a result, and with efforts placed on self-performance of certain aspects of work (e.g. demolition), delivery and coordination is improving. For instance, CNL has accelerated the pace of facility decommissioning on the Chalk River site, and demolition of facilities lead to cost savings.

Work to decommission, dismantle and remediate the Whiteshell Laboratories site, located in Manitoba, also continued. Several structures were demolished, including large parts of an important research and development complex. The complex, which was no longer in use, was first decontaminated prior to its demolition, which allowed for the recycling of 98% of building materials. Work was also performed safely, with no lost-time injuries during the demolition.

CNL's planning for the in situ decommissioning of the WR-1 research reactor at the Whiteshell site and of the Nuclear Power Demonstration Reactor in Rolphton, Ontario, also continued with activities to engage local stakeholders during the summer and more planned in the coming months. The proposal to decommission the reactors in situ (i.e. by immobilizing and leaving them in place) is in line with international best practice and will enable a reduction in AECL's liability by reducing risks and costs associated with the removal and disposal of contaminated reactor components. CNL is currently undertaking an environmental assessment on this proposal with a view of demonstrating the safety of the proposal and identifying mitigating measures for potential adverse environmental effects.

At the Port Hope Area Initiative, where historic low-level radioactive waste in the municipalities of Port Hope and Clarington is being cleaned up, CNL continued with site preparation and construction at both

the Port Granby and Port Hope facilities. The Port Granby project achieved an important milestone in September with the opening of the Lakeshore Road detour to public traffic, a critical path item to enable the start of waste emplacement, expected later this fall. The Port Granby Project will address a long-standing environmental issue by safely relocating 450,000 cubic metres of historic low-level radioactive waste away from the receding Lake Ontario shoreline for safe, long-term storage in the engineered above ground mound facility being built approximately 700 metres north of the lake. This important milestone advances Canada's long-term commitment to clean up low-level radioactive waste in the community, restore historically contaminated lands and return them to a naturalized landscape.

Finally, CNL is in the process of consolidating information on AECL's waste inventories across all sites with a view of proposing strategic and cost effective ways to address associated liabilities. The objective is to leverage international best practices to better understand options, including potential improvements to current activities that create waste, as well as pathways for disposal.

#### **Nuclear Laboratories**

Work at CNL continued to deliver on the Federal Nuclear Science and Technology (S&T) Workplan to support federal departments and agencies in their responsibilities as they relate to nuclear S&T. This includes work in support of federal responsibilities in the areas of health protection, energy, public safety, security, emergency management and environmental protection. In the second quarter of 2016-17, federal departments and agencies were engaged on progress to date and discussed work priorities going forward. To date, all project milestones have been achieved on time.

CNL is also tasked with leveraging the facilities, capabilities and expertise at the Chalk River Laboratories to support industry and commercial customers. Commercial margins in Q2 were ahead of plans on a year-to-date basis and margins at year end are also projected to exceed targets.

CNL continued to safely operate the National Research Universal (NRU) reactor and prepare for the end of the routine production of the key medical isotope molybdenum-99 from the reactor on October 31, 2016. The Government of Canada's strategy since 2010 has been to cease the production of molybdenum-99 from the NRU in October 2016. In early 2015, the Government of Canada asked AECL, as a contingency, to retain the capacity to produce molybdenum-99 between October 2016 and March 2018 in case of a worldwide shortage. Since then, AECL and CNL, the operator of the NRU, have worked diligently to do all the necessary preparations to maintain Mo-99 production on "hot standby" during the Contingency period. The NRU will continue to be fully operational during the Contingency period for other purposes, and as such, production of Mo-99 could be resumed rapidly to address a significant, prolonged shortage.

That said, the global outlook for medical isotopes has improved over recent years. The latest projections from the Organisation for Economic Cooperation and Development (OECD) and the Association of Imaging Producers and Equipment Suppliers indicate that the global supply of Mo-99 is expected to be sufficient to meet global demand over the coming years. This includes sufficient normal 'buffer' supply to address unexpected shortages, even without the NRU.

An important milestone was achieved at the NRU with the U2 loops starting in September, a first since 2005. The loops provide an environment in which to test full fuel bundles in a CANDU-like environment and helps support research for the safe operations of CANDU reactors.

Finally, CNL continues to make progress with the important renewal and refurbishment of the Chalk River Laboratories. Activities in support of this initiative included ongoing projects, as well as planning for the next 10 years of capital investments to support of the ongoing science and technology mission and to transform the site towards a right-sized, sustainable and world-class science campus. Progress during Q2 included:

- The near completion of Building 350, a collaborative and inter-disciplinary space for cutting-edge research and development in chemistry and materials. During Q2, construction activities were completed, installation of laboratory equipment started and some administrative staff moved into the building. Finalization and formal inauguration is expected in the coming months.
- Installation of a natural gas pipeline and conversion of the site Powerhouse and other key
  facilities on the Chalk River site are proceeding ahead of schedule, with CNL proposing to
  bring some facility conversions forward from next year. The conversion to natural gas will
  substantially reduce the operating cost of the Chalk River site.
- Repurposing of Building 215 to accommodate the Tritium laboratory is proceeding as
  planned to enable vacating the existing building which does not effectively meet modern
  requirements. This facility upgrade will enable a new laboratory environment, to leverage
  existing capabilities, and grow CNL's science and technology stature.
- Installation of a supply of domestic water is proceeding ahead of schedule and will address current deficiencies with the supply of potable water for food preparation, sanitary and personal facilities and safe drinking water at the Chalk River site and to conform to current provincial and/or federal standards.

#### Financial Overview

AECL's second quarter financial results reflected a deficit of \$26 million compared to a \$28 million surplus in the same period of the previous year.

The Government of Canada provides funding for AECL to advance its priorities and deliver on its mandate. Funding of \$148 million for the second quarter of 2016-17 was drawn from Parliamentary appropriations.

AECL's planned activities are set out in its Corporate Plan. The 2016-17 year-to-date results are generally comparable to the planned results, and as such, AECL is on track to meet its commitments within budget. Priorities and deliverables have not materially changed in the first six months of 2016-17.

# **Forward-Looking Statements**

This Management's Narrative Discussion 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 quarter ended September 30, 2016, and should be read in conjunction with the unaudited consolidated financial statements and accompanying notes.

The Management's Narrative Discussion contains forward-looking statements with respect to AECL based on assumptions that Management considers reasonable at the time of preparation. 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.

## **Financial Review**

	Three Months Ended		Six Months Ended				
	September 30,			September 30,			
(\$ millions)	2016		2015		2016		2015
Revenues							
Parliamentary appropriations	\$ 148	\$	110	\$	331	\$	180
Commercial revenue	29		27		64		46
Interest income	1		1		3		3
Other funding	-		54		-		100
	\$ 178	\$	192	\$	398	\$	329
Expenses							
Cost of sales	\$ 21	\$	14	\$	47	\$	27
Operating expenses	11		75		21		156
Contractual expenses	100		11		162		11
Finance expenses	72		63		143		126
Wrap-Up Office activities	-		1		4		4
	\$ 204	\$	164	\$	377	\$	324

#### **Parliamentary Appropriations**

AECL receives Parliamentary appropriations to deliver on its missions and priorities. AECL recognized \$148 million of Parliamentary appropriations in the second quarter of 2016-17, compared to \$110 million for the same period in 2015-16. On a year-to-date basis, AECL recognized \$331 million of Parliamentary appropriations, compared to \$180 million for the same period in 2015-16. The variances are primarily related to the fact that, 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'.

#### **Commercial Revenue**

In the second quarter of 2016-17, \$29 million in revenue was generated related to isotope sales, commercial science and technology sales and services, nuclear waste management, and heavy water sales, compared to \$27 million for the same period in 2015-16. On a year-to-date basis, revenues were \$64 million, compared to \$46 million in the first six months of 2015-16. The reported increase in the year-to-date can be attributed primarily to increased heavy water sales in the period.

#### **Interest Income**

Interest income is earned on long-term receivables, investments held in trust and on cash. Income earned in the quarter and year-to date are 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 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 is provided directly to AECL through Parliamentary appropriations.

#### **Cost of Sales**

Cost of sales have increased with the increase in Commercial revenue noted above.

#### **Operating Expenses and Contractual Expenses**

With the implementation of the Government-owned, Contractor-operated model and the associated transfer of the shares of CNL to CNEA on September 13, 2015, the contractual arrangement with CNEA and CNL came into effect. 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 have been reported by AECL as Contractual expenses. Expenditures in this category for the second quarter, which also include AECL's own oversight expenses, total \$111 million, compared to expenses of a similar nature of \$86 million in the second quarter of 2015-16. On a year-to-date basis, operating expenses and contractual expenditures were \$183 million in 2016-17 compared to \$167 million for the same period in 2015-16.

#### **Financial Expenses**

Financial expenses include the increase in the net present value of the decommissioning and waste management provision. Financial expenses in the second quarter of 2016-17 of \$72 million were higher than the \$63 million reported during the same period in 2015-16. On a year-to-date basis, financial expenses were \$143 million compared to \$126 million in 2015-16. These variances are due to the increase of the reported liability as a result of the transfer of the contaminated sites liability associated with the Port Hope Area Initiative to AECL from Natural Resources Canada during 2015-16.

#### **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 are being managed by the Wrap-up Office. Operating expenses for the Wrap-up Office include the cost of staff and third-party service providers to address the retained liabilities. These activities continue to be wound down.

# **Consolidated Cash Flow and Working Capital**

	Three Mont Septe	hs Ended ember 30,	Six Months Ended September 30,		
(\$ millions)	2016	2015	2016	2015	
Cash from operating activities  Cash used in capital activities	\$ <b>54</b> \$ (38)	169 <b>\$</b> (34)	222 \$ (82)	186 (66)	
Cash					
Increase (Decrease)	16	135	140	120	
Balance at beginning of the period	208	61	84	76	
Balance at end of the period	\$ <b>224</b> \$	196 \$	<b>224</b> \$	196	

Overall, AECL's closing cash position for the second quarter of 2016-17 increased to \$224 million compared to the balance at the close of the second quarter of 2015-16 of \$196 million.

## **Operating Activities**

Operating activities generated a net cash inflow of \$54 million in the second quarter of 2016-17, compared to \$169 million during the same period in 2015-16. On a year-to-date basis, operating activities resulted in a net cash inflow of \$222 million compared to \$186 million during the same period the previous year. The variance in the second quarter is primarily related to decreased appropriations received in 2016-17 due to the timing of cash outlays in both periods.

# **Capital Activities**

Capital activities used cash of \$38 million in the second quarter of 2016-17 compared to \$34 million used in the same period in 2015-16. On a year-to-date basis, capital activities used cash of \$82 million

compared to \$66 million used in the same period as the previous year. The year-to-date increase is primarily due to the accelerated construction activities for a new laboratory complex at the Chalk River Laboratories site.

# Highlights of the Consolidated Statements of Financial Position

	Septe	mber 30,	March 31,	Variance	Variance
(\$ millions)		2016	2016	In\$	Ву %
Financial Assets	\$	<b>588</b> \$	481	\$ 107	22%
Liabilities		8,482	8,324	158	2%
Non-Financial Assets		563	506	57	11%
Accumulated Deficit		(7,331)	(7,337)	6	0%

AECL closed the second quarter of 2016-17 with Financial Assets of \$588 million, which represents a \$107 million variance from March 31, 2016. This variance is mainly the result of increased cash received from Parliamentary appropriations for the anticipated contractual expenditures to CNL that was treated as Deferred funding as described above.

The increase in Liabilities of \$158 million can be attributed primarily to the increase in Deferred funding as described above.

The increase in Non-Financial Assets of \$57 million is mainly a result of spending toward tangible capital assets.

# **Management of Risks and Uncertainties**

Risks and uncertainties are described in AECL's 2015-16 Annual Financial Report under the section "Management's Discussion and Analysis." Risks and uncertainties and risk management practices as noted in the 2015-16 Annual Financial Report have not materially changed in the first six months of 2016-17.

#### MANAGEMENT'S RESPONSIBILITY

Management is responsible for the preparation and fair presentation of these consolidated quarterly financial statements in accordance with the Treasury Board of Canada "Standard on Quarterly Financial Reports for Crown Corporations," and for such internal controls as Management determines is necessary to enable the preparation of consolidated quarterly financial statements that are free from material misstatement. Management is also responsible for ensuring all other information in this quarterly financial report is consistent, where appropriate, with the consolidated quarterly financial statements.

Based on our knowledge, these unaudited consolidated quarterly financial statements present fairly, in all material respects, the financial position, results of operations and cash flows of the Corporation, as at the date of and for the periods presented in the consolidated quarterly financial statements.

**Richard Sexton** 

Acting Chief Transition Officer

November 29, 2016

Chalk River, Canada

Avid **S**mith

(Nief Financial Officer

November 29, 2016 Chalk River, Canada

# **UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS**

## **Consolidated Statements of Financial Position (Unaudited)**

	September 30,	March 31,	April 1,
Notes	2016	2016	2015
	224 546	04.552	75.042
	•	,	75,912
	-		-
	,	,	47,805
5	40,278	54,552	59,581
	52,353	68,579	99,794
	6,556	7,242	25,884
	205,128	212,968	221,283
	588,061	480,752	530,259
6	66.442	62.926	133,666
7	-		35,798
	· ·		-
	-		_
	_0.,000		
	257.262	245.011	220,510
		,	,
8	6.767.450	6.763.423	6,487,228
9			-, - , -
			3,165
	8,482,433	8,323,947	6,880,367
	(7,004,272)	(7.042.405)	(6.350.400)
	(7,894,372)	(7,843,195)	(6,350,108)
10	562,557	505,487	410,558
	607	430	3,486
	563,164	505,917	414,044
	(7.331.208)	(7.337.278)	(5,936,064)
	5 6 7 8 9	Notes 2016  224,516 8,835 50,395 5 40,278 52,353 6,556 205,128 588,061  6 66,442 7 25,861 125,661 167,980 257,262 8 6,767,450 9 1,071,420 357 8,482,433 (7,894,372)  10 562,557 607	Notes         2016         2016           224,516         84,553           8,835         3,538           50,395         49,320           5         40,278         54,552           52,353         68,579           6,556         7,242           205,128         212,968           588,061         480,752           6         66,442         62,926           7         25,861         27,898           125,661         114,287           167,980         -           257,262         245,011           8         6,767,450         6,763,423           9         1,071,420         1,109,493           357         909           8,482,433         8,323,947           (7,894,372)         (7,843,195)           10         562,557         505,487           607         430           563,164         505,917

# **Consolidated Statements of Operations and Accumulated Deficit (Unaudited)**

			Three IV	lonths Ended	Six IV	onths Ended
		2016-17	S	eptember 30,	S	eptember 30,
(thousands of Canadian dollars)	Notes	Budget	2016	2015	2016	2015
Revenues						
Parliamentary appropriations	11	689,049	147,596	110,200	330,316	180,200
Commercial revenue		67,500	29,470	26,699	64,328	46,334
Interest income		5,800	1,308	1,395	3,157	2,483
Other funding	11	-	-	54,338	-	99,688
		762,349	178,374	192,632	397,801	328,705
Expenses						
Cost of sales		37,125	21,489	13,838	46,613	27,431
Operating expenses		47,000	10,577	75,364	21,120	156,472
Contractual expenses	12	327,347	100,128	11,090	162,162	11,090
Finance expenses		198,592	71,699	62,918	143,398	125,836
Wrap-Up Office activities		6,800	426	1,323	3,637	3,574
		616,864	204,319	164,533	376,930	324,403
Surplus (Deficit) for the period		145,485	(25,945)	28,099	20,871	4,302
Accumulated deficit, beginning of peri	iod	(7,337,278)	(7,298,219)	(5,967,747)	(7,337,278)	(5,936,064)
Transfer to deferred decommissioning	g	•	•	•	•	·
and waste management funding		(24,501)	(6,320)	(6,320)	(12,251)	(12,251)
Transfer to repayable contributions		-	(724)	(2,499)	(2,550)	(4,454)
Accumulated deficit, end of period		(7,216,294)	(7,331,208)	(5,948,467)	(7,331,208)	(5,948,467)

# **Consolidated Statements of Change in Net Financial Debt (Unaudited)**

			Three Months Ended		Six N	1onths Ended
		2016-17	S	eptember 30,	S	eptember 30,
(thousands of Canadian dollars)	Notes	Budget	2016	2015	2016	2015
Surplus (deficit) for the period		145,485	(25,945)	28,099	20,871	4,302
Tangible capital assets						
Acquisition of tangible capital assets	10	(167,600)	(36,356)	(35,729)	(69,521)	(75,185)
Amortization of tangible capital assets	10	24,000	6,476	5,623	12,313	11,054
Disposal of tangible capital assets	10	-	138	-	138	-
		(143,600)	(29,742)	(30,106)	(57,070)	(64,131)
Non-financial assets Changes in prepaid expenses		-	248	1,914	(177)	3,458
Decrease (increase) in net debt		1,885	(55,439)	(93)	(36,376)	(56,371)
Net debt at beginning of period  Transfer to deferred decommissioning		(7,843,195)	(7,831,889)	(6,414,272)	(7,843,195)	(6,350,108)
and waste management funding		(24,501)	(6,320)	(6,320)	(12,251)	(12,251)
Transfer to repayable contributions		-	(724)	(2,499)	(2,550)	(4,454)
Net debt at end of period		(7,865,811)	(7,894,372)	(6,423,184)	(7,894,372)	(6,423,184)

# **Consolidated Statements of Cash Flows (Unaudited)**

	Three Mo	Six Months Ended		
	Se	ptember 30,	Se	ptember 30,
(thousands of Canadian dollars)	2016	2015	2016	2015
Operating transactions				
Cash receipts from Parliamentary				
appropriations	167,980	225,582	498,296	295,582
Cash receipts from customers	36,964	36,534	95,718	86,528
Cash receipts for decommissioning and				
waste management activities	-	53,316	-	100,210
Cash paid to suppliers	(46,220)	(57,149)	(185,612)	(95,707)
Cash paid to employees	(3,965)	(32,344)	(9,023)	(103,545)
Cash paid for decommissioning activities	(100,311)	(57,030)	(177,444)	(97,472)
Interest received	177	182	463	369
Cash provided by operating transactions	54,625	169,091	222,398	185,965
Capital transactions	()	( )		
Acquisition of tangible capital assets	(38,395)	(34,038)	(82,435)	(65,489)
Cash applied to capital transactions	(38,395)	(34,038)	(82,435)	(65,489)
Increase (decrease) in cash and cash equivalents	16,230	135,053	139,963	120,476
Cash and cash equivalents at beginning of period	208,286	61,335	84,553	75,912
Cash and cash equivalents at end of period	224,516	196,388	224,516	196,388

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS For the three and six months ended September 30, 2016

(Expressed in thousands of Canadian dollars)

(Unaudited)

# 1. The Corporation

Atomic Energy of Canada Limited (AECL) is a federal Crown corporation whose mandate is to fulfill the Government's waste and decommissioning responsibilities, provide nuclear expertise to support federal roles and responsibilities, and offer services to users of the Nuclear Laboratories on commercial terms. 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), the assets of 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*. 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 the assets of AECL's CANDU Reactor Division (Commercial Operations) to Candu Energy Inc., a whollyowned 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. With the transition to the Government-owned, Contractor-operated business model, the restructuring of AECL is now complete. 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 2016-2017 to 2020-2021 Corporate Plan received Governor in Council approval in the first quarter of the 2016-17 fiscal year. The Corporate Plan is aligned with the restructuring direction provided by the Shareholder and reflects AECL's new role under the Government-owned, Contractor-operated model.

# 3. Significant Accounting Policies

#### a) Adoption of New Accounting Standards

Effective April 1, 2016, AECL adopted the Public Sector Accounting Standards (PSAS). 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.

These consolidated quarterly financial statements should be read in conjunction with the annual audited consolidated financial statements dated March 31, 2016, as well as Note 4 relating to the transition to Public Sector Accounting Standards.

Both financial and non-financial assets are reported on the Statement 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, 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 budget is reflected in the Consolidated Statements of Operations and Accumulated Deficit and the Consolidated Statements of Change in Net Financial Debt. Budget data 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.

Budget figures have not been audited, and are presented for information purposes.

## c) 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 Unit Credit 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. The Corporation 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 the Company'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.

## d) Decommissioning and Waste Management Provision

AECL provides for its obligations to decommission nuclear facilities and to manage nuclear waste in order to satisfy regulatory requirements. The best estimate of an obligation is recognized in the period in which a reliable 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 Finance 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. Upon settlement of the liability, a gain or loss will be recorded. 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 and depreciated 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.

#### e) 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.

## f) 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	20-40 years
Machinery & Equipment	3-25 years
Software Costs	3 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.

## g) 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.

# 4. Transition to Public Sector Accounting Standards

Effective April 1, 2016, AECL adopted Canadian Public Sector Accounting Standards (PSAS). These amended 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 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 Statement of Cash Flow.

Under PSAS, the discount rate applied to any Asset Retirement Obligations should be 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 & Waste Management Provision

Under PSAS, the discount rate applied to determine the present value of the liability should be consistent with PSAS, and 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.

#### c) Contaminated Sites Liability

Under PSAS, the discount rate applied to determine the present value of the liability should be consistent with PSAS, and 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 financial statements as part of the decommissioning and waste management provision has been reclassified to the contaminated sites liability.

## 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.

Under PSAS, the discount rate for the non-funded benefits must 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 surplus (deficit).

#### 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) Statement of Cash Flows

The presentation of AECL's Consolidated Cash Flow Statements 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 has also been amended to be consistent with other presentation changes to the Consolidated Statements of Financial Position and the Consolidated Statements of Operations as stated above in *Deferred Capital Funding*, of this note.

# g) 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.

# h) Summary of Financial Adjustments

(thousands of Canadian dollars)	Notes		
Accumulated deficit as at April 1, 2015, as previously reported per IFRS		\$	(9,785,854)
Adjustment to Tangible capital assets	a)	Y	(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	C)	\$	(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)		471,692
Accumulated deficit as at March 31, 2016, as restated per PSAS		\$	(7,337,278)
A constitution of the second o			(420.046)
Annual deficit as at March 31, 2016, as previously reported per IFRS		\$	(139,916)
Adjustment to Parliamentary appropriations for capital funding			145,328
Adjustment to Parliamentary appropriations for amortization of deferred capital			(45.042)
funding			(45,843)
Adjustment to Revaluation gain (loss) on decommissioning and waste management			(470,500)
provision and other			(173,630)
Adjustment to Financial expenses			(45,129)
Adjustment to Operating expenses		_	(1,234)
Annual deficit as at March 31, 2016, as restated per PSAS		\$	(260,424)

## 5. Trade and Other Receivables

	September 30,		March 31,
(thousands of Canadian dollars)		2016	2016
Trade receivables	\$	<b>18,346</b> \$	16,094
Less: allowance for doubtful accounts		(3,419)	(3,419)
Net trade receivables	\$	<b>14,927</b> \$	12,675
Other receivables:			
Unbilled revenue		11,255	10,407
Consumption taxes receivable		12,998	9,911
Appropriations receivable		-	19,400
Other receivables		1,098	2,159
	\$	40,278 \$	54,552

# 6. Accounts Payable and Accrued Liabilities

	September 30,			March 31,	
(thousands of Canadian dollars)		2016		2016	
Trade payables	\$	351	\$	562	
Other payables and accrued expenses	<b>,</b>	15,336	Ų	10,699	
Accrued payroll liabilities		1,859		2,810	
Amounts due to related parties		34,097		31,548	
Amounts due to Shareholder		584		381	
Provisions		13,884		15,851	
Restructuring provision		331		1,075	
	\$	66,442	\$	62,926	

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 19 of the annual audited consolidated financial statements dated March 31, 2016).

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, disputes with suppliers and an onerous lease.

# 7. Employee Future Benefits

#### a) Pension Plan

Employees of AECL participate in the Public Service Pension Plan (PSPP). The PSPP is a contributory defined benefit plan established through legislation and sponsored by the Government of Canada. Contributions are required by both the employees and the employer to cover current service cost. The President of the Treasury Board of Canada sets the required employer contributions based on a multiple of the employees' required contribution. Total contributions of \$0.4 million (Q2 2015-16: \$7.0 million) were recognized as an expense in the quarter and for the year-to-date contributions of \$1.2 million (year-to-date 2015-16: \$15.4 million) were recognized as an expense. 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-subsidiary, 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 are for its small workforce which is responsible for providing contractual oversight of the Government-owned, Contractor-operated model.

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, multiplied by the average of the best five consecutive years of earnings. The benefits are coordinated with Canada/Québec Pension Plan benefits and are indexed to inflation.

## b) Employee Benefits

AECL provides certain voluntary termination compensation (VTC) and other post-employment benefits as described in Note 4(n) of the annual audited consolidated financial statements dated March 31, 2016. The defined benefit obligation is funded as benefits are paid. Accordingly, there are no plan assets and the defined plan deficit is equal to the defined benefit obligation of \$25.9 million (March 31, 2016: \$27.9 million).

The VTC included in the reported Employee benefits liability is \$11.4 million (March 31, 2016: \$12.7 million) and is payable in instances of future voluntary resignations and retirements. An estimate of the amounts expected to be paid in 2016-17 is based on AECL's most recent actuarial valuation.

AECL's total expense for employee benefits was \$1.6 million for this quarter (Q2 2015-16: \$1.4 million). On a year-to-date basis, the total expense for employee benefits was \$2.3 million (year-to-date 2015-16: \$2.3 million).

## 8. Decommissioning and Waste Management Provision

		eptember 30,	March 31,	
(thousands of Canadian dollars)		2016	2016	
Carrying amount - Beginning of period	\$	<b>6,763,423</b> \$	6,487,228	
Liabilities settled		(132,601)	(208,143)	
Unwinding of discount		131,193	251,672	
Revision in estimate and timing of expenditures		-	223,536	
Waste, decommissioning and site restoration costs from ongoing				
operations		5,435	9,130	
Carrying amount - End of period	\$	<b>6,767,450</b> \$	6,763,423	

As the discount rate has remained unchanged over the period, there is no change in the discount rate to report.

The undiscounted future expenditures, adjusted for inflation, for the plan projects comprising the liability are \$17,481.0 million (March 31, 2016 – \$17,613.6 million).

The provision as at September 30, 2016 and March 31, 2016 was discounted using a rate of 3.88%.

# 9. Contaminated Sites Liability

As part of the implementation of the Government-owned, Contractor-operated model, the responsibilities for the implementation of Canada's commitments with respect to the Port Hope Area Initiative, 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 \$1,071.4 million (Q2 2015-16: \$nil) for the Port Hope Area Initiative using a net present value technique. The nature of the liability is the cleanup and local, long-term, safe management of historic low-level radioactive waste in the municipalities of Port Hope and Clarington. The liability is discounted using net present value techniques at a rate of 2.20%. The estimated total undiscounted expenditures are \$1,199.5 million (March 31, 2016: \$1,249.8 million).

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). A liability has not been recognized as insufficient information is available regarding

the scope, required remediation activities and schedule to reasonably estimate the cost of the obligation.

	Se	eptember 30,	March 31,
(thousands of Canadian dollars)		2016	2016
Carrying amount - Beginning of period	\$	1,109,493	\$ -
Liabilities settled		(50,277)	(31,310)
Unwinding of discount		12,204	13,295
Revision in estimate and timing of expenditures		-	16,894
Contributed liability		-	1,110,614
Carrying amount - End of period	\$	1,071,420	\$ 1,109,493

# 10. Tangible Capital Assets

ı	(thousands	οf	Canadian	dollars	)

	 struction in progress	and and land	Buildings	Reactors, achinery and Equipment		Total
Cost at March 31, 2016	\$ 220,749	\$ 83,249	\$ 309,765	\$ 427,189	\$ 1	,040,952
Additions and transfers	69,521	73	1,616	1,058		72,268
Disposals and transfers	(2,747)	(371)	-	(3,149)		(6,267)
Cost at September 30, 2016	287,523	82,951	311,381	425,098	1	,106,953
Depreciation at March 31, 2016	-	41,617	187,824	306,024		535,465
Increase in depreciation	-	1,586	3,129	7,598		12,313
Disposals	-	(371)	-	(3,011)		(3,382)
Depreciation at June 30, 2016	-	42,832	190,953	310,611		544,396
Net carrying amount at March 31, 2016	220,749	41,632	121,941	121,165		505,487
Net carrying amount at September 30, 2016	\$ 287,523	\$ 40,119	\$ 120,428	\$ 114,487	\$	562,557

# 11. Funding

## a) Parliamentary Appropriations

AECL segregates its Parliamentary appropriations, which include 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, as well as decommissioning and waste management activities. Statutory Funding relates to amounts associated with obligations pursuant to the divestiture of the Commercial Operations business.

For the three and six months ended September 30, 2016, Parliamentary appropriations were received and recognized as follows:

		Three Mo	nths Ended	Six Months Ended			
(thousands of Canadian dollars)		Sep	tember 30,	September 30,			
		2016	2015	2016	2015		
Parliamentary appropriations for operating and							
capital expenditures							
Amount received during the period for operating							
and capital expenditures	\$	<b>167,980</b> \$	225,580 \$	<b>498,296</b> \$	295,580		
Amount receivable at the end of the period		-	-	-	-		
Amount deferred from the previous period		147,596	-	-	-		
Amount deferred to the next period		(167,980)	(115,380)	(167,980)	(115,380)		
		147,596	110,200	330,316	180,200		
Statutory funding							
Amount received during the period		-	-	-	-		
Amount receivable at the end of the period		-	-	-	-		
		-	-	-	-		
Total Parliamentary appropriations recognized	\$	<b>147,596</b> \$	110,200 \$	<b>330,316</b> \$	180,200		

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'.

In Q2 2016-17, AECL received \$168 million and recognized a sum of \$148 million (Q2 2015-16: \$225 million received and \$110 million recognized). On a year-to-date basis, AECL received \$498 million and recognized \$330 million in Parliamentary appropriations (year-to-date 2015-16: \$295 million received and \$180 million recognized). The difference between received and recognized Parliamentary appropriations relate to amounts recorded as deferred 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

Other funding was recognized as follows:

	<b>Three Months Ended</b>			Six	Six Months E				
		ember 30,		Sept	ember 30,				
(thousands of Canadian dollars)	2016		2015		2016		2015		
Cost recoveries from third parties and other	\$ -	\$	6,267	\$	-	\$	11,170		
Decommissioning and waste management	-		48,071		-		88,518		
	\$ -	\$	54,338	\$	-	\$	99,688		

As of September 13, 2015, AECL took over responsibility for fulfilling the Government's obligations with respect to legacy obligations associated with AECL sites as well as historic low-level radioactive wastes. 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.

# 12. 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:

	Three Mont	ths Ended	Six Months Ende				
	Sept	ember 30,	Septem	ber 30,			
(thousands of Canadian dollars)	2016	2015	2016	2015			
Contractual amounts paid or payable	\$ <b>254,950</b> \$	25,533 <b>\$</b>	<b>449,878</b> \$	25,533			
Less: Costs charged to Decommissioning and waste management provision (see Notes 8, 9)	(101,791)	(7,437)	(181,681)	(7,437)			
Less: Costs charged to Construction in progress	(37,164)	(4,581)	(69,662)	(4,581)			
Less: Costs classified as Cost of sales	(15,867)	(2,425)	(36,373)	(2,425)			
Contractual expenses	\$ <b>100,128</b> \$	11,090 \$	<b>162,162</b> \$	11,090			

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

The balance due to CNL at September 30, 2016 was \$125.7 million and represents funding owing for allowable costs incurred by CNL.



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