

Canadian Nuclear Safety Commission

2014–15

Departmental Performance Report

The Honourable Jim Carr, P.C., M.P.
Minister of Natural Resources

Canadian Nuclear Safety Commission 2014-15 Departmental Performance Report

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President's Message

It is once again my honour and great pleasure to present the Canadian Nuclear Safety Commission (CNSC) Departmental Performance Report for 2014–15. In the past year, the CNSC continued its commitment to nuclear safety by strengthening its regulatory framework, assessing applications and granting licences, conducting inspections and enforcing regulations. Through this work, the CNSC continues to deliver on its strategic outcome of safe and secure nuclear installations and processes used solely for peaceful purposes, and public confidence in the nuclear regulatory regime's effectiveness.



In the past year, the CNSC's work focused on four main priorities, which are outlined in greater detail throughout this report:

- regulatory oversight and licensing of nuclear facilities
- strengthening the regulatory framework
- disseminating objective, scientific and technical information to the public and to stakeholders
- improving management effectiveness

The Commission held public hearings for several major facilities, and its decisions included removal of the Pickering Nuclear Generating Station's hold point and issuance of a license for continued operation until 2020. The Commission also held the first part of a public hearing to renew the operating licence for the Bruce A and B Nuclear Generating Stations. Additionally, in June 2015, the Federal Court of Appeal heard the appeal by the CNSC and others of a Federal Court decision dealing with OPG's Darlington New Nuclear Power Plant Project. On September 10, 2015, the Court rendered a decision in favour of OPG and the Canadian government.

The work of the Joint Review Panel to consider the proposed Deep Geologic Repository Project for Low- and Intermediate-Level Radioactive Waste was largely completed during the past year. Our staff provided extensive support to the panel, which submitted its report to the Minister of the Environment in May 2015. Should the Minister accept the panel's recommendations, the project will move to the next phase, which is licensing under the *Nuclear Safety and Control Act*.

Significant progress has been made to address the Fukushima Action Items (FAIs), following the Fukushima event of 2011. The nuclear industry is on track to complete the remaining FAIs by the December 2015 deadline as set forth in the *CNSC Integrated Action Plan On the Lessons Learned From the Fukushima Daiichi Nuclear Accident*.

In addition to these large initiatives and special projects, the bulk of our work entails day-to-day oversight of nearly 2,000 licensees, to ensure the continued safety of all nuclear activities in Canada. Our ongoing efforts and commitment to safety are reflected in the Canadian nuclear industry's excellent safety record. Our goal is to maintain this success as we continue to strive toward being the best nuclear regulator in the world.

Michael Binder
President

Section I: Organizational Expenditure Overview

Organizational Profile

Appropriate Minister: Minister of Natural Resources

Institutional Head: Michael Binder, President

Ministerial Portfolio: Natural Resources Canada

Enabling Instrument(s): *Nuclear Safety and Control Act (NSCA)*

Year of Incorporation / Commencement: 2000

Organizational Context

Raison d'être

The Canadian Nuclear Safety Commission (CNSC) was established on May 31, 2000, with the coming into force of the *Nuclear Safety and Control Act*ⁱ (NSCA). It replaced the Atomic Energy Control Board, established in 1946 by the *Atomic Energy Control Act*. The CNSC is a departmental corporation listed in Schedule II of the *Financial Administration Act*ⁱⁱ, and reports to Parliament through the Minister of Natural Resources.

Mission

The Canadian Nuclear Safety Commission regulates the use of nuclear energy and materials to protect health, safety, security and the environment, and to implement Canada's international commitments on the peaceful use of nuclear energy; and to disseminate objective scientific, technical and regulatory information to the public.

Mandate

Under the NSCA, the CNSC:

- regulates the development, production and use of nuclear energy in Canada to protect health, safety and the environment
- regulates the production, possession, use and transport of nuclear substances, and the production, possession and use of prescribed equipment and prescribed information
- implements measures respecting Canada's international commitments on the non-proliferation of nuclear weapons and the peaceful use of nuclear energy
- is responsible for disseminating objective scientific, technical and regulatory information concerning the CNSC's activities, and about how the development, production, possession, transport and use of nuclear substances affect the environment and the health and safety of persons

Responsibilities

The CNSC is an independent regulatory agency and quasi-judicial administrative tribunal. It provides regulatory oversight of all nuclear-related activities and substances in Canada.

Environmental protection is a key element of the CNSC's mission and mandate. As the sole responsible authority for nuclear projects under the *Canadian Environmental Assessment Act, 2012 (CEAA 2012)*ⁱⁱⁱ, the CNSC carries out environmental assessments in accordance with this legislation. For nuclear projects that no longer require environmental assessments under CEAA 2012, the NSCA continues to ensure the public and environment are protected through

environmental assessments under the NSCA. The CNSC is also responsible for designating installations under the *Nuclear Liability Act*^{iv}.

The CNSC is Canada's authority for the implementation of nuclear safeguards, as set out in the *Protocol Additional to the Agreement Between Canada and the International Atomic Energy Agency for the Application of Safeguards in Connection With the Treaty on the Non-Proliferation of Nuclear Weapons*^v. The CNSC also administers the nuclear non-proliferation provisions of bilateral nuclear cooperation agreements between the Government of Canada and foreign nuclear trading partners.

The Commission has up to seven permanent members, appointed by the Governor-in-Council, and is supported by CNSC employees across Canada. The President of the CNSC is a full-time Commission member, while other members may be appointed to serve on a full- or part-time basis. Temporary members can also be appointed by the Governor-in-Council, as required. Commission members are chosen according to their credentials, and are independent of any government, industry or special interest group.

In addition to being a regulatory organization, the Commission is an administrative tribunal set up at arm's length from government. The Commission makes most decisions through a public hearing process, guided by clear rules of procedure. Interested parties and members of the public may be heard at proceedings that are periodically held in communities close to major nuclear facilities, in order to make them as accessible as possible to affected persons.

The Commission provides extensive reasons for its decisions, which are based on information that may include public input, as well as the recommendations of expert CNSC staff. Decisions, hearing transcripts, webcast archives and CNSC Online resource modules are publicly available on the CNSC website, Facebook and YouTube. Through Twitter, the Commission now has an additional tool to inform the public about important Commission decisions, press releases and news about events or conferences in which the CNSC participates.

Strategic Outcome and Program Alignment Architecture

The following illustrates the CNSC’s strategic outcome, as well as the complete framework of programs and sub-programs that support the strategic outcome.

Strategic outcome: Safe and secure nuclear installations and processes used solely for peaceful purposes and public confidence in the nuclear regulatory regime’s effectiveness.

- 1.1 Program:** Regulatory framework program
 - 1.1.1 Sub-program:** Administration of the NSCA
 - 1.1.2 Sub-program:** Domestic and international arrangements
 - 1.1.3 Sub-program:** Regulatory research
 - 1.1.4 Sub-program:** Stakeholder engagement

- 1.2 Program:** Licensing and certification program
 - 1.2.1 Sub-program:** Application assessment
 - 1.2.2 Sub-program:** Licensing and certification decisions

- 1.3 Program:** Compliance program
 - 1.3.1 Sub-program:** Verification
 - 1.3.2 Sub-program:** Enforcement

- 1.4 Program:** Internal services

Organizational Priorities

Priority	Type	Program(s)
1. Provide regulatory oversight for licensing and certification of nuclear facilities and activities	Ongoing	Licensing and certification

Summary of progress

In the past year, the Commission held public hearings for several major facilities, and its decisions included removal of the Pickering Nuclear Generating Station's hold point and issuance of a license for continued operation until 2020. The Commission also held the first part of a public hearing to renew the operating licence for the Bruce A and B Nuclear Generating Stations.

The CNSC continues to ensure a state-of-readiness for any new major projects that may develop, such as for the Darlington New Nuclear Power Plant Project. The CNSC was one of the appellants challenging the [Federal Court's May 14, 2014 judgment](#)^{vi} on the Darlington New Nuclear Power Plant Project proposed by Ontario Power Generation (OPG). In the CNSC's view, there were aspects of the May 14, 2014 Federal Court judgment that contained errors of law concerning the Court's interpretation of the *Canadian Environmental Assessment Act* and the manner in which it reviewed the assessment done by the Joint Review Panel in this case. On September 10, 2015, the Federal Court of Appeal [rendered a decision](#)^{vii} in favour of OPG and the Canadian government.

The work of the Joint Review Panel to consider the proposed Deep Geologic Repository Project for Low- and Intermediate-Level Radioactive Waste was largely completed during the past year. CNSC staff provided extensive support to the panel, which submitted its report to the Minister of the Environment in May 2015. Should the Minister accept the panel's recommendations, the project will move to licensing.

A CNSC integrated action plan was established in response to the events at Fukushima to identify measures to further improve nuclear safety. The plan lists 36 distinct Fukushima action items (FAIs) for nuclear power plants. Significant progress has been made to address these FAIs. The nuclear industry is on track to complete the remaining FAIs by the December 2015 deadline as set forth in the *CNSC Integrated Action Plan On the Lessons Learned From the Fukushima Daiichi Nuclear Accident*.

Priority	Type	Program(s)
2. Strengthen the regulatory framework	Ongoing	Regulatory framework

Summary of progress
<p>Strengthening of the regulatory framework is a core priority for the CNSC. One of the principal tools to manage the framework is the CNSC’s Regulatory Framework Plan. In 2014–15, the CNSC met its commitments under the plan including the completion of the <i>Regulations Amending Certain Regulations Made Under the Nuclear Safety and Control Act</i>, as well as eight regulatory documents and three discussion papers. The organization also implemented all of its commitments under the Government of Canada’s regulatory reform initiatives.</p> <p>The CNSC supported NRCan’s efforts to develop a new Federal Nuclear Science and Technology Program as part of the restructuring of Atomic Energy of Canada Limited.</p> <p>Over 2014–15, the CNSC also continued its work to support Canada’s commitment towards establishing a national nuclear forensics capability. The CNSC laboratory is transitioning into an operational role within the national nuclear forensics laboratory network.</p>

Priority	Type	Program(s)
3. Disseminate objective, scientific, technical and regulatory information to the public and stakeholders	Ongoing	Regulatory framework

Summary of progress
<p>Engaging our stakeholders in dialogue and disseminating objective information is a significant part of the CNSC’s mandate. In 2014–15, the CNSC continued to make engagement and communication activities a priority by: participating in over 200 outreach and engagement events targeted to the general public, nuclear host communities and youth; enhancing and expanding upon the CNSC’s digital presence (e.g., through social media, including the launch of the CNSC Twitter account this year); providing regulatory oversight of licensee public information and disclosure programs (i.e., through new regulatory guidance provided within RD/GC-99.3, <i>Public Information and Disclosure</i> and draft REGDOC-3.2.2, <i>Aboriginal Engagement</i>); consulting and providing guidance on engagement with Aboriginal communities; and, providing public participation funding (i.e., \$246,000 to 41 recipients for 8 different projects).</p>

Priority	Type	Program(s)
4. Improve management effectiveness	Ongoing	Internal services
Summary of progress		
<p>In 2014–15, the CNSC continued to strengthen management effectiveness through:</p> <ul style="list-style-type: none"> • developing a new strategic planning framework, program alignment architecture and performance measurement framework, which will serve as the basis of the CNSC’s future planning and reporting cycles, beginning in 2015–16 • completing branch risk profiles and continuing efforts towards development of its enterprise risk profile • continuing to revise the CNSC management system to strengthen management effectiveness • continuing to make progress on the workforce of the future initiative to ensure that the organization has the design, skills and capabilities it needs to carry out its regulatory mandate and respond to changes in its operating environment • implementing management and leadership development activities, staff innovation labs, and encouraging high participation in the Public Service Employee Survey in an effort to strengthen the organization’s leadership capacity, management accountability and employee engagement and alignment • strengthening the financial guarantee program, by approving and implementing a new model for licensees using nuclear substances, prescribed equipment and Class II facilities on April 1, 2015 • continuing to improve IM/IT infrastructure by addressing legacy applications and integration with Shared Services Canada • continued implementation of the Harmonized Plan: the CNSC’s corporate, client-driven, improvement plan that integrates and aligns all cross-functional CNSC improvement initiatives, including information management - information technology (IM-IT) improvements, into a single prioritized plan 		

Risk Analysis

Risk	Risk response strategy	Link to program alignment architecture
Dynamic regulatory environment	Strategic planning	Internal services

The CNSC operates in an environment that is greatly influenced by changing industry patterns and global economies. Over this past year, the CNSC has made – and continues to make – adjustments to its plans to adequately respond to the evolution of the nuclear industry. Such changes include: (1) the shutdown of the Gentilly-2 nuclear power plant in Bécancour, QC, on December 28, 2012; (2) delays in proceeding with new uranium mine projects; and, (3) the Ontario Government’s announcement (on October 10, 2013) that it will defer investing, for the foreseeable future, in new nuclear generating reactors at the Darlington Nuclear Generating Station.

In response to changing industry activity, the CNSC continued to engage in scenario planning to ensure that it can continue to operate effectively, while providing regulatory oversight of Canada’s nuclear industry. To ensure these scenario plans are integrated into the business of the organization, the CNSC developed a strategic planning framework to guide the organization over the next 10 years. The CNSC is committed to ensuring the safety and security of all Canadian nuclear facilities and activities, overseeing nuclear processes used solely for peaceful purposes, and building public confidence in the nuclear regulatory regime’s effectiveness.

The CNSC will complete development of its enterprise risk profile in 2015–16, which will serve as a key input to future planning.

Actual Expenditures

Table 1 provides a summary of total planned and actual CNSC spending for 2014–15.

Table 1: Budgetary financial resources (dollars)

2014–15 Main Estimates	2014–15 planned spending	2014–15 total authorities available for use	2014–15 actual spending (authorities used)	Difference (actual minus planned)
131,637,295	141,984,925	143,393,125	138,139,569	(3,845,356)

Total budgetary expenditures as shown in the 2014–15 Main Estimates exclude contributions to employee benefit plans related to personnel expenditures incurred pursuant to paragraph 21(3) of the *NSCA*. The 2014–15 actual spending of \$138,139,569 is comprised of \$40,051,490 in voted appropriation, \$13,657,948 in contributions to employee benefit plans, \$84,410,163 for expenditures pursuant to paragraph 21(3) of the *NSCA* and \$19,968 for the spending of proceeds from the disposal of surplus Crown assets.

The financial resources table above provides a summary of total planned spending, total authorities and actual spending for the CNSC in fiscal year 2014–15. The increase from Main Estimates to planned spending is mainly explained by contributions to employee benefit plans related to personnel expenditures pursuant to subsection 21(3) of the *NSCA*. The increase from

planned spending to total authorities available for use is primarily due to funds in the amount of \$2.8 million received from Treasury Board Secretariat (TBS) for a one-time transition payment for implementing salary payment in arrears by the Government of Canada.

Table 2 provides a summary of total planned and actual human resources for the CNSC in fiscal year 2014–15.

Table 2: Human resources (full-time equivalents [FTEs])

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
804	788	(16)

Table 3 provides a summary of both planned spending and actual spending per program for three fiscal years.

Table 3: Budgetary performance summary for strategic outcome and programs (dollars)

Strategic outcome(s), program(s) and internal services	2014–15 Main Estimates	2014–15 planned spending	2015–16 planned spending	2016–17 planned spending	2014–15 total authorities available for use	2014–15 actual spending (authorities used)	2013–14 actual spending (authorities used)	2012–13 actual spending (authorities used)
Strategic outcome: 1. Safe and secure nuclear installations and processes used solely for peaceful purposes and public confidence in the nuclear regulatory regime's effectiveness								
Regulatory framework program	26,049,097	28,420,217			27,784,689	28,509,322	27,536,138	29,682,743
Licensing and certification program	26,179,983	28,996,918			29,186,133	21,355,025	24,072,978	25,304,007
Compliance program	38,703,659	42,979,637			43,163,575	45,872,668	48,652,198	41,778,894
Nuclear fuel cycle program			12,245,890	12,381,333				
Nuclear reactors program			40,776,958	41,227,964				
Nuclear substances and prescribed equipment program			12,637,501	12,777,275				
Nuclear non-proliferation program			6,694,722	6,768,768				
Scientific, technical, regulatory and public information program			27,932,468	28,241,410				
Subtotal	90,932,739	100,396,772	100,287,539	101,396,750	100,134,397	95,737,015	100,261,314	96,765,644
Internal services subtotal	40,704,556	41,588,153	41,245,893	41,702,085	43,258,728	42,402,554	45,355,707	42,933,510
Total	131,637,295	141,984,925	141,533,432	143,098,835	143,393,125	138,139,569	145,617,021	139,699,154

The resource levels indicated in the performance summary table above include the amounts reported for the CNSC's Main Estimates as well as the authorities available for use and authorities used for the previous three years, as presented in the *Public Accounts of Canada*. Resource levels for planned spending include the most recent plans, as presented in the 2014–15 and 2015–16 Reports on Plans and Priorities (RPPs).

Following a year-long strategic review of the organization, the CNSC has adopted a new program alignment architecture (PAA) to be implemented in 2015–16. The new architecture more clearly reflects the fundamental aspects of the CNSC's regulatory work.

The new PAA includes the following programs:

- Nuclear fuel cycle program
- Nuclear reactors program
- Nuclear substances and prescribed equipment program
- Nuclear non-proliferation program
- Scientific, technical, regulatory and public information program
- Internal services program

The CNSC's Main Estimates for fiscal year 2014–15 totaled \$131.6 million, compared to total authorities of \$143.4 million. The \$11.8 million difference is mainly explained by:

- contributions to employee benefit plans for personnel expenditures related to subsection 21(3) of the NSCA that were not included in the 2014–15 Main Estimates
- funding received from TBS following the ratification of a new collective agreement
- operating budget carry-forward from 2013–14 to 2014–15
- funds received from TBS for a one-time transition payment for implementing salary payment in arrears by the Government of Canada
- a reduction in the statutory authorities due to lower expenditures than planned, pursuant to subsection 21(3) of the NSCA. This reduction is mainly attributable to the reduction phased in over 2013–14 and 2014–15, related to Hydro-Québec's announcement to shut down the Gentilly-2 Nuclear Generating Station

The change in planned spending between 2014–15 and 2016–17 is mainly due to a projected increase in fee revenue due to cost increases related to salaries and wages and a phased-in review of formulas used within the *Canadian Nuclear Safety Commission Cost Recovery Fees Regulations*.

The CNSC’s actual spending increased from \$139.7 million in 2012–13 to \$145.6 million in 2013–14 due to spending related to severance cash-out. In 2014–15, the CNSC’s actual spending decreased to \$138.1 million due to spending in 2013–14 related to severance cash-out in addition to Hydro-Québec’s announcement to shut down the Gentilly-2 Nuclear Generating Station. These decreases were partially offset by the costs of implementing salary payment in arrears by the Government of Canada.

Alignment of Spending With the Whole-of-Government Framework

Table 4 illustrates how the CNSC’s programs align to the Government of Canada social affairs outcome area.

Table 4: Alignment of 2014–15 actual spending with the whole-of-government Framework^{viii} (dollars)

Strategic outcome	Program	Spending area	Government of Canada outcome	2014–15 actual spending
Safe and secure nuclear installations and processes used solely for peaceful purposes and public confidence in the nuclear regulatory regime’s effectiveness	Regulatory framework	Social affairs	A safe and secure Canada	28,509,322
	Licensing and certification			21,355,025
	Compliance			45,872,668

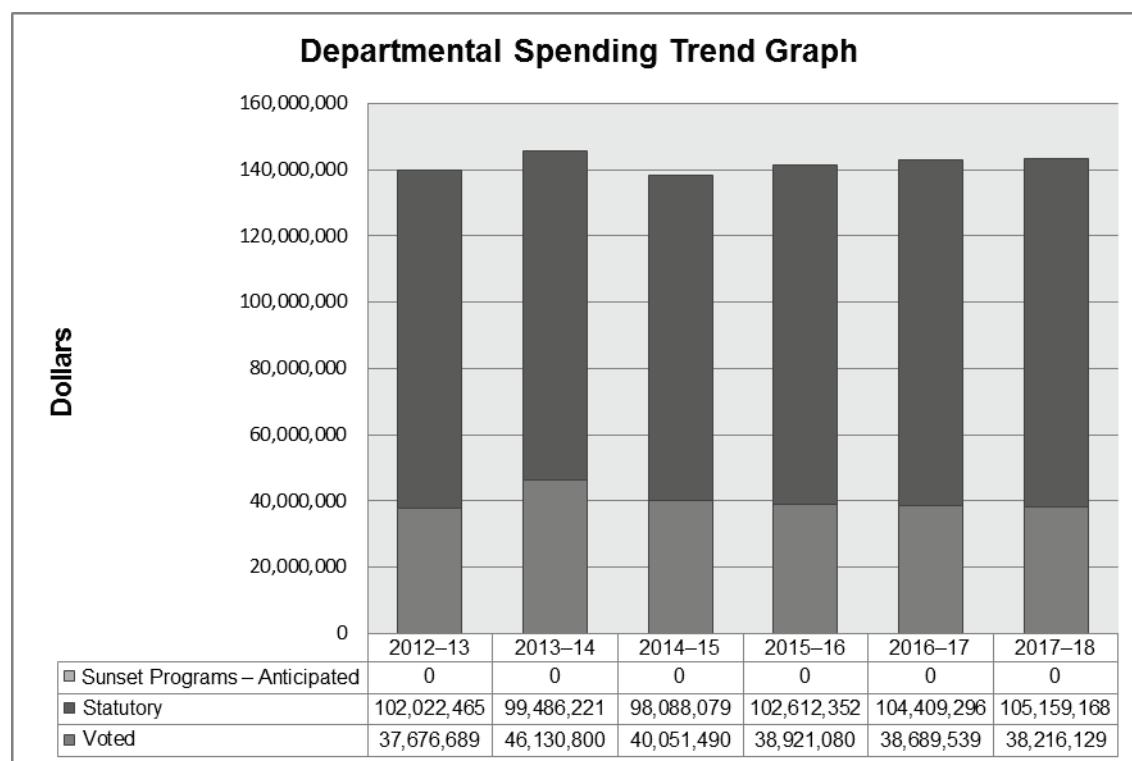
Table 5 illustrates the Government of Canada outcome area to which CNSC’s programs contribute.

Table 5: Total spending by spending area (dollars)

Spending area	Total planned spending	Total actual spending
Economic affairs	0	0
Social affairs	100,396,772	95,737,015
International affairs	0	0
Government affairs	0	0

Departmental Spending Trend

Figure 1: Departmental spending trend, fiscal years 2012–13 to 2017–18



The CNSC’s total spending remains relatively stable and is expected to increase slightly from 2014–15 to 2017–18 as a result of a projected increase in statutory spending.

Planned statutory spending from 2014–15 through 2017–18 shows an increase due to forecasted economic increases for salary costs, and a phased-in review of formulas used within the *Canadian Nuclear Safety Commission Cost Recovery Fees Regulations*, to align costs with regulatory activities for the various licence types.

Planned voted spending shows a decline from 2014–15 through 2017–18. Decreases are mainly due to the one-time transition payment, for implementation of pay in arrears, which occurred in 2014–15, and a decrease in funding received to support the Government of Canada single window initiative – a horizontal initiative under the Perimeter Security and Economic Competitiveness Action Plan (also known as “Beyond the Border Action Plan”), which provided funding over three years, ending in 2016–17.

Over the past two years, the CNSC has seen an increase in voted spending from 2012–13 to 2013–14 due to a significant amount of severance for voluntary departures being cashed out.

The CNSC’s statutory spending decrease from 2012–13 to 2013–14 and from 2013–14 to 2014–15 is primarily due to Hydro-Québec’s announcement to shut down the Gentilly-2 Nuclear Generating Station.

The CNSC does not have any sunset programs at this time.

Expenditures by Vote

For information on the CNSC’s organizational voted and statutory expenditures, consult the *Public Accounts of Canada 2015*^{ix}, which is available on the [Public Works and Government Services Canada website](#)^x.

Section II: Analysis of Programs by Strategic Outcome

Strategic Outcome

The CNSC has one strategic outcome: **safe and secure nuclear installations and processes used solely for peaceful purposes and public confidence in the nuclear regulatory regime’s effectiveness**. To support this outcome, the CNSC has four programs: regulatory framework, licensing and certification, compliance, and internal services.

Program 1.1: Regulatory Framework

The regulatory framework program is in place to ensure that Canada has a clear and pragmatic regulatory framework for the nuclear industry. Funds are used to develop and make improvements to elements of the regulatory framework that protect the health, safety, security and environment for Canadians, while implementing Canada’s international commitments on the non-proliferation of nuclear weapons and the peaceful use of nuclear energy.

The CNSC’s regulatory framework includes elements such as:

- the *Nuclear Safety and Control Act* (NSCA) and regulations made under the NSCA
- regulatory documents, which explain requirements and guidance
- nuclear standards developed by the CSA Group (formerly named the Canadian Standards Association)
- safeguards agreement and additional protocol between Canada and the International Atomic Energy Agency
- bilateral nuclear cooperation agreements and supporting administrative arrangements

The CNSC also designates installations under the *Nuclear Liability Act* and, as the sole responsible authority for nuclear projects under the CEAA 2012, carries out environmental assessments for nuclear projects identified in the *Regulations Designating Physical Activities*^{xi}.

Table 6 presents the CNSC’s planned and actual spending for the regulatory framework program.

Table 6: Budgetary financial resources (dollars)

2014–15 Main Estimates	2014–15 planned spending	2014–15 total authorities available for use	2014–15 actual spending (authorities used)	2014–15 difference (actual minus planned)
26,049,097	28,420,217	27,784,689	28,509,322	89,105

Table 7 presents the CNSC’s planned and actual human resources for the regulatory framework program for 2014–15.

Table 7: Human resources (FTEs)

2014–15 planned	2014–15 actual	2014–15 difference (actual minus planned)
146	146	0

Table 8 aligns the regulatory framework program’s expected result with its corresponding target and performance status.

Table 8: Performance results

Expected results	Performance indicators	Targets	Actual results
A clear and pragmatic regulatory framework	Rate of Court upholding the Commission’s decisions	100 % success rate of Court upholding the Commission’s decisions	100%*

*The Federal Court of Appeal heard the appeal by the CNSC and others of a Federal Court decision dealing with OPG’s Darlington New Nuclear Power Plant Project, in June of 2015; on September 10, 2015, a decision by the Federal Court of Appeal was rendered in favour of OPG and the Canadian government. In another judicial review, this one dealing with OPG’s plan to refurbish reactors at Darlington, the matter has been appealed to the Federal Court of Appeal, and a hearing date is expected to be set shortly. Two additional judicial review applications have recently been initiated in the matter of the environmental assessment for OPG’s deep geologic repository; this matter is being held in abeyance until a decision by the Minister of the Environment is made on the environmental assessment.

Performance Analysis and Lessons Learned

The CNSC continued to modernize its regulatory framework and, as a result, met all of the priorities outlined within its Regulatory Framework Plan and implemented its commitments in support of the Government of Canada’s regulatory reform initiatives.

The CNSC continued to implement a strategic outreach and engagement plan, including strengthening engagement on regulatory affairs. The organization reached out to different target audiences including youth (focus of implementation) and the medical community (focus of research), as well as addressing waste – an emerging operational issue – as part of its core outreach activities.

Outreach and engagement plans were established and 202 activities were actually implemented, well in excess of the 152 originally planned. New outreach planning and reporting processes were developed and implemented in April and June 2014 respectively. Finally, the CNSC developed a range of new outreach tools such as videos, feature articles, infographics and interactive web modules.

The expected result for this program was met, and the CNSC continues to strengthen and clarify its regulatory framework where necessary.

Sub-program 1.1.1: Administration of the NSCA

This sub-program aims to develop necessary changes to the NSCA and its associated regulations, based on the CNSC’s ongoing assessment of any gaps in the legislation or regulations, and to recommend these changes to the Government of Canada.

The program makes recommendations to the Commission, which makes decisions (with Governor-in-Council approval) on new or amended regulations. The Commission also approves regulatory documents that are required to support the regulatory framework and provide clarity for licensees.

Table 9 presents the CNSC’s planned and actual spending for the administration of the NSCA sub-program for 2014–15.

Table 9: Budgetary financial resources (dollars)

2014–15 planned spending	2014–15 actual spending	2014–15 difference (actual minus planned)
7,370,171	7,392,467	22,296

Table 10 presents the CNSC’s planned and actual human resources for the administration of the NSCA sub-program for 2014–15.

Table 10: Human resources (FTEs)

2014–15 planned spending	2014–15 actual spending	2014–15 difference (actual minus planned)
38	38	0

Table 11 aligns the administration of the NSCA sub-program’s expected result with its corresponding target and performance status.

Table 11: Performance results

Expected results	Performance indicators	Targets	Actual results
An NSCA without gaps that establishes a clear mandate, governance, authorities and controls for the CNSC	Percentage of regulations, regulatory documents and discussion papers published as per the Regulatory Framework Plan ^{xii}	80%	86%

Performance Analysis and Lessons Learned

In 2014–15, the CNSC continued the modernization of its regulatory framework, according to the priorities outlined in the CNSC’s Regulatory Framework Plan.

This work included preparing the *Packaging and Transport of Nuclear Substances Regulations, 2015*, which were approved by the Governor in Council and came into force in June 2015;

proposing amendment of the *Radiation Protection Regulations*; and publishing a discussion paper on *Nuclear Non-Proliferation Import and Export Control Regulations* in March 2015.

The CNSC published REGDOC-2.4.2, *Probabilistic Safety Assessment for Nuclear Power Plants*, in May 2014. This regulatory document sets out the details for probabilistic safety assessment, and supersedes S-294, *Probabilistic Safety Assessment for Nuclear Power Plants*, which was published in April 2005. REGDOC-2.4.2 reflects lessons learned from the Fukushima nuclear event of March 2011, and addresses findings from the *CNSC Fukushima Task Force Report*.

Achievements also included briefing the Commission on the omnibus regulatory changes package, which reflects lessons learned from Fukushima, in March 2015, and proceeding with drafting of those regulations. As well, the CNSC completed and published, by the end of the year, all the regulatory documents that were identified for revision or development by the Fukushima Task Force. Additional details about the CNSC's work following the Fukushima event can be found on the [CNSC's web site](#)^{xiii}.

In 2014–15, the CNSC responded to Government of Canada regulatory reform initiatives, meeting commitments to support the Red Tape Reduction Action Plan. The CNSC worked with the Major Project Management Office and its working groups; engaged with the Community of Federal Regulators; and, worked with the Northern Projects Management Office to jointly hold seven information sessions in February 2015 in advance of the Nunavut Impact Review Board Final Environmental Impact Statement on the Kiggavik Uranium Mine Project. The CNSC also formed a team to explore initiatives with the Regulatory Review Council.

During this past fiscal year, the CNSC exceeded its expected target, publishing 86 percent of regulations, regulatory documents and discussion papers as per the Regulatory Framework Plan.

Sub-program 1.1.2: Domestic and International Arrangements

This sub-program aims to establish and maintain collaboration with other organizations within Canada and abroad to regulate the use of nuclear energy and materials, and to implement measures to provide assurances of Canada's compliance with its international obligations on the peaceful use of nuclear energy.

The CNSC interacts frequently with the International Atomic Energy Agency (IAEA) and other regulatory agencies to exchange information and contribute to the development of standards pertaining to nuclear regulation. The CNSC ensures Canada's compliance with the *Canada–IAEA Safeguards Agreement* and the Additional Protocol to that agreement.

The CNSC also implements the non-proliferation and import and export control provisions of Canada's bilateral nuclear cooperation agreements, which require all nuclear trade to be carried out in accordance with Canada's nuclear non-proliferation policy and obligations under the *Treaty on the Non-Proliferation of Nuclear Weapons*.

These agreements establish reciprocal obligations that are designed to minimize the risk of proliferation associated with the international transfer of controlled nuclear materials, equipment and information. The CNSC participates (along with the Department of Foreign Affairs, Trade and Development Canada) in the negotiation of these agreements, and implements administrative arrangements with its foreign counterparts to effectively fulfill the terms and conditions of these agreements.

Table 12 presents the CNSC’s planned and actual spending for the domestic and international arrangements sub-program for 2014–15.

Table 12: Budgetary financial resources (dollars)

2014–15 planned spending	2014–15 actual spending	2014–15 difference (actual minus planned)
11,089,450	11,124,338	34,888

Table 13 presents the CNSC’s planned and actual human resources for the domestic and international arrangements sub-program for 2014–15.

Table 13: Human resources (FTEs)

2014–15 Planned spending	2014–15 actual spending	2014–15 difference (actual minus planned)
57	57	0

Table 14 aligns the domestic and international arrangements sub-program’s expected result with its corresponding target and performance status.

Table 14: Performance results

Expected results	Performance indicators	Targets	Actual results
International transfers of nuclear materials and technology are solely for peaceful purposes	Nuclear goods and technology exported from Canada under bilateral nuclear cooperation agreements (NCAs) remain in peaceful use	Positive IAEA conclusion reached in all recipient countries	IAEA safeguards conclusions were positive for countries to which Canada exported nuclear goods and technology that were subject to a

			bilateral NCA
IAEA inspection and other verification activities are successfully undertaken to allow the IAEA to evaluate, on an annual basis, Canada's compliance with its obligations pursuant to its safeguards agreements	Inspection reports and a statement by the IAEA confirming that all nuclear material in Canada remained in peaceful activities	IAEA broader conclusion reached for Canada	All nuclear material in Canada remained in peaceful activities – IAEA broader conclusion reached for Canada for calendar year 2014

Performance Analysis and Lessons Learned

During 2014–15, all notification, accounting and reporting procedures as required to implement and comply with the non-proliferation provisions of Canada's bilateral nuclear cooperation agreements (NCAs) and the associated CNSC administrative arrangements (AAs) are being implemented on an ongoing basis, in association with export and import licensing assessments and decisions. An AA between the CNSC and Kazakhstan, pursuant to the Canada-Kazakhstan NCA, came into effect in August 2014.

The CNSC signed four Memoranda of Understanding in 2014–15 with Mongolia, Poland, Sweden and the United States to establish regulatory cooperation and the exchange of technical information in regulatory matters.

The CNSC continued to support Canada's commitment to establishing a national nuclear forensics capability. The CNSC sample analysis is continuing on schedule and the CNSC laboratory characterized approximately 100 samples in 2014–15. The development of data analytical algorithms has shown promising results to date, for both chemometric and machine learning approaches. The next step is to consolidate the findings of the algorithm development as a composite (unified) implementation of both approaches. Trilateral work has been launched with the United Kingdom and the United States to develop a synthetic uranium ore concentrate data set for cross-validation and benchmarking purposes. Results of sample classification thus far demonstrate high accuracy.

The expected result for this sub-program was met, as positive IAEA conclusions were reached.

Sub-program 1.1.3: Regulatory Research

This sub-program administers funds to conduct research projects that generate objective, scientific and technical information to address any potential regulatory gaps, support regulatory decision-making by both the Commission and CNSC staff, and also provide objective, scientific and technical information for dissemination to the public and stakeholders.

This program uses funding from the following transfer payment program: Class Grants and Contributions Program.

Table 15 presents the CNSC's planned and actual spending for the regulatory research sub-program for 2014–15.

Table 15: Budgetary financial resources (dollars)

2014–15 planned spending	2014–15 actual spending	2014–15 difference (actual minus planned)
4,055,995	4,068,280	12,285

Table 16 presents the CNSC's planned and actual human resources for the regulatory research sub-program for 2014–15.

Table 16: Human resources (FTEs)

2014–15 planned	2014–15 actual	2014–15 difference (actual minus planned)
21	21	0

Table 17 aligns the regulatory research sub-program's expected result with its corresponding target and performance status.

Table 17: Performance results

Expected results	Performance indicators	Targets	Actual results
Research generated to support regulatory decision-making	Projects completed as per the research plan (schedule performance)	100%	100%

Performance Analysis and Lessons Learned

CNSC staff continued to further the understanding of regulatory science this year: CNSC staff published 19 technical papers and 7 peer-reviewed journal articles over the last year. Additionally, the CNSC spent \$3.7 million on 40 research projects, representing an increase of \$950,000 from the previous year.

Reports presenting the CNSC’s research activities in greater detail are available on the CNSC’s [Research Report](#)^{xiv} Web page.

The expected result for this sub-program was met. All 11 planned research projects were completed, and final reports were received for them. As well, the CNSC continued to publish a number of papers and journal articles.

Sub-program 1.1.4: Stakeholder Engagement

This sub-program administers funds with the aim of ensuring that the CNSC’s stakeholders (licensees, regulatory partners, governmental organizations, Aboriginal groups, other interested parties, and the general Canadian population) are informed of the role of the CNSC and its activities, policies and programs.

This sub-program is based on the CNSC’s legislated mandate to provide objective scientific and technical information about the nuclear activities that it regulates. The engagement of the CNSC’s stakeholders also guarantees their informed input when soliciting their feedback on regulatory issues. Public input – in the form of written submissions or oral interventions at Commission proceedings – also offers an important perspective for the Commission’s consideration in its decision-making process. As a result, licensees and Canadians can benefit from ongoing improvements to how the Canadian nuclear industry is regulated.

Table 18 presents the CNSC’s planned and actual spending for the stakeholder engagement sub-program for 2014–15.

Table 18: Budgetary financial resources (dollars)

2014–15 planned spending	2014–15 actual spending	2014–15 difference (actual minus planned)
5,904,601	5,924,237	19,636

Table 19 presents the CNSC’s planned and actual human resources for the stakeholder engagement sub-program for 2014–15.

Table 19: Human resources (FTEs)

2014–15 planned	2014–15 actual	2014–15 difference (actual minus planned)
30	30	0

Table 20 aligns the stakeholder engagement sub-program’s expected result with its corresponding target and performance status.

Table 20: Performance results

Expected results	Performance indicators	Targets	Actual results
Increased stakeholder understanding of the regulatory program	Number of stakeholders participating in CNSC stakeholder engagement activities (e.g., CNSC 101 activities)	Count (target to be developed with trend data – 152 for 2014–15)	366

Performance Analysis and Lessons Learned

During 2014–15, the CNSC strengthened its approach to strategic outreach and engagement planning by focusing on four pillars.

- **Pillar 1: Identifying key target audiences for different years and addressing emerging operational issues for each audience** led to the CNSC participating in youth activities (e.g., science fairs), researching how to support the medical community and hosting CNSC open houses at the request of communities participating in the Nuclear Waste Management Organization’s process to identify a safe site, in a willing and informed community, for the deep geologic repository for Canada’s used nuclear fuel.
- **Pillar 2: Establishing the outreach and engagement plans** led to the CNSC participating in 202 outreach activities and surpassing its planned target (i.e., 152).
- **Pillar 3: Coordinated approach to outreach planning and reporting** led to the development of new outreach planning and reporting processes (in April and June 2014 respectively).
- **Pillar 4: Developing new outreach tools such as videos, feature articles, infographics and interactive web modules** led to the CNSC maintaining an ongoing digital presence

through its website, the Government of Canada’s website, as well as through social media including Facebook and YouTube; exploring the use of Twitter; producing plain language information in a variety of formats; and disseminating scientific and technical information at conferences and other public forums.

CNSC continued its focus on conducting outreach and engagement with Aboriginal communities by participating in 14 events with Aboriginal groups in relation to proposed projects; provided support regarding Aboriginal consultation for all public Commission hearings; and requested public input on draft REGDOC-3.2.2, *Aboriginal Engagement*. In addition, CNSC awarded over \$254,000 in participant funding to 41 recipients for 8 different projects through its Participant Funding Program. Of those 41 recipients, 21 were Aboriginal groups or organizations and they were awarded over \$129,000 for their participation in the CNSC regulatory process.

The expected result for this sub-program was met with the CNSC continuing to hold events to increase stakeholder understanding of the regulatory program through a variety of outreach and engagement initiatives.

Program 1.2: Licensing and Certification

The licensing and certification program is in place to issue licences, and certify persons and prescribed equipment in relation to nuclear-related activities in Canada. Licensing and certification is a major part of the regulator’s core work. Through this program, the CNSC obtains evidence of an applicant’s ability to operate safely and comply with all regulatory requirements. The CNSC undertakes this work to ensure that nuclear activities and facilities in Canada are managed with adequate provision for the protection of the health, safety and security of Canadians and the environment, and for the fulfillment of international commitments to the peaceful use of nuclear energy.

Table 21 presents the CNSC’s planned and actual spending for the licensing and certification program.

Table 21: Budgetary financial resources (dollars)

2014–15 Main Estimates	2014–15 planned spending	2014–15 total authorities available for use	2014–15 actual spending (authorities used)	2014–15 difference (actual minus planned)
26,179,983	28,996,918	29,186,133	21,355,025	(7,641,893)*

*The variance between planned and actual expenditures is mostly explained by a decrease in planned vendor design reviews and licensing of new-build projects.

Table 22 presents the CNSC’s planned and actual human resources for the licensing and certification program for 2014–15.

Table 22: Human resources (FTEs)

2014–15 planned	2014–15 actual	2014–15 difference (actual minus planned)
188	157	(31)*

*The variance between planned and actual FTEs is mostly explained by a decrease in planned vendor design reviews and licensing of new-build projects.

Table 23 aligns the licensing and certification program’s expected result with its corresponding target and performance status.

Table 23: Performance results

Expected results	Performance indicators	Targets	Actual results
Licences and certificates issued as per regulatory requirements	Licensing decisions are issued within timelines defined by external performance standards	Per external performance standards	Refer to external performance standards results – licensing (table 30)

Performance Analysis and Lessons Learned

In 2014–15, the CNSC continued regulatory oversight of nearly 2,500 licences held by just over 1,700 licensees of nuclear substances, prescribed equipment and Class II nuclear facilities. The CNSC held 5 public hearings involving 129 intervenors, 8 public meetings with 16 intervenors and 21 abridged hearings.

In addition to licensing activities for major nuclear facilities, highlights included:

- issuing 535 export and 167 import licences for nuclear substances, prescribed equipment and information, as well as 254 export licences for risk-significant radioactive sources
- issuing 155 new transport licences, revising 37 transport licences and 41 transport certificates for package design and for special-form radioactive material
- issuing 12 new certificates and revising 55 certificates for radiation devices and other prescribed equipment

- managing 3,271 CNSC certificates held by persons across Canada who are key operating personnel for both power and research reactors, health physicists and radiation safety officers, and industrial radiography exposure device operators

The CNSC continued to focus on ensuring a state-of-readiness for any new major projects that may develop. Additionally, progress continued on completing the action items related to the Fukushima event. Specifically:

- all Fukushima action items (FAIs) are closed for OPG (Pickering and Darlington stations) as well as for Hydro-Québec (Gentilly-2)
- the remaining open FAIs (two mid-term FAIs for NB Power and one long-term FAI for Bruce Power) are on track to be completed in 2015

The CNSC continued licensing activities related to waste management, including:

- the continuation of public hearings (September and October 2013, and September 2014) related to OPG's proposed Deep Geologic Repository Project for Low- and Intermediate-Level Waste.

The expected result for this program was met, with the CNSC having exceeded its targets with respect to its external performance standards.

A complete record of proceedings and decisions, as well as hearing transcripts, is available at nuclearsafety.gc.ca or upon request from the CNSC.

Sub-program 1.2.1: Application Assessment

This sub-program administers funds to assess the capability of applicants to meet regulatory requirements associated with their proposed activities. This assessment may include a review of the corporate status, financial viability and verification of the applicant's capability to meet safety, design, engineering, and other technical requirements, as well as environmental assessments, required by the CEEA 2012.

The CNSC requires evidence that applicants have the necessary programs, processes and qualified staff to support their ongoing or proposed activities. For existing licences and certificates, the CNSC also requires evidence of satisfactory performance. This program also aims to address the certification of operating personnel (such as radiation safety officers in hospitals), and certification processes for radiation devices and for transport packages for nuclear substances.

Table 24 presents the CNSC's planned and actual spending for the application assessment sub-program for 2014–15.

Table 24: Budgetary financial resources (dollars)

2014–15 planned spending	2014–15 actual spending	2014–15 difference (actual minus planned)
23,197,534	17,084,020	(6,113,514)*

*The variance between planned and actual expenditures is mostly explained by a decrease in planned vendor design reviews and licensing of new-build projects.

Table 25 presents the CNSC’s planned and actual human resources for the application assessment sub-program for 2014–15.

Table 25: Human resources (FTEs)

2014–15 planned	2014–15 actual	2014–15 difference (actual minus planned)
150	126	(24)*

*The variance between planned and actual FTEs is mostly explained by a decrease in planned vendor design reviews and licensing of new-build projects.

Table 26 aligns the application assessment sub-program’s expected result with its corresponding target and performance status.

Table 26: Performance results

Expected results	Performance indicators	Targets	Actual results
Risk-informed review of licensing and certification applications to ensure applications meet regulatory requirements	Percentage of applications that meet the regulatory requirements associated with the proposed activity	100%	100%

Performance Analysis and Lessons Learned

The CNSC licenses and provides oversight of existing major nuclear facilities and activities. In March 2015, the Commission approved REGDOC-2.3.3, *Periodic Safety Reviews (PSR)*, for publication. Moving forward, the CNSC's power reactor licensees will conduct PSRs and submit a plan of resulting corrective actions and safety improvements in support of their licence renewal applications.

The CNSC undertook licensing of nuclear facilities and activities, including:

- the first part of a public hearing to renew the operating licence for the Bruce A and B Nuclear Generating Stations
- request from Ontario Power Generation (OPG) for removal of the hold point associated with a licence condition of the Pickering Nuclear Generating Station power reactor operating licence, to allow the reactors to operate beyond 210,000 equivalent full-power hours of pressure tube life
- removal of Point Lepreau's hold point associated with its fire-prevention program, as the requirement has now been met
- continuation of oversight after the shutdown of the Gentilly-2 Nuclear Generating Station in December 2012
- renewal of the non-power reactor operating licence for the McMaster Nuclear Reactor

The CNSC worked on a service agreement with Northern Nuclear Laboratories (also known as URS Canadian Operations Ltd.), a consortium of various companies, to finalize the draft report on options for long-term management of specific facilities.

The expected result for this sub-program was met, with the CNSC having achieved 100 percent of its performance indicator.

Sub-program 1.2.2: Licensing and Certification Decisions

In this sub-program, funds are administered as part of the process of issuing, amending, renewing, suspending, or revoking licences or certificates. The Commission is the overall decision-making authority for all licensing matters. Some licensing matters involve public hearings before the Commission, with CNSC staff recommendations and input from stakeholders. Certificates and certain categories of licences are issued by CNSC designated officers, as authorized by the Commission, under the authority of the NSCA.

The CNSC's consideration and issuance of licences for the export and import of nuclear substances, prescribed equipment and prescribed information further ensures that Canada meets its international obligations and commitments on the peaceful use of nuclear energy and nuclear materials.

Table 27 below presents the CNSC’s planned and actual spending for the licensing and certification decisions sub-program for 2014–15.

Table 27: Budgetary financial resources (dollars)

2014–15 planned spending	2014–15 actual spending	2014–15 difference (actual minus planned)
5,799,384	4,271,005	(1,528,379)*

*The variance between planned and actual expenditures is mostly explained by a decrease in planned vendor design reviews and licensing of new-build projects.

Table 28 below presents the CNSC’s planned and actual human resources for the licensing and certification decisions sub-program for 2014–15.

Table 28: Human resources (FTEs)

2014–15 planned	2014–15 actual	2014–15 difference (actual minus planned)
38	31	(7)*

*The variance between planned and actual FTEs is mostly explained by a decrease in planned vendor design reviews and licensing of new-build projects.

Table 29 below aligns the licensing and certification decisions sub-program’s expected result with its corresponding target and performance status.

Table 29: Performance results

Expected results	Performance indicators	Targets	Actual results
Timely, risk-informed licensing and certification decisions	Licensing decisions are issued within timelines defined by external performance standards	Per external performance standards	Refer to external performance standards results — licensing (table 30)

Performance Analysis and Lessons Learned

The CNSC provided oversight of existing major nuclear facilities and activities including the re-licensing processes for the Bruce and Darlington nuclear generating stations. On February 5, 2015, Part 1 of a public hearing was held to consider the application by Bruce Power Inc. for the

renewal of the two power reactor operating licences for the Bruce A and B Nuclear Generating Stations, and consolidation as a single operating licence. Part 2 of the public hearing was held subsequently on April 14–16, 2015 in the host community of Kincardine, Ontario.

The Part 1 public hearing date and location to consider the long-term renewal of the power reactor operating licence for Ontario Power Generation's (OPG) Darlington Nuclear Generating Station, including the proposed refurbishment of all four Darlington NGS units, has been confirmed for August 19, 2015 in Ottawa. Part 2 public hearing date is tentatively scheduled for November 2–5, 2015 in the host community of Courtice, Ontario.

The Gentilly-2 Nuclear Generating Station, located near Trois-Rivières, QC, was permanently shut down in December 2012. It was transitioning to safe storage throughout the year and completed the transition on December 2, 2014. In addition, a detailed decommissioning plan is being developed by the licensee for submission and staff review. The CNSC continues to evaluate operations and verify compliance with regulatory requirements and licence conditions.

Licensing of Cameco Corporation's proposed Millennium mine in Saskatchewan is delayed as Cameco has put mining of that uranium deposit on hold in light of current economic conditions.

The expected result for this sub-program was met as the CNSC successfully accomplished plans and exceeded its targets with respect to its external performance standards.

Table 30 presents the CNSC's external performance standards related to licensing for 2014–15.

Table 30: External performance standards results – licensing

Licensing: For applications pertaining to a new licence, renewal, amendment, or deviation, the CNSC will:						
Activity	Performance standard	Target	Results	Results	Results	Results
		%	%	%	%	%
			2011–12	2012–13	2013–14	2014–15
Issue a licensing decision when a public hearing is not required	Within 80 business days	80	91	98	98	93
Issue a licensing decision when a public hearing is required ¹	Within 160 business days	90	100	79	100	100

Program 1.3: Compliance

The compliance program is in place to verify that CNSC licensees exhibit a high level of compliance with the CNSC’s regulatory framework. Compliance verification activities are an important part of the core work of the CNSC. This program enables the CNSC to provide regulatory assurances to Canadians of the continuing compliance and safety performance of licensees. This program’s funding is used to:

- ensure that licensees fully understand how to achieve compliance
- promote the development and foster a healthy safety culture and common safety values
- verify compliance through inspections and other assessments of licensee performance
- take necessary enforcement actions on non-compliance

¹ The hearing process does not apply to licensing and certification activities that are related to nuclear substances, radiation devices, Class II facilities, prescribed equipment, transport and packaging.

Table 31 presents the CNSC’s planned and actual spending for the compliance program for 2014–15.

Table 31: Budgetary financial resources (dollars)

2014–15 Main Estimates	2014–15 planned spending	2014–15 total authorities Available for use	2014–15 actual spending (authorities used)	2014–15 difference (actual minus planned)
38,703,659	42,979,637	43,163,575	45,872,668	2,893,031*

*The variance between planned and actual expenditures is explained by the realignment of work priorities from the licensing and certification program to compliance verification activities.

Table 32 below presents the CNSC’s planned and actual human resources for the compliance program for 2014–15.

Table 32: Human resources (FTEs)

2014–15 planned	2014–15 actual	2014–15 difference (actual minus planned)
251	263	12*

*The variance between planned and actual FTEs is explained by the realignment of work priorities from the licensing and certification program to compliance verification activities.

Table 33 below aligns the compliance program’s expected result with its corresponding target and performance status.

Table 33: Performance results

Expected results	Performance indicators	Targets	Actual results
Safe and secure nuclear installations and processes	Compliance rating of licensees	Satisfactory or better in all safety and control areas	Satisfactory or better achieved in all safety and control areas
Licensees comply with the regulatory framework	Compliance activity reports are issued to licensees within timelines defined by external performance standards	Per external performance standards	Refer to external performance standards results – verification and enforcement
Radiation doses to nuclear energy workers do not exceed regulatory limits of 50 millisieverts (mSv) / year	Number of radiation exposures over the allowable dose limits for nuclear energy workers (NEWs)	Zero reported cases	1*
Radiation doses to members of the public living around nuclear facilities do not exceed regulatory limits of 1 mSv/year	Number of radiation exposures over the allowable dose limits for members of the public	Zero reported cases	0
Radiological releases to the environment do not exceed regulatory limits	Number of radiological releases to the environment that exceed regulatory limits	Zero reported cases	0

*There was one radiation exposure that led to a NEW dose limit exceedance during this fiscal year. The exposure occurred at the Montreal Neurological Institute (MNI) to a worker’s left hand, which exceeded the CNSC’s annual extremity dose limit of 500 mSv. No health effects were observed or expected as a result of this dose. The worker received this dose from incorrect handling of fluorine-18. The worker was removed from work, and investigations were carried out by the MNI and CNSC staff. The incident was presented at a Commission public meeting on June 17, 2015, and additional steps by the MNI were proposed to improve the situation, including a review of its radiation safety rules and retraining of its personnel.

Performance Analysis and Lessons Learned

In 2014–15, the CNSC carried out a variety of compliance activities, which form a substantial part of its daily work.

- The CNSC conducted 1,687 inspections and 2,906 desktop reviews and annual compliance report verifications, relative to nearly 2,500 licences held by just over 1,700 licensees (this work includes inspections of nuclear power plants; facilities involved with the nuclear fuel cycle, such as uranium mines and mills, laboratories and research facilities, and processing and waste facilities; and, inspections related to the use of nuclear substances and prescribed equipment in medical, industrial, academic and research, and commercial applications, including operation of accelerators and Class II facilities, and transport).

Through site inspections, reviews and assessments, CNSC staff concluded that Canada's nuclear power plants operated safely during the past year, receiving either satisfactory or fully satisfactory ratings on the safety and control areas. Further details on the regulatory oversight of Canadian nuclear power plants can be found on the [CNSC website](#)^{xv}.

In 2014–15, in the medical, industrial, academic and research, and commercial sectors that use nuclear substances, 99.9 percent of the 60,407 NEWs and other workers combined received less than the annual radiation dose limit for members of the public of 1 millisievert (mSv)/yr. All NEWs, except the one reported in table 33, received radiation doses below the annual limit 50 mSv/yr that applies to NEWs.

As well, the CNSC continued regulatory oversight of nuclear legacy sites through periodic inspections to ensure compliance with regulatory and environmental requirements, as well as with the latest criteria for quality assurance, security, emergency preparedness and other protective measures. The CNSC developed its [Independent Environmental Monitoring Program](#)^{xvi} (IEMP) to add a layer of verification that the public and the environment around licensed nuclear facilities are safe. This program is separate from, but complementary to, the CNSC's ongoing compliance verification activities, such as reviews of compliance reports and regular inspections. The IEMP is in line with similar programs of other national and international regulatory bodies.

Overall, licensees across all sectors continued to demonstrate operational safety and compliance with regulatory requirements, contributing to the expected results for this program being met.

Sub-program 1.3.1: Verification

This sub-program administers funds to verify compliance through onsite inspections and the review of operational activities and licensee documentation. The CNSC requires licensees to report routine performance data and unusual occurrences, and conducts investigations of unplanned events or accidents involving nuclear facilities and substances in Canada.

Table 34 below presents the CNSC’s planned and actual spending for the verification sub-program for 2014–15.

Table 34: Budgetary financial resources (dollars)

2014–15 planned spending	2014–15 actual spending	2014–15 difference (actual minus planned)
38,681,673	41,285,401	2,603,728*

*The variance between planned and actual expenditures is explained by the realignment of work priorities from the licensing and certification program to compliance verification activities.

Table 35 below presents the CNSC’s planned and actual human resources for the verification sub-program for 2014–15.

Table 35: Human resources (FTEs)

2014–15 planned	2014–15 actual	2014–15 difference (actual minus planned)
226	237	11*

*The variance between planned and actual FTEs is explained by the realignment of work priorities from the licensing and certification program to compliance verification activities.

Table 36 below aligns the verification sub-program’s expected result with its corresponding target and performance status.

Table 36: Performance results

Expected results	Performance indicators	Targets	Actual results
Verification activities conducted to ensure compliance with the NSCA, regulations and	Compliance verification activity reports are issued to licensees within	Per external performance standards	Refer to external performance standards results – verification (table 37)

licences	timelines defined by external performance standards		
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Performance Analysis and Lessons Learned

Verification primarily through inspections is a core compliance responsibility of the organization. In addition to carrying out its comprehensive inspection program, as highlighted in the section above, the CNSC also undertook activities in support of licensee compliance. In support of enhanced emergency management, and the associated licensing and oversight of existing major nuclear facilities and activities, the CNSC participated in Exercise Unified Response in May 2014: a three-day, multi-party exercise involving a simulated severe accident at the Darlington Nuclear Generating Station, and one of the largest exercises in North America involving 50 organizations and 2,000 participants. The exercise successfully demonstrated the ability to protect the public, infrastructure and the environment, and further strengthened relationships between the CNSC, the U.S. Nuclear Regulatory Commission and the International Atomic Energy Agency.

To further strengthen the CNSC's regulatory framework around cyber security for the nuclear industry, CNSC staff participated extensively in the drafting of new CSA standard N290.7, *Cyber security for nuclear power plants and small reactor facilities*, which was published in December 2014. The CNSC has also introduced new cyber-security compliance verification criteria to licence conditions handbooks, and has produced a first-of-its-kind inspection guide for conducting cyber-security inspections. A successful pilot inspection was conducted at a nuclear power plant at the beginning of 2015, and further cyber-security inspections are planned at other Canadian nuclear power plants over the next few years.

The expected result for this sub-program was met, through delivery of the 2014–15 inspection plans and with the CNSC having met or exceeded the external performance standards targets.

Table 37 presents the CNSC’s external performance standards for the verification sub-program for 2014–15.

Table 37: External performance standards results – verification

Verification: Upon completion of the verification activity, the CNSC will:						
Activity	Performance standard	Target %	Results % 2011–12	Results % 2012–13	Results % 2013–14	Results % 2014–15
Issue type I inspection preliminary report	At the type I inspection exit meeting	100	100	100	100	100
Issue type I inspection report	Within 60 business days	80	88	96	83	90
Issue type II inspection report	Within 40 business days ²	80	80	93	91	94
Issue desktop review report	Within 60 business days	90	93	98	92	95

Sub-program 1.3.2: Enforcement

This sub-program administers funds to address cases where compliance is unsatisfactory. The CNSC uses a graduated approach to enforcement, based on risk significance. The Commission may require licensees to appear before it, and may impose restrictions or revoke licences.

Through inspectors and designated officers, the CNSC also enforces compliance by applying legal instruments – such as issuing orders and administrative monetary penalties, or recommending prosecution under the NSCA.

Table 38 presents the CNSC’s planned and actual spending for the enforcement sub-program for 2014–15.

² Power reactor licensees are provided 10 working days beyond the exit meeting to supply supplemental information; the above results take into consideration this allowance.

Table 38: Budgetary financial resources (dollars)

2014–15 planned	2014–15 actual	2014–15 difference (actual minus planned)
4,297,964	4,587,267	289,303

Table 39 presents the CNSC’s planned and actual human resources for the enforcement sub-program for 2014–15.

Table 39: Human resources (FTEs)

2014–15 planned	2014–15 actual	2014–15 difference (actual minus planned)
25	26	1

Table 40 aligns the enforcement sub-program’s expected result with its corresponding target and performance status.

Table 40: Performance results

Expected results	Performance indicators	Targets	Actual results
Graduated enforcement to ensure timely response for addressing non-compliances	Decisions about orders are issued to licensees within timelines defined by external performance standards	Per external performance standards	Refer to external performance standards results — enforcement (table 41)

Performance Analysis and Lessons Learned

Enforcement activities related to this sub-program depend upon the outcome of CNSC verification activities. The CNSC employs a graduated approach to enforcement to encourage and compel compliance, and deter future non-compliances.

The CNSC issued 12 orders to licensees across the industrial and academic sectors during the reporting period. This number represents a reduction from 18 orders issued in the previous fiscal year. These orders typically required the licensee to cease the licenced activity or use of a nuclear-related device or substance until corrective action and compliance with CNSC

requirements is demonstrated. Additionally, administrative monetary penalties were issued in 2014–15. Readers are invited to consult the [CNSC website](#)^{xvii} for a list of all regulatory actions.

The expected result for this program was met, with the CNSC having met its external performance standard target for enforcement.

Table 41 presents the CNSC’s external performance standards for the enforcement sub-program for 2014–15.

Table 41: External performance standards results – enforcement

Enforcement: When a decision about an Order is made, the CNSC will:						
Activity	Performance standard	Target	Results	Results	Results	Results
		%	%	%	%	%
			2011-12	2012-13	2013-14	2014-15
Provide the decision in writing on whether to confirm, amend, revoke or replace the Order (see <i>Canadian Nuclear Safety Commission Rules of Procedure</i>)	Within 10 business days	100	100	100	100	100

Program 1.4: Internal Services

Internal services are groups of related activities and resources that are administered to support the needs of programs and other corporate obligations of an organization. These groups are: Management and Oversight Services, Communications Services, Legal Services, Human Resources Management Services, Financial Management Services, Information Management Services, Information Technology Services, Real Property Services, Materiel Services, Acquisition Services, and Other Administrative Services. Internal services include only those activities and resources that apply across an organization and not those provided to a specific program.

Table 42 presents the CNSC’s planned and actual spending for internal services for 2014–15.

Table 42: Budgetary financial resources (dollars)

2014–15 Main Estimates	2014–15 planned spending	2014–15 total authorities available for use	2014–15 actual spending (authorities used)	2014–15 difference (actual minus planned)
40,704,556	41,588,153	43,258,728	42,402,554	814,401

Table 43 presents the CNSC’s planned and actual human resources for internal services for 2014–15.

Table 43: Human resources (FTEs)

2014–15 planned	2014–15 actual	2014–15 difference (actual minus planned)
219	222	3

Performance Analysis and Lessons Learned

In addition to the efforts to strengthen strategic planning, highlighted in Section I, the CNSC completed its first Management Accountability Framework assessment in five years. Overall, the organization's results were positive and corrective actions have been put in place in areas requiring improvement.

The CNSC continued development of its Workforce of the Future Initiative, which was launched in 2014 to anticipate the organization's workforce requirements to 2025 and implement concrete actions over the more immediate term that ensure the CNSC's continued capacity to deliver its regulatory mandate. The organizational capabilities required to perform were confirmed, the risks to be mitigated identified and HR strategies to maintain a competent and agile organization defined.

Through an increased focus on talent management, the CNSC took steps to enhance leadership capacity, management accountability, employee engagement and alignment. This included initiatives that support the assessment and early identification of leadership potential, continued emphasis on learning and diversified training approaches, and increased use of assignments over indeterminate appointments to broaden experience. Innovation Labs (under the Blueprint 2020 initiative), which afforded employees opportunities to shape continuous improvement initiatives, further supported high employee engagement. Efforts were also made to promote participation in the Public Service Employee Survey, resulting in a CNSC participation rate of 80 percent.

The CNSC enhanced the efficiency and effectiveness of its cost recovery regime, using a two-pronged approach that included (1) the delivery of information sessions on costing, cost recovery and time reporting to all management and staff to increase understanding of the costing framework and the link to time reporting; and, (2) the review of CNSC's current practices for the allocation of work efforts charged to licensees, which resulted in adjustments to increase the number of base and variable hours associated with regulatory activities, effective April 1, 2015.

The CNSC continues to make enhancements to its IM/IT infrastructure, including preparing plans to replace and consolidate legacy applications and implement Government of Canada transformation initiatives.

Table 44 presents the CNSC’s external performance standards for the internal services program for 2014–15.

Table 44: External performance standards – internal services

Activity	Performance standard	Target %	Results % 2011–12	Results % 2012–13	Results % 2013–14	Results % 2014–15
Access to information						
Respond to requests under the <i>Access to Information Act</i> (ATI) and <i>Privacy Act</i>	Within legislated time periods as stated in the acts	100	ATI – 86; Privacy – N/A	ATI – 66; Privacy – N/A	ATI – 53; ³ Privacy – 66	ATI – 81; Privacy – N/A ⁴
Place public hearings advertisements	Within deadlines stipulated in the regulations	100	100	100	100	100
Follow the appropriate standard for response time to public inquiries	Same-day acknowledgement, with response time for completion of the request depending upon complexity:	100	100	100	100	100
	Low – same day	100	100	100	100	100
	Medium – within 5 business days	100	95	95	95	100
	High – within 10 business days	100	90	95	93	95

³ The results for 2013–14 were lower due to increased volume and complexity of ATI requests.

⁴ No requests were closed during the reporting period. Only one request was received at the end of fiscal year and it was carried over into the next.

Section III: Supplementary Information

Financial Statements Highlights

The CNSC reports on a full accrual accounting basis, according to the TBS policy based on generally accepted accounting principles. The tables below provide highlights from the CNSC's statement of financial position and statement of operations, as presented in its audited financial statements. As such, there are differences between these tables and those presented in other sections of the *2014–15 Departmental Performance Report*, which are prepared on the modified cash basis of accounting.

Table 45: Condensed statement of operations (unaudited)

CNSC Condensed statement of operations for the year ended March 31, 2015 (dollars)					
Financial information	2014–15 planned results	2014–15 actual	2013–14 actual	Difference (2014–15 actual minus 2014–15 planned)	Difference (2014–15 actual minus 2013–14 actual)
Total expenses	157,474,182	153,868,757	149,114,244	(3,605,425)	4,754,513
Total revenues	111,465,250	104,830,693	103,460,701	(6,634,557)	1,369,992
Net cost of operations before government funding and transfers	46,008,932	49,038,064	45,653,543	3,029,132	3,384,521

The planned results for fiscal year 2014–15 are as set out in the future oriented financial statements that were published within the *2014–15 Report on Plans and Priorities*.

The CNSC's total expenses increased by 3.2 percent or \$4.8 million from 2013–14 to 2014–15, while revenues increased by 1.3 percent or \$1.4 million from 2013–14 to 2014–15. The increase in total expenses was mainly due to a reduction in the liability for severance recorded in 2013–14 following the Government's decision to allow employees to cash out severance benefits. This adjustment resulted in a significant decrease in salaries and employee benefits expenses in 2013–14, when compared to other years. The increase in revenues is attributable to increase in expenses incurred to undertake regulatory activity plans and a review of formula fees to be more in line with regulatory operating activities.

Table 46: Condensed statement of financial position (unaudited)

CNSC condensed statement of financial position as at March 31, 2015 (dollars)			
Financial information	2014–15	2013–14	Difference (2014–15 minus 2013–14)
Total net liabilities	41,532,530	41,518,889	13,641
Total net financial assets	27,095,110	29,145,325	(2,050,215)
Departmental net debt	14,437,420	12,373,564	2,063,856
Total non-financial assets	10,055,338	12,187,890	(2,132,552)
Departmental net financial position	(4,382,082)	(185,674)	(4,196,408)

The decrease in the CNSC's net financial assets is attributable to the amount due from the Consolidated Revenue Fund, which decreased as a result of a lower amount of refunds owed to licensees at the end of 2014–15 compared to 2013-14.

The decrease in the CNSC's non-financial assets is due to a net decrease in the value of tangible capital assets, resulting from annual amortization exceeding the value of in-year purchased capital assets.

The graphs below represent the CNSC's cost of operations and revenues by expense and revenue category.

The graphs below represent the CNSC’s cost of operations and revenues by expense and revenue category.

Figure 2: Cost of CNSC operations by category

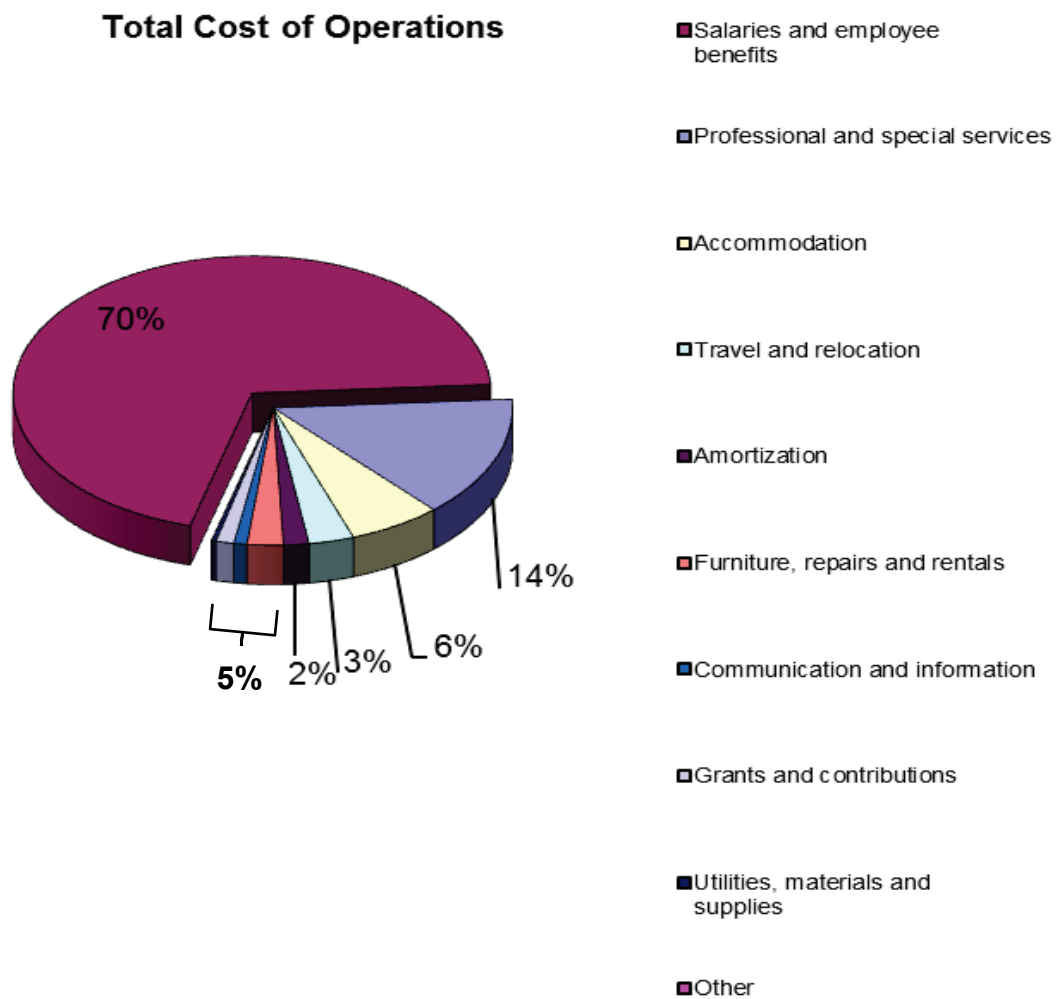
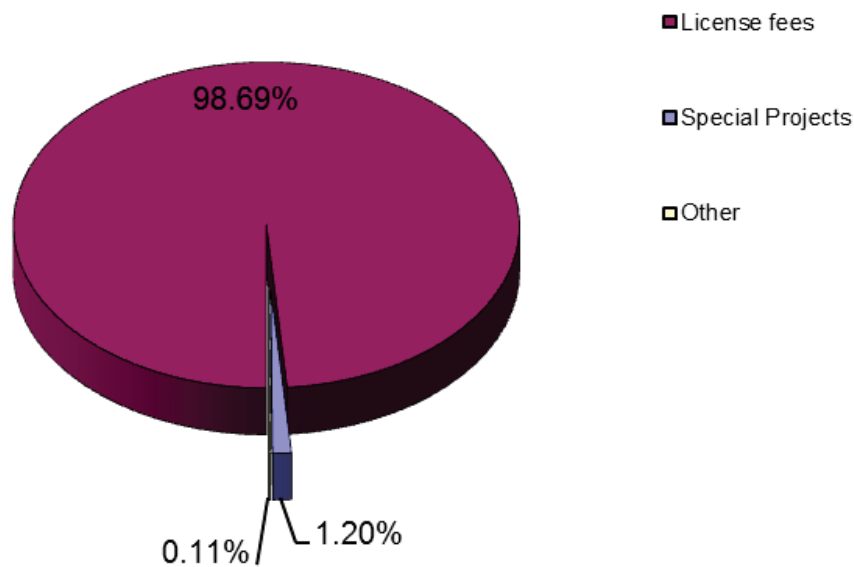


Figure 3: CNSC revenues by category**Total Fee Revenue**

Financial Statements

Further details on the CNSC's finances are detailed in its audited financial statements, which are published in the annual report. The CNSC's annual reports can be accessed from the [CNSC website](#)^{xviii}.

Supplementary Information Tables

All electronic supplementary information tables listed in the *2014–15 Departmental Performance Report* can be found on the [CNSC website](#)^{xix}.

- Internal audits
- Internal evaluations
- Departmental sustainable development strategy
- User fees
- Responses to parliamentary committees and external audits

Tax Expenditures and Evaluations Report

The tax system can be used to achieve public policy objectives through the application of special measures such as low tax rates, exemptions, deductions, deferrals and credits. The Department of Finance Canada publishes cost estimates and projections for these measures annually in the *Tax Expenditures and Evaluations*^{xx} publication. The tax measures presented in the *Tax Expenditures and Evaluations* publication are the responsibility of the Minister of Finance.

Section IV: Organizational Contact Information

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Appendix: Definitions

appropriation

Any authority of Parliament to pay money out of the Consolidated Revenue Fund.

budgetary expenditures

Expenditures that include operating and capital expenditures, transfer payments to other levels of government, organizations or individuals, and payments to Crown corporations.

departmental performance report

A report on an appropriated organization's actual accomplishments against the plans, priorities and expected results set out in the corresponding reports on plans and priorities. These reports are tabled in Parliament in the fall.

full-time equivalent

A measure of the extent to which an employee represents a full person-year charge against a departmental budget. Full-time equivalents are calculated as a ratio of assigned hours of work to scheduled hours of work. Scheduled hours of work are set out in collective agreements.

Government of Canada outcomes

A set of 16 high-level objectives defined for the government as a whole, grouped in four spending areas: economic affairs, social affairs, international affairs and government affairs.

management, resources and results structure

A comprehensive framework that consists of an organization's inventory of programs, resources, results, performance indicators and governance information. Programs and results are depicted in their hierarchical relationship to each other and to the strategic outcome(s) to which they contribute. The management, resources and results structure is developed from the program alignment architecture.

non-budgetary expenditures

Expenditures that include net outlays and receipts related to loans, investments and advances, and that change the composition of the financial assets of the Government of Canada.

performance

What an organization did with its resources to achieve its results, how well those results compare to what the organization intended to achieve and how well lessons learned have been identified.

performance indicator

A qualitative or quantitative means of measuring an output or outcome, with the intention of gauging the performance of an organization, program, policy or initiative respecting expected results.

performance reporting

The process of communicating evidence-based performance information – performance reporting supports decision-making, accountability and transparency.

plan

The articulation of strategic choices, which provides information on how an organization intends to achieve its priorities and associated results. Generally, a plan will explain the logic behind the strategies chosen and tends to focus on actions that lead up to the expected result.

planned spending

For reports on plans and priorities and departmental performance reports, those amounts that receive Treasury Board approval by February 1. Therefore, planned spending may include amounts incremental to planned expenditures presented in the Main Estimates.

A department is expected to be aware of the authorities that it has sought and received. The determination of planned spending is a departmental responsibility, and departments must be able to defend the expenditure and accrual numbers presented in their RPPs and DPRs.

priorities

A plan or project that an organization has chosen to focus and report on during the planning period. Priorities represent the things that are most important or what must be done first to support the achievement of the desired strategic outcomes.

program

A group of related resource inputs and activities that are managed to meet specific needs and to achieve intended results, and that are treated as a budgetary unit.

program alignment architecture

A structured inventory of an organization’s programs depicting the hierarchical relationship between programs and the strategic outcomes to which they contribute.

report on plans and priorities

Provides information on the plans and expected performance of appropriated organizations over a three-year period. These reports are tabled in Parliament each spring.

result

An external consequence attributed, in part, to an organization, policy, program or initiative. Results are not within the control of a single organization, policy, program or initiative; instead, they are within the area of the organization’s influence.

strategic outcome

A long-term and enduring benefit to Canadians that is linked to the organization’s mandate, vision and core functions.

sunset program

A time-limited program that does not have an ongoing funding and policy authority. When the program is set to expire, a decision must be made whether to continue the program. In the case of a renewal, the decision specifies the scope, funding level and duration.

target

A measurable performance or success level that an organization, program or initiative plans to achieve within a specified time period. Targets can be either quantitative or qualitative.

whole-of-government framework

A framework that maps the financial contributions of federal organizations receiving appropriations by aligning their programs to a set of 16 government-wide, high-level outcome areas, grouped under four spending areas.

Endnotes

- ⁱ *Nuclear Safety and Control Act*, <http://laws-lois.justice.gc.ca/eng/acts/N-28.3/>
- ⁱⁱ Government of Canada, *Financial Administration Act*, <http://laws-lois.justice.gc.ca/eng/acts/F-11/>
- ⁱⁱⁱ *Canadian Environmental Assessment Act, 2012*, <http://laws-lois.justice.gc.ca/eng/acts/C-15.21/>
- ^{iv} *Nuclear Liability Act*, <http://laws-lois.justice.gc.ca/eng/acts/N-28/>
- ^v *Protocol Additional to the Agreement Between Canada and the International Atomic Energy Agency for the Application of Safeguards in Connection With the Treaty on the Non-Proliferation of Nuclear Weapons*, <https://www.iaea.org/sites/default/files/publications/documents/infcircs/1972/infcirc164a1.pdf>
- ^{vi} Federal Court Decisions, <http://decisions.fct-cf.gc.ca/fc-cf/decisions/en/item/71634/index.do>
- ^{vii} Canadian Nuclear Safety Commission, Darlington Nuclear Power Plant – latest news, *September 10, 2015: Federal Court of Appeal grants CNSC appeal on a challenge to the Joint Review Panel’s decision on the environmental assessment and licence issued to OPG*, <http://www.nuclearsafety.gc.ca/eng/resources/status-of-new-nuclear-projects/darlington/index.cfm>
- ^{viii} Whole-of-government framework, <http://www.tbs-sct.gc.ca/ppg-cpr/frame-cadre-eng.aspx>
- ^{ix} *Public Accounts of Canada 2014*, <http://www.tpsgc-pwgsc.gc.ca/recgen/cpc-pac/index-eng.html>
- ^x Public Works and Government Services Canada, <http://www.tpsgc-pwgsc.gc.ca/comm/index-eng.html>
- ^{xi} *Regulations Designating Physical Activities*, <http://laws-lois.justice.gc.ca/eng/regulations/SOR-2012-147/page-1.html>
- ^{xii} CNSC’s Regulatory Framework Plan, <http://www.nuclearsafety.gc.ca/eng/acts-and-regulations/regulatory-framework/regulatory-framework-plan.cfm>
- ^{xiii} Canadian Nuclear Safety Commission, *Canada’s Response to Fukushima*, <http://www.nuclearsafety.gc.ca/eng/resources/fukushima/index.cfm>
- ^{xiv} CNSC’s Research Reports, <http://www.nuclearsafety.gc.ca/eng/resources/publications/reports/research-reports/index.cfm>
- ^{xv} *Regulatory Oversight Report for Canadian Nuclear Power Plants: 2014*, <http://nuclearsafety.gc.ca/eng/reactors/power-plants/regulatory-oversight-report-npp/index.cfm>

^{xvi} CNSC's Independent Environmental Monitoring Program (IEMP),
<http://www.nuclearsafety.gc.ca/eng/resources/maps-of-nuclear-facilities/iemp/index-iemp.cfm>

^{xvii} Regulatory Actions, <http://www.nuclearsafety.gc.ca/eng/acts-and-regulations/regulatory-action/index.cfm>

^{xviii} Canadian Nuclear Safety Commission, Annual Reports,
<http://www.nuclearsafety.gc.ca/eng/resources/publications/reports/annual-reports/index.cfm>

^{xix} Canadian Nuclear Safety Commission, Departmental Performance Reports,
<http://www.nuclearsafety.gc.ca/eng/resources/publications/reports/departmental/index.cfm>

^{xx} Government of Canada Tax Expenditures and Evaluations, <http://www.fin.gc.ca/purl/taxexp-eng.asp>