Canadian Nuclear Safety Commission
Commission canadienne de sûreté nucléaire

CNSC 2023–24 Departmental Plan

Departmental Plan 2023–24

Canada

Canadian Nuclear Safety Commission

2023–24

Departmental Plan

The Honourable Jonathan Wilkinson, P.C., M.P.
Minister of Natural Resources

CANADIAN NUCLEAR SAFETY COMMISSION
2023–24 DEPARTMENTAL PLAN

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FROM THE PRESIDENT AND CEO

I am pleased to present the Canadian Nuclear Safety Commission (CNSC) 2023–24 Departmental Plan, which describes our plans and priorities for the year ahead. 2023–24 will be another challenging and exciting year for the CNSC, as new nuclear technologies and growing public expectations continue to test the adaptability and readiness of regulators around the world. No matter what uncertainties we may face, our top priority will always be to ensure the safety and security of Canadians and the protection of the environment.

With momentum building toward the potential deployment of small modular reactors (SMRs) in Canada, the CNSC will continue to focus on ensuring our state of readiness. We are building on years of dedicated effort to ramp up our capacity to regulate emerging nuclear technologies, like SMRs, and we are continuing to publicly demonstrate our global leadership in this area. In the 2022 federal budget, $50.7 million was allocated to enable the CNSC to strengthen its ability to oversee and regulate new technologies. This investment will help ensure we have the necessary resources to provide regulatory predictability and clarity for applicants, expand the CNSC's technical capabilities, support policy development undertaken by federal and provincial governments, and enhance international collaboration and regulatory harmonization on SMRs. Complementing these efforts, the CNSC is working closely with the Natural Science and Engineering Research Council to increase the scientific information available to support regulatory decision-making and foster SMR-related research within Canadian universities. In the year ahead, the CNSC will continue to lead discussions, domestically and internationally, on how regulators are preparing to effectively regulate innovative technologies while maintaining an unwavering commitment to safety.

As countries seek to meet aggressive and important climate change commitments, SMRs are increasingly seen as an enabler of achieving these goals. In the year ahead, the CNSC will continue to advocate the need for international standardization of SMR designs and harmonization of regulatory practices and safety standards to support the potential safe and efficient global deployment of this technology. As chair of the International Atomic Energy Agency's Commission on Safety Standards (CSS) over the past 3 years, I have had the privilege to lead the improvement of international safety standards and harmonization of regulatory practices. As we move towards the end of our term, the CSS continues to address the impact of military conflicts around nuclear facilities, approve the development of new safety guides to address SMRs and advanced technologies, and plan for the future in light of an ever-changing nuclear landscape.

Nuclear waste management continues to draw a high level of public scrutiny and attention, and a strong performance by the CNSC in this area is essential for maintaining public trust and confidence. The CNSC will continue addressing the regulatory implications of the modernization of nuclear waste regulation in Canada. This includes future projects such as the Nuclear Waste Management Organization's Adaptive Phased Management, SMR technologies, and any potential implications of waste policy development within Canada. Central to this work, the CNSC will prioritize building relationships and trust with Indigenous Nations and communities and a diverse stakeholder network.

With such significant shifts in the nuclear sector, the CNSC is also embarking on its own transformation journey to set ourselves up for success. In 2023–24, the CNSC will establish a Transformation Management Office to deliver the full scope of our transformation agenda in a coordinated manner, including the initiatives arising from the CNSC's recent strategic review (Project Athena), which concluded in 2022. These initiatives also include exploring how we can leverage digital technology to have a consistent approach across all regulatory programs and adopting efficiencies to improve our day-to-day work experience.

Underpinning every aspect of the CNSC's important mission is our deep commitment to advancing the reconciliation agenda. Next year, the CNSC will place even greater focus on building relationships with Indigenous communities and progressing with the implementation of our trust-building strategy and reconciliation strategy. This work complements the development of the CNSC Strategic Stakeholder Engagement Program, which will focus on long-term relationship building with key stakeholders while embracing the lessons learned from the trust and relationship-building work that CNSC is undertaking with Indigenous Nations and communities.

Innovation is also playing a larger role in the changing way we conduct our day-to-day business. We are continuously adapting our workforce and workplace to excel under our new hybrid work model. For example, we are leveraging new digital tools and capabilities and moving forward with the Government of Canada's GCWorkplace project. This includes the modernization of CNSC workspaces to encourage collaboration and offer greater flexibility and foster a culture of health and wellbeing.

Looking ahead, the CNSC will continue taking significant action in advancing equity, diversity and inclusion, which are fundamental to strengthening our healthy safety culture, encouraging innovation and collaboration, and supporting better decision-making. In particular, the CNSC will develop a new Equity, Diversity and Inclusion Plan with our newly formed Advisory Council on Inclusion to ensure that our efforts in this area are thoughtful and strategic. In 2023, the CNSC will continue to lead initiatives such as the International Gender Champions Impact Group on Gender Equality in Nuclear Regulatory Agencies – a community of heads of nuclear regulatory agencies and organizations committed to address gender issues in their institutions, countries and with international partners. In May 2023, the CNSC will host Canada's first Nuclear Energy Agency International Mentoring Workshop. This workshop will bring together Grade 9 Indigenous girls and accomplished mentors, weaving together Indigenous knowledge and western science to provide an empowering experience for young Indigenous women and to inspire them to consider pursuing careers in Science, Technology, Engineering and Math.

I encourage Canadians to keep reading to learn more about how the CNSC's highly skilled, professional staff are diligently regulating Canada's nuclear industry and keeping the environment and Canadians safe.

Rumina Velshi
President

PLANS AT A GLANCE

THE CNSC'S 4 STRATEGIC PRIORITIES

TO HAVE A **MODERN** APPROACH TO NUCLEAR REGULATION

- The CNSC is committed to a modern approach to nuclear regulation using science- and evidence-based, risk-informed, and technically sound regulatory practices and regulatory framework that consider scientific uncertainties and evolving expectations.

TO BE A **TRUSTED** REGULATOR

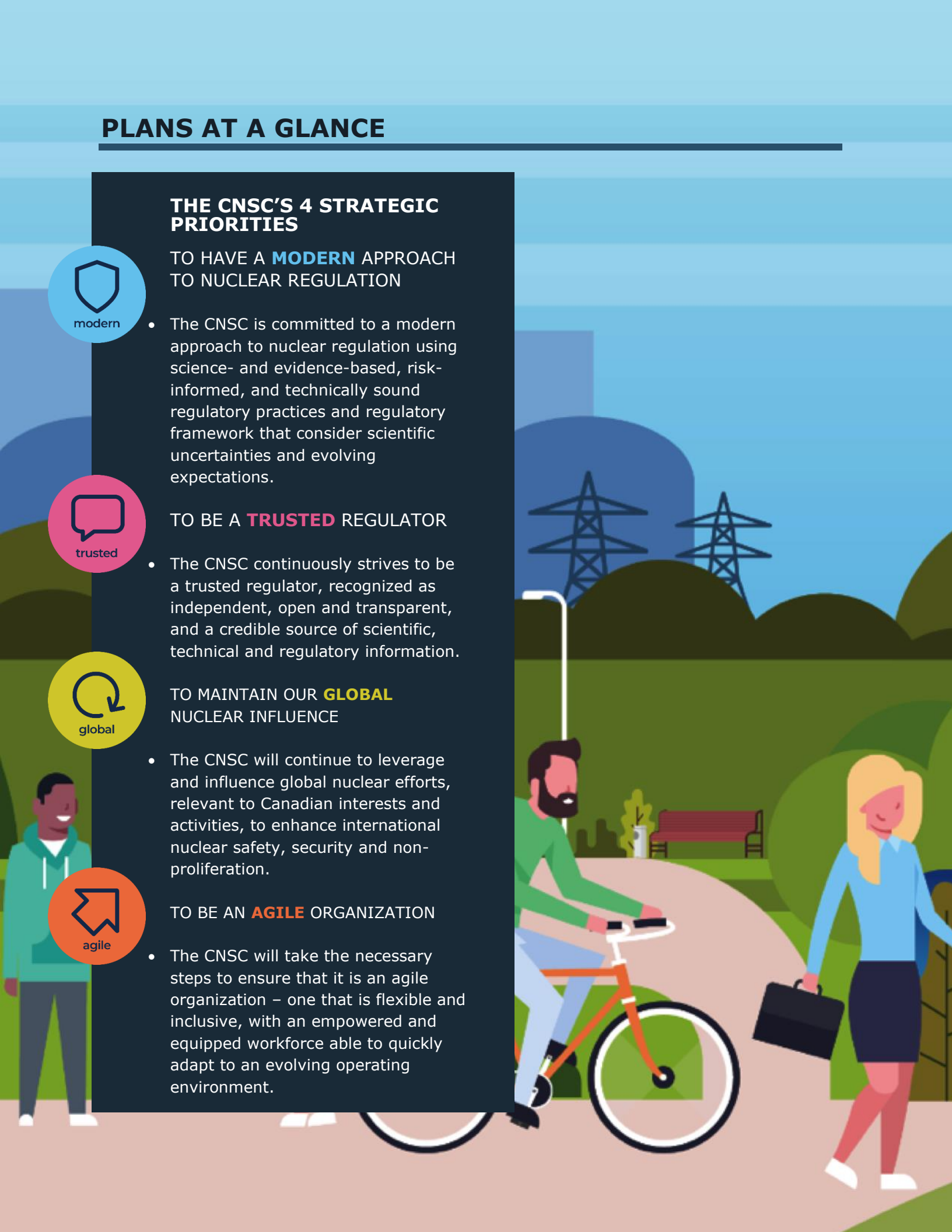
- The CNSC continuously strives to be a trusted regulator, recognized as independent, open and transparent, and a credible source of scientific, technical and regulatory information.

TO MAINTAIN OUR **GLOBAL** NUCLEAR INFLUENCE

- The CNSC will continue to leverage and influence global nuclear efforts, relevant to Canadian interests and activities, to enhance international nuclear safety, security and non-proliferation.

TO BE AN **AGILE** ORGANIZATION

- The CNSC will take the necessary steps to ensure that it is an agile organization – one that is flexible and inclusive, with an empowered and equipped workforce able to quickly adapt to an evolving operating environment.



PLANS AT A GLANCE

The commitment to the CNSC's core responsibility of nuclear regulation, the fulfillment of its mandate, and the achievement of its Departmental Results for 2023–24 and beyond are delivered through 5 programs (plus Internal Services) that are guided by the following four strategic priorities: modern, trusted, global and agile.

The CNSC is committed to a **modern** approach to nuclear regulation using science- and evidence-based, risk-informed, and technically sound regulatory practices and regulatory framework that consider scientific uncertainties and evolving expectations. In 2023–24, the CNSC will:

- leverage Budget 2022 (A Plan to Grow Our Economy and Make Life More Affordable[1]) to advance small modular reactor (SMR) readiness by:
  - refining the regulatory framework to provide greater regulatory clarity and predictability
  - expanding its technical ability, capacity and competency to regulate SMRs, including partnering with Natural Sciences and Engineering Research Council of Canada (NSERC) to foster SMR research at Canadian universities through the NSERC-CNSC Small Modular Reactors Research Grants Initiative[2]
  - supporting and coordinating policy development by providing technical expertise to federal and provincial policy owners
  - strengthening existing international collaboration efforts and pursuing international harmonization goals
- undertake compliance and licensing activities for new SMR builds, including:
  - reviewing the application for a licence to construct, for the Darlington New Nuclear Project
  - conducting technical reviews of application from Global First Power for a licence to prepare site
- conduct pre-licensing activities to support proposed SMR projects including:
  - New Brunswick Power's proposed SMR at the Point Lepreau site
  - Saskatchewan Power's proposed SMR
  - ongoing vendor design reviews
- continue to improve its regulatory oversight of radioactive waste management by:
  - consistently documenting rationales behind compliance planning decisions
  - improving data management practices
  - exploring ways to better integrate compliance verification data between software systems

Innovative technologies
The CNSC continually strives to be ready to regulate new nuclear technologies and associated disruptive, innovative and emerging technologies (DIET). One of these new technologies is fusion. In 2022, the CNSC published a white paper on fusion technologies and is currently involved with the International Atomic Energy Agency (IAEA) in drafting IAEA technical documents on fundamental

principles for regulating such technology. In 2023–24, the CNSC's newly formed Fusion Coordination Team will continue to monitor developments in fusion and participate in international discussions on regulating novel applications of this technology.

The CNSC is also working with a nuclear consultancy company to develop a research paper on artificial intelligence in the nuclear industry, and is collaborating on separate trilateral white papers with the United Kingdom's Office of Nuclear Regulation and the United States Nuclear Regulatory Commission. Both papers will be published on the CNSC website.

The CNSC continuously strives to be a **trusted** regulator, recognized as independent, open and transparent, and as a credible source of scientific, technical and regulatory information. In 2023–24, the CNSC will:

- demonstrate CNSC independence in regulatory decision making by:
  - developing and implementing an internal communications plan on best practices for appropriate CNSC-industry interaction
  - undertaking policy analysis work to examine the feasibility of whistleblower protection
  - determining the best approach for sharing information used in support of regulatory decisions
- modernize Commission proceedings in response to best practices and evolving public expectations around public engagement and participation by:
  - improving access to all proceeding documents
  - facilitating public participation to Commission's proceedings through ongoing improvements to the use of the hybrid approach (virtual/in-person)
  - implementing an issue driven approach to enable more effective participation in hearings
  - incorporating pre-hearing technical conferences to enhance comprehension of complex issues and further eliminate barriers to participation in the regulatory process
  - enhancing CNSC's Rules of Procedure[3]
  - ensuring the use of plain-language writing in the Commission's decisions and minutes
  - modernizing the CNSC's website to make it easier to navigate and to provide greater licensee-specific information to users
- undertake domestic and international outreach efforts to raise awareness of the importance of a healthy safety culture and the role of the licensee organization's board of directors
- develop and begin implementing an action plan in response to the findings and recommendations in the anticipated Nuclear Energy Agency report resulting from the 2022 Country-Specific Safety Culture Forum[4]

Canada's 2022 Country-Specific Safety Culture Forum

Indigenous and stakeholder engagement

The CNSC recognizes and understands the importance of consulting and building relationships with Indigenous Nations and communities in Canada, and is taking concrete steps towards working together to ensure the safe and effective regulation of nuclear energy and materials.

To this end, in 2023–24, the CNSC is committed to:

- implementing a new Strategic Stakeholder Engagement program that will guide the development and maintenance of long-term relationships with Indigenous Nations and communities and specific stakeholders, and ensure that concerns, perspectives and values are taken into consideration; in establishing this new program, the CNSC will move from a transactional approach to Indigenous and stakeholder relations to a lifecycle approach that focuses on long-term relationship building with key stakeholders outside of the CNSC's existing licensing processes
- advancing reconciliation through 5 strategic pillars:
  - Modernization of the CNSC's approach to consultation, engagement and long-term relationship building, including contributing to the Government of Canada's implementation of the federal *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP) *Act* and related government action plan under development
  - Strengthened management and governance for Indigenous consultation and engagement, and establishment of an Indigenous Advisory Committee (IAC); the IAC will provide independent external advice on the integration of Indigenous worldviews and perspectives to advance reconciliation and enhance the CNSC's policy and operational practices across all organizational branches
  - Enhanced CNSC cultural competency to foster a culture of reconciliation and Indigenous awareness
  - Integration of Indigenous knowledge based on the Indigenous Knowledge Policy Framework[5], to clearly articulate the CNSC's approach to working with Indigenous Peoples and their knowledge, in a manner consistent with the Impact Assessment Agency of Canada's framework and approach for working with Indigenous knowledge
  - Lowering of financial and capacity barriers, in order to enhance participation of Indigenous Nations and communities in CNSC regulatory processes

The CNSC will continue to leverage and influence **global** nuclear efforts, relevant to Canadian interests and activities, to enhance international nuclear safety, security and non-proliferation. In 2023–24, the CNSC will:

- demonstrate leadership and support efforts on harmonization of regulatory practices and requirements at a global level: International collaboration to harmonize the regulatory process is key to the successful deployment of new reactor designs such as SMRs. The CNSC will continue to participate in the IAEA SMR Regulators' Forum, and

CNSC Executive Vice-President and Chief Regulatory Operations Officer Ramzi Jammal and U.S. NRC Executive Director for Operations Daniel H. Dorman sign charter agreement on advanced reactor and small modular reactor technologies.

working groups and the Nuclear Energy Agency's (NEA) SMR-related working groups.

- enhance cooperation with the United States Nuclear Regulatory Commission (U.S. NRC)[6] by conducting joint safety reviews and exchanges on technical conclusions, including the collaboration outlined by the CNSC Charter[7] to reduce duplication of licensing review efforts.
- support improvements to safety standards through its roles in international associations and committees that advance nuclear safety, such as International Nuclear Safety Advisory Group and the Commission on Safety Standards.
- participate actively in NEA Committees and Working Groups and support the development of NEA publications, such as technical papers and reports.
- continue to exercise influence and hold leadership positions within multilateral organizations such as the International Nuclear Regulators Association (INRA) and the Western European Nuclear Regulators Association to share regulatory expertise: In May 2023, President and CEO Rumina Velshi will chair the 51st INRA meeting and host international members in Canada.
- participate in annual multinational events – specifically, the IAEA General Conference and the U.S. NRC Regulatory Information Conference.
- engage with Japan and the Philippines to further develop administrative arrangements[8] in support of Government of Canada efforts to modernize treaty and the respective Nuclear Cooperation Agreements[8] currently in force. The CNSC will also support Global Affairs Canada in the development of a Nuclear Cooperation Agreement with Poland.

The CNSC's Women in Science, Technology, Engineering and Math Initiative

WISTEM initiative

With greater diversity, the CNSC will be better equipped to achieve regulatory excellence and deliver on its mandate. To this end, it has undertaken a Women in Science, Technology, Engineering and Math (WISTEM) Initiative to raise awareness of and support women in STEM careers at the CNSC and elsewhere. In 2023–24, the CNSC WISTEM initative will:

- host the first Canadian NEA International Mentoring Workshop, which will weave both Indigenous and Western STEM systems to provide an empowering and inspiring experience for young Indigenous women
- continue to act as scientific secretariat to initiatives led by CNSC President and CEO Velshi; for example, the NEA's Gender Balance Task Group and the International Gender Champions Impact Group on Gender Equality in Nuclear Regulatory Agencies will be working collaboratively throughout 2022–24 on gender surveys regarding gender equity in nuclear regulatory agencies
- continue to implement mentoring and coaching programs, host networking events, participate and coordinate outreach activities, and promote the CNSC–university collaborative model to encourage more women to undertake academic research in STEM

agile

The CNSC will take the necessary steps to ensure that it is an agile organization – one that is flexible and inclusive, with an empowered and equipped workforce able to quickly adapt to an evolving operating environment. Improvements in this area support the attainment of all the CNSC's strategic priorities and Departmental Results. In 2023–24, the CNSC will:

- support digital transformation to provide its workforce with the necessary tools to be flexible, agile and respond to long-term organizational needs: New digital capabilities and tools will improve collaboration, work and data management, planning and tracking, process automation, etc.
- align its policies and processes to enable and empower a mobile and hybrid workforce: In this model, managers and employees will co-create flexible, in-office and remote work practices that prioritize personal well-being and career progression, while maximizing team connection, collaboration and innovation – regardless of location.

The CNSC's transformation agenda

As the nuclear industry continues to rapidly evolve, the CNSC is preparing to embark on a complex and exciting transformation journey to set itself up for success. In 2023–24, the CNSC will be implementing a Transformation Management Office (TMO) to deliver the full scope of CNSC transformation in a coordinated manner.

This new office will serve as a centralized change management function with clear objectives. It will use a systematic approach to manage CNSC transformation initiatives, including those selected as part of Project Athena – the strategic review of the CNSC that concluded in 2022. These initiatives will represent major organization-wide transformation that will propel the organization toward its vision of being a modern, agile, trusted and global regulator. The TMO will play a key role in ensuring that the CNSC achieves its vision and objectives, by positioning it to meet current and future demands of the Government of Canada, industry, Canadians, Indigenous Nations and communities, and other key stakeholders.

For more information on the CNSC's plans, see the "Core responsibilities: planned results and resources" section of this plan.

CORE RESPONSIBILITIES: PLANNED RESULTS AND RESOURCES

CORE RESPONSIBILITY: NUCLEAR REGULATION

THE CNSC'S DEPARTMENTAL RESULTS

1. The environment is protected from releases from nuclear facilities and activities.
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2. Canadians are protected from radiation resulting from nuclear facilities and activities.
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3. Nuclear material and substances, facilities and activities are secure and used for peaceful purposes.
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4. Canadians, including Indigenous peoples, have meaningful information about, and the opportunity to participate in, the nuclear regulatory process.
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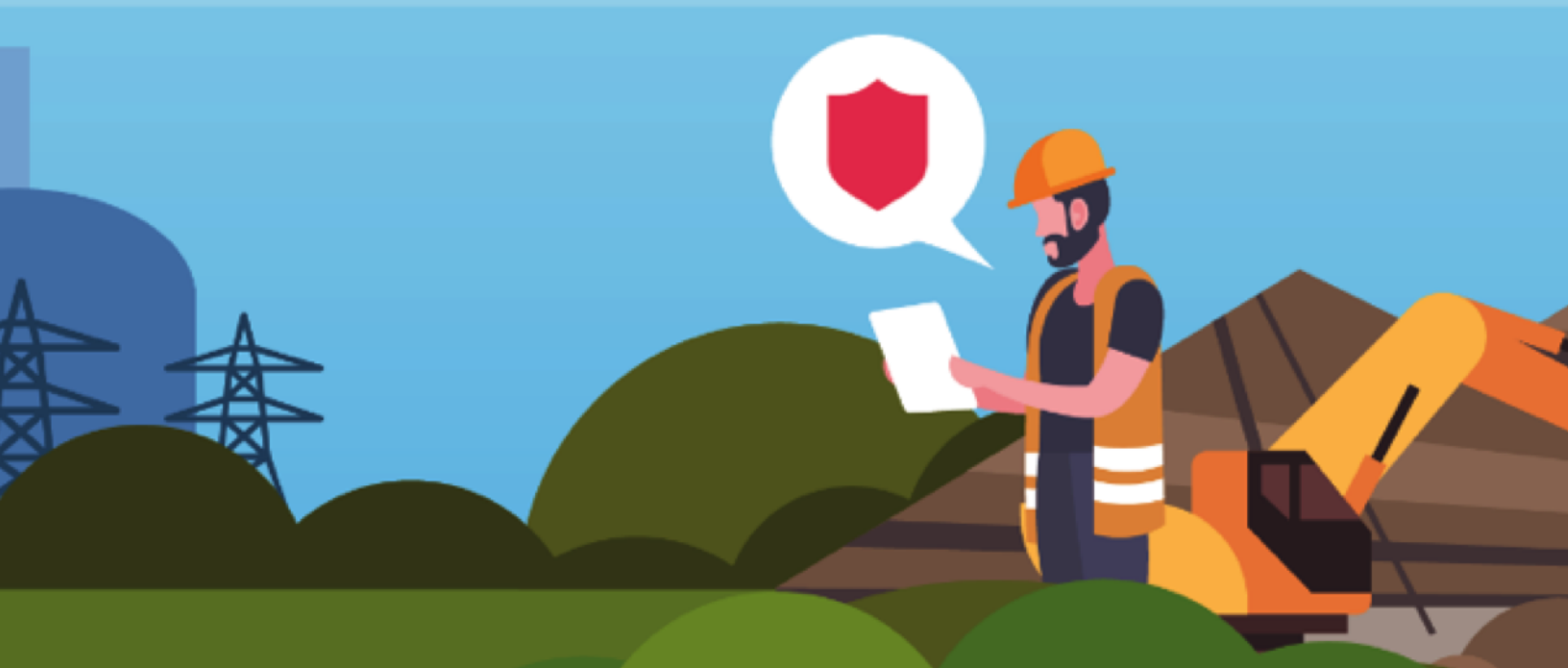


CORE RESPONSIBILITIES: PLANNED RESULTS AND RESOURCES

This section contains detailed information on the department's planned results and resources for each of its core responsibilities.

Nuclear Regulation

Description

The CNSC regulates the development, production and use of nuclear energy and substances to protect the health, safety, security of persons and the environment; implements Canada's international commitments on the peaceful use of nuclear energy; and disseminates objective scientific and regulatory information to members of the public. The CNSC maintains a regulatory framework and conducts licensing (including environmental protection reviews), compliance verification and enforcement. The CNSC is committed to building and maintaining the confidence of the public and Indigenous peoples through transparent, open and inclusive regulatory processes.

LIFECYCLE REGULATION

The CNSC is one of the only federal regulators to regulate the entire lifecycle of a project, from resource extraction, through nuclear fuel processing and power production, to decommissioning and waste management.

Planning highlights

DEPARTMENTAL RESULT 1

The environment is protected from releases from nuclear facilities and activities.

DEPARTMENTAL RESULT 2

Canadians are protected from radiation resulting from nuclear facilities and activities.

For the CNSC to achieve its planned results, risks must be identified, monitored and controlled across all nuclear facilities and activities by CNSC inspectors who conduct compliance verification activities for nearly 1,700 licensees in various sectors.

To ensure that the environment is protected from radiological and hazardous releases from nuclear facilities and activities, and to ensure that Canadians are protected from radiation resulting from nuclear facilities and activities, in 2023–24, the CNSC will:

- continue its regulatory oversight of Bruce Power's[9] Unit 6 major component replacement (MCR). CNSC staff will continue to ensure that the structures, systems and components will function as designed. Once this verification is complete, the CNSC will allow Bruce Power to load fuel into the refurbished reactor and proceed with the remaining commissioning tests for the unit to return to service in 2023. Additionally, CNSC staff have developed an inspection and compliance assessment plan to prepare for the Unit 3 MCR outage, scheduled to begin in March 2023.

- ensure continued regulatory oversight of the refurbishments at Darlington Nuclear Generating Station[10] to verify that projects are carried out safely and that required safety improvements are implemented. Ontario Power Generation (OPG) is expected to have 3 units in different stages of refurbishment outage: Unit 3 oversight includes return-to-service activities, Unit 1 oversight focuses on the install segment, and Unit 4 will begin the lead-in segment.
- continue to conduct environmental assessments[11] for major projects including the Near Surface Disposal Facility[12], Nuclear Power Demonstration closure project[13], Rook 1 project[14], Wheeler River[15], Whiteshell Reactor #1[16], and Micro Modular Reactor project[17] at the Chalk River Laboratories site.
- continue to collaborate with the Impact Assessment Agency of Canada under their memorandum of understanding[18] to ensure readiness for the first integrated impact assessment of a nuclear project, expected to start in 2023.
- prepare to regulate the Adaptive Phased Management (APM) plan – Canada's plan for the long-term management of used nuclear fuel – being implemented by the Nuclear Waste Management Organization[19]. APM involves the containment and isolation of used nuclear fuel in a new deep geological repository. Regulatory efforts will continue to include outreach and engagement, regulatory framework development, capacity building and independent research.
- prepare for end of commercial operation activities at Pickering Units 1 and 4 and the public hearing anticipated for OPG's proposed operation of Units 5–8 until September 2026. If OPG informs the CNSC of a request to operate the Pickering Nuclear Generating Station[20] beyond December 31, 2024, CNSC experts will review OPG's reassessment of the periodic safety review results.
- seek to achieve a new ISO/IEC 17025:2017[21] accreditation from the Standards Council of Canada[22]. The scope of this accreditation will include radioactivity measurement and inorganic elemental analysis of water samples. ISO/IEC 17025:2017 accreditation provides formal national and international recognition of the CNSC Laboratory's[23] technical competence. The laboratory provides various sample analysis services to the CNSC inspectors and officers in support of regulatory verification of licensee programs and to the independent environmental monitoring program.
- support the establishment of new laboratory requirements and the science collaboration approach for TerraCanada Science and Innovation Hub[24], as the CNSC Laboratory will be included in the first phase. The hub is part of a federal government-wide initiative to modernize science infrastructure and enhance collaboration among scientists.
- begin preparations to host an Integrated Regulatory Review Service (IRRS) follow-up mission based on *Canada's Response to the 2019 IRRS Report*, including a preparatory meeting with IAEA and CNSC staff.

CNSC isotope evaluation initiatives
In 2023–24, the CNSC will continue to provide regulatory oversight of medical isotope-producing initiatives that are progressing at the Darlington Nuclear Generating Station. Specifically, OPG (the licensee):

- has been granted a licence amendment by the Commission to allow production of molybdenum-99 (Mo-99). Mo-99 – and more precisely, its decay product, technetium-99 (Tc-99m) – is widely used by the medical industry for diagnostic imaging. OPG is expected to begin commercial production (irradiation of natural Mo-98) in 2023–24. CNSC staff will continue to provide regulatory oversight of OPG's activities.
- is pursuing an amendment to authorize the production of cobalt-60 (Co-60) and submitted a licensing application in December 2022. Co-60 is currently produced in other Ontario reactors and is commonly used to sterilize medical equipment. In 2023–24, the CNSC expects to participate in the Commission hearing process for a cobalt-related licence amendment.

To support the assurance that the public and environment are safe around licensed nuclear facilities, the CNSC has implemented an Independent Environmental Monitoring Program[25] (IEMP). The IEMP complements the CNSC's ongoing compliance verification program and involves taking samples from public areas around nuclear facilities. These samples are analyzed by the CNSC Laboratory to determine the amounts of radiological and hazardous substances. The results are then compared to applicable guidelines and resulting conclusions are communicated on the CNSC website[25].

CNSC staff sampling soil for BWXT in Toronto

In 2023–24, the CNSC will sample 9 sites: Darlington Nuclear Generating Site, Gentilly-2 facilities, Blind River Refinery, Nordion (Canada) Inc., Nuclear Power Demonstration Waste Facility, Port Hope Project and Port Granby Project, McMaster University, Gunnar mine, and Lorado mine.

DEPARTMENTAL RESULT 3

Nuclear material and substances, facilities and activities are secure and used for peaceful purposes.

Through the *Nuclear Safety and Control Act* (NSCA), the CNSC implements Canada's international commitments on the peaceful use of nuclear energy. The CNSC implements regulatory programs to ensure that CNSC licensees and Canada at large meet the obligations arising from Canada's international safeguards agreements with the IAEA. Safeguards conclusions drawn by the IAEA assure Canadians and the international community that all nuclear materials in Canada are used for peaceful purposes.

To ensure nuclear material and substances, facilities and activities are secure and used for peaceful purposes, in 2023–24, the CNSC will:

- repeal and replace the *Nuclear Security Regulations*[26] as part of its nuclear security regulatory modernization project. Modernizing the nuclear security regulatory framework[27] involves extensive consultation with the public and stakeholders, as well as working to meet Government of Canada requirements for developing regulations, such as weighing the impacts of potential changes to licensees' security programs against the benefits to Canadians. The CNSC received

approval from the Treasury Board Cabinet Committee to pre-publish the draft regulations for consultation in 2022, and plans to seek the Commission's and Governor in Council approval in 2023.

- revise its nuclear security series of regulatory documents to provide guidance for applicants and licensees on meeting the requirements of the new regulations. The CNSC plans to post the revised regulatory documents for public consultation in fall 2023 and publish the documents in fall 2024.
- implement the recommendations stemming from the joint audit and evaluation conducted in 2022–23 on the CNSC's regulation of cyber security. In addition, the CNSC will continue to update its regulatory requirements and guidance to enhance the regulation of cyber security and the protection of information for nuclear facilities and for nuclear substance licensees. Public consultation will be held on these regulatory changes.

Emergency preparedness at the CNSC

To ensure the safety of Canadians and the environment, the CNSC requires all major nuclear facilities in Canada to have comprehensive emergency preparedness programs and response plans, including regular emergency exercises, to deal with potential incidents at their sites. These plans must harmonize with those of other stakeholders, including provinces, municipalities and other federal partners. The CNSC will undertake the following initiatives in 2023–24 to enhance its emergency preparedness:

- support the execution of the Emergency Preparedness Review 2019 Management Action Plan[28] and prepare for follow-up mission in 2023
- support the revision of the Federal Nuclear Emergency Plan[29] for publication in 2023
- review and amend (accordingly) memoranda of understanding concluded between the CNSC and the provinces of Ontario and New Brunswick related to emergency response

DEPARTMENTAL RESULT 4

Canadians, including Indigenous peoples, have meaningful information about, and the opportunity to participate in, the nuclear regulatory process.

The CNSC is a proactive regulator that supports participation of members of the public and Indigenous peoples in its regulatory processes. Public hearings and meetings are open to the public, are sometimes held in the affected community, and are always webcast live on the CNSC website. In addition, the CNSC offers funding through its Participant Funding Program[30] (PFP) to help support the participation of Indigenous peoples, members of the public, and stakeholders in bringing valuable information to the Commission. This is recognized internationally as a best practice for regulators to emulate.

The public and Indigenous peoples are also consulted on discussion papers and draft regulatory framework documents prior to publication. Furthermore, the CNSC frequently participates in community outreach and engagement activities and responds to media calls and public information inquiries. As an agent of the Crown, the CNSC has an important responsibility to engage and consult with

interested Indigenous Nations and communities and is committed to developing long-term positive relationships with these communities. The CNSC is always striving to implement ideas to improve its outreach and engagement strategies with all stakeholders and Indigenous Nations and communities.

To ensure that Canadians, including Indigenous peoples, have meaningful information about, and the opportunity to participate in, the nuclear regulatory process in 2023–24, the CNSC will:

- leverage the funding received through the Impact Assessment Renewal Initiative to:
    - establish a grants and contributions program, the Indigenous and Stakeholder Capacity Fund, to ensure that Indigenous Nations and communities and stakeholders have the capacity to take part in the CNSC's programs and initiatives prior to and following decisions on new projects, and between licensing decisions of existing projects.
    - provide resources for the CNSC's Indigenous and stakeholder engagement activities in support of a more holistic, lifecycle approach to relationship building, consultation, and engagement.
    - increase the funding envelope for the existing PFP to provide additional support to Indigenous peoples, the public, local communities, and key stakeholders to enable their participation in the CNSC's licensing reviews and decision-making processes.
- undertake follow-up actions from the Commission's decision to renew the Point Lepreau Nuclear Generating Station[31] operating licence until June 2032. These actions include reporting back to the Commission annually, through the regulatory oversight report, on CNSC staff's and New Brunswick Power's progress in advancing reconciliation; coordinating with required provincial and federal agencies to bring awareness to issues identified by Indigenous Nations and communities; and providing a comprehensive update in 2027 to the Commission, which ensures participation opportunities for members of the public and Indigenous Nations and communities.
- continue to explore and implement solutions to present digital regulatory information in a way that enhances accessibility and clarity for Canadians, including Indigenous peoples.
- continue to administer its online consultation platform, letstalknuclearsafety.ca[32]. Feedback is an important part of the CNSC's process for regulating the nuclear industry in Canada. Proposed changes to regulatory framework tools are posted to the platform for public consultation with host communities, licensees, interested organizations and anyone else who would like to take part.
- ensure that scientific information and data are accessible in accordance with the Open Government[33] initiative. The CNSC will undertake this through implementing the Regional Information and Monitoring Network for the Ottawa River Watershed, and by developing a CNSC Open Government guidance framework or plan to facilitate the posting of various Open Data and Open Information products to the Open Government Portal.

Planned results for Nuclear Regulation

The following table shows, for Nuclear Regulation, the planned results, the result indicators, the targets and the target dates for 2023–24, and the actual results for the three most recent fiscal years for which actual results are available.

Departmental results	Departmental Result Indicators	Target	Date to achieve target	2019–20 Actual results	2020–21 Actual results	2021–22 Actual results
The environment is protected from releases from nuclear facilities and activities.	Number of instances of radiological releases that exceeded regulatory limits	0	March 31, 2024	1[34]	0	0
	Number of instances of hazardous releases that exceeded regulatory limits	≤5	March 31, 2024	2	2	0
	Percentage of Independent Environmental Monitoring (IEMP) samples (food, water, air, soil, sediment, sand and vegetation) that met guidelines	≥95%	March 31, 2024	98.9%	94.9%[35]	97%
Canadians are protected from radiation resulting from nuclear facilities and activities.	Number of radiation doses to members of the public that exceeded regulatory limits	0	March 31, 2024	0	0	0
	Number of radiation doses to workers that exceeded regulatory limits	0	March 31, 2024	2[36]	3[37]	0
Nuclear material and substances, facilities and activities are secure and used for peaceful purposes.	Number of instances of non-peaceful or malicious use of Canadian exports of nuclear substances, equipment and information	0	March 31, 2024	0	0	0
	Number of lost or stolen radioactive sealed sources	≤2	March 31, 2024	0	0	0
	Canada's international commitments to the International Atomic Energy Agency (IAEA) with respect to nuclear safeguards and verification are met	IAEA broader conclusion	December 31, 2023	Met	Met	Met
Canadians, including Indigenous peoples, have meaningful information about, and the opportunity to participate in, the nuclear regulatory process.	Percentage of Commission proceedings that were accessible to members of the public and Indigenous peoples	>90%	March 31, 2024	100%	100%	92%
	Percentage of Commission proceedings for which the Participant Funding Program (PFP) was made available to members of the public and Indigenous peoples	>90%	March 31, 2024	100%	100%	100%
	Percentage of Commission proceedings documents that were available in a timely manner on the CNSC external website upon request by members of the public and Indigenous peoples	> 90%	March 31, 2024	100%	100%	95%
	Number of self-identified Indigenous Nations, communities and organizations who participated in CNSC proceedings	Stable or increasing trend	March 31, 2024	22	18[38]	23

The financial, human resources and performance information for the Canadian Nuclear Safety Commission's program inventory is available in the GC InfoBase[39].

Planned budgetary spending for Nuclear Regulation

The following table shows, for Nuclear Regulation, budgetary spending for 2023–24, as well as planned spending for that year and for each of the next two fiscal years.

2023–24 budgetary spending (as indicated in Main Estimates)	2023–24 planned spending	2024–25 planned spending	2025–26 planned spending
108,617,235	116,574,133	118,614,657	119,718,168

Financial, human resources and performance information for the Canadian Nuclear Safety Commission's program inventory is available in the GC InfoBase[39].

Planned human resources for Nuclear Regulation

The following table shows, in full-time equivalents, the human resources the department will need to fulfill this core responsibility for 2023–24 and for each of the next two fiscal years.

2023–24 planned full-time equivalents	2024–25 planned full-time equivalents	2025–26 planned full-time equivalents
682	678	678

Financial, human resources and performance information for the Canadian Nuclear Safety Commission's program inventory is available in the GC InfoBase[39].

INTERNAL SERVICES: PLANNED RESULTS

Description

Internal services are the services that are provided within a department so that it can meet its corporate obligations and deliver its programs. There are 10 categories of internal services:

- management and oversight
- communications
- corporate security
- legal
- human resources management
- financial management
- information management
- information technology
- materiel management
- acquisition management

Strengthening the CNSC's hybrid work model

The CNSC continues to develop new tools and practices to foster a team culture that is conducive to collaboration in a hybrid work environment.

In 2023–24, the CNSC will continue implementing the Government of Canada's GCworkplace vision[40] through an accelerated 5-year plan that will see the conversion of its spaces to modern design standards. In the short term, some steps have been taken to support a hybrid workplace, such as the transition to activity-based seating to enhance collaboration and connection.

The CNSC will continue onboarding staff into its Microsoft Teams / SharePoint-driven Digital Workspace through 2023–24, providing new opportunities for collaboration and building digital efficiencies. The CNSC's Digital Program will build on that foundation, introducing new digital applications and tools and integrating unified information and data to improve regulatory activities, improve insights, and supporting decision making.

Planning highlights

Equity, diversity and inclusion (EDI) are fundamental to the CNSC's regulatory safety culture and critical to spurring innovation and team collaboration. The CNSC has taken deliberate actions to build a healthy, collaborative workplace and a supportive culture for employees. In 2023–24, the CNSC will develop a new 3-year EDI Plan that will include initiatives such as:

- raising awareness about the importance of self-identification and launching a new self-identification form that is more reflective of Canada's available labour market
- establishing a pay equity plan by September 2024 under the *Pay Equity Act*[41] to identify and correct gender wage gaps where they exist
- implementing the CNSC Accessibility Plan as per requirements under the *Accessible Canada Act*; the plan will focus on the identification and removal of barriers, and the prevention of new barriers.
- leveraging a new Advisory Council on Inclusion to advocate and represent the voices and interests of members of equity-seeking groups, employee networks and CNSC staff through open discussion and transparent decision-making processes, in order to make meaningful contributions to implement goals and actions outlined in the current EDI Plan

In 2023–24, the CNSC will also continue to build workforce capability for respect, inclusion and collaboration in a hybrid work environment. The CNSC will do this by continuing to create opportunities for dialogue to allow colleagues to learn about each other by hearing about lived experiences in order to

grow awareness and build trust. The CNSC will also continue to vary its hiring strategies to ensure that it has access to diverse talent while building interpersonal skills that empower people to navigate situations that can create mistrust and undermine an inclusive workplace.

Additionally, the CNSC will continue to pilot a career progression program for regional inspectors and establish an additional pilot with technical specialists. The objective is to address the Public Service Employee Survey findings and employee feedback on satisfaction with career advancement opportunities, and to provide managers a flexible way to manage their workforce.

Planning for contracts awarded to Indigenous businesses

In August 2021 the Treasury Board Secretariat announced that Government departments and agencies will need to ensure that 5% of contracts are awarded to Indigenous businesses. This requirement is being phased in across the Government and will become mandatory for CNSC in fiscal year (FY) 2023–24. The CNSC has been ramping up to meet this target and, based on contracting activity in FY 2022–23, expects that it will be able to meet the mandatory target.

5% reporting field description	2021-22 actual % achieved	2022-23 forecasted % target	2023-24 planned % target
Total percentage of contracts with Indigenous businesses	N/A	N/A	5%

Planned budgetary spending for internal services

The following table shows, for internal services, budgetary spending for 2023–24, as well as planned spending for that year and for each of the next two fiscal years.

2023–24 budgetary spending (as indicated in Main Estimates)	2023–24 planned spending	2024–25 planned spending	2025–26 planned spending
49,970,614	53,889,683	54,280,914	54,916,246

Planned human resources for internal services

The following table shows, in full-time equivalents, the human resources the department will need to carry out its internal services for 2023–24 and for each of the next two fiscal years.

2023–24 planned full-time equivalents	2024–25 planned full-time equivalents	2025–26 planned full-time equivalents
301	300	300

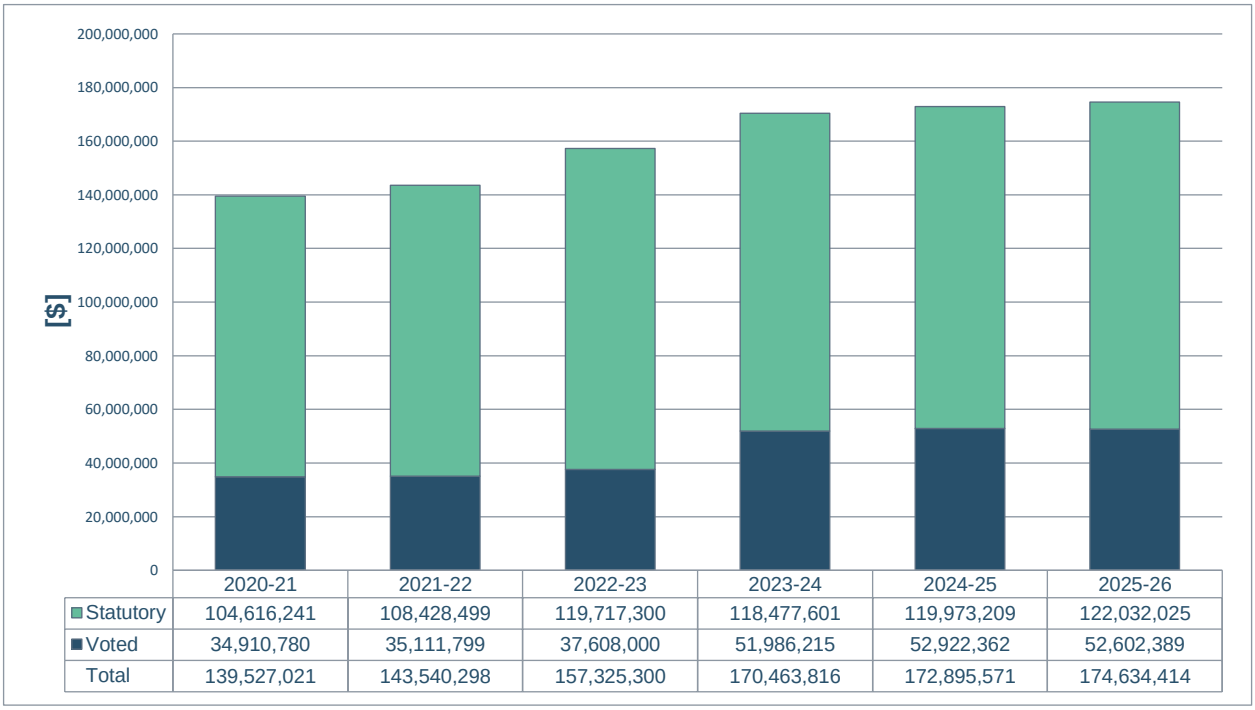
PLANNED SPENDING AND HUMAN RESOURCES

This section provides an overview of the department's planned spending and human resources for the next three fiscal years and compares planned spending for 2023–24 with actual spending for the current year and the previous year.

Planned spending

Departmental spending 2020–21 to 2025–26

The following graph presents planned (voted and statutory) spending over time.



	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Statutory	104,616,241	108,428,499	119,717,300	118,477,601	119,973,209	122,032,025
Voted	34,910,780	35,111,799	37,608,000	51,986,215	52,922,362	52,602,389
Total	139,527,021	143,540,298	157,325,300	170,463,816	172,895,571	174,634,414

The CNSC is financed by the Government of Canada through voted Parliamentary and statutory authorities. Included in the statutory appropriation is a revenue-spending authority, which allows the CNSC to spend most licence fee revenue, as well as the funding for contributions to employee benefit plans. The voted authority provides funding for activities exempt from paying fees (i.e., hospitals and universities) and activities with respect to Canada's international obligations (including non-proliferation activities), public responsibilities such as emergency management and public information programs, and the updating of the Nuclear Safety Control Act and its associated regulations.

The budgetary planning summary section provides variance explanations on year-to-year fluctuations in spending.

Budgetary planning summary for core responsibilities and internal services (dollars)

The following table shows information on spending for each of the Canadian Nuclear Safety Commission's core responsibilities and for its internal services for 2023–24 and other relevant fiscal years.

Core responsibilities and internal services	2020–21 actual expenditures	2021–22 actual expenditures	2022–23 forecast spending	2023–24 budgetary spending (as indicated in Main Estimates)	2023–24 planned spending	2024–25 planned spending	2025–26 planned spending
Nuclear Regulation	92,862,646	96,598,106	103,834,698	108,617,235	116,574,133	118,614,657	119,718,168
Subtotal	92,862,646	96,598,106	103,834,698	108,617,235	116,574,133	118,614,657	119,718,168
Internal services	46,664,375	46,942,192	53,490,602	49,970,614	53,889,683	54,280,914	54,916,246
Total	**139,527,021**	**143,540,298**	**157,325,300**	**158,587,849**	**170,463,816**	**172,895,571**	**174,634,414**

The difference between the 2023–24 Main Estimates of $158.6 million and the 2023–24 planned spending of $170.5 million is due to the practice of including only the employee benefit costs associated with the voted appropriation funds in the Main Estimates, while including the additional employee benefits associated with the revenue spending authority in the planned spending. Fees collected by the CNSC represent approximately 70% of planned spending.

The $4.0-million increase in actual spending from $139.5 million in 2020–21 to $143.5 million in 2021–22 is mainly due to an increase in personnel costs resulting from a rise in positions staffed and from economic increases, including retroactive payments.

Planned spending is forecast to increase by $13.8 million from $143.5 million in 2021–22 to $157.3 million in 2022–23, due to a predicted increase in FTE utilization, cost-of-living increases including salary and wages, a significant increase in travel in light of to the easing of COVID-19 travel restrictions, and use of funding received through Budget 2022, A Plan to Grow Our Economy and Make Life More Affordable[42], to expand the CNSC's technical ability, capacity and competency to regulate SMRs.

The CNSC's planned spending is forecast to increase by $13.2 million to $170.5 million in 2023–24, from $157.3 million in 2022–23, due to funding received to expand the CNSC's technical ability, capacity and competency to regulate SMRs as well as the implementation of activities arising from funding received through the Impact Assessment Renewal Initiative, including the establishment of a new grants and contributions program, the Indigenous and Stakeholder Capacity Fund, and an increase in the funding envelope for the existing Participant Funding Program. The increase is also attributable to a forecasted increase in FTE utilization due to the continued staffing of vacant positions and cost-of-living increases,

including salary and wages.

The CNSC's overall planned spending plans indicate no significant changes over the 2023–24 to 2025–26 planning periods. The increases in planned spending from $170.5 million in 2023–24 to $172.9 million in 2024–25, and $174.6 million in 2025–26, are primarily attributable to cost-of-living increases, including salary and wages.

Planned human resources

The following table shows information on human resources, in full-time equivalents (FTEs), for each of the Canadian Nuclear Safety Commission's core responsibilities and for its internal services for 2023–24 and the other relevant years.

Human resources planning summary for core responsibilities and internal services

Core responsibilities and internal services	2020–21 actual full-time equivalents	2021–22 actual full-time equivalents	2022–23 forecast full-time equivalents	2023–24 planned full-time equivalents	2024–25 planned full-time equivalents	2025–26 planned full-time equivalents
Nuclear regulation	581	592	617	682	678	678
Subtotal	581	592	617	682	678	678
Internal services	269	279	293	301	300	300
Total	850	871	910	983	978	978

The increase in FTEs from 850 in 2020–21 to 871 in 2021–22 is primarily a result of the staffing of vacant positions. The forecast increase from 871 FTEs in 2021-22 to 910 FTEs in 2022–23 is attributable to added positions for the regulation of SMRs in addition to the continued staffing of vacant positions. The planned increase from 910 FTEs in 2022–23 to 983 FTEs in 2023–24 is due to full-year impact of the 2022–23 staffing actions to implement SMR regulatory readiness, and the new grants and contribution program as well as the continued staffing of vacant positions. The FTE forecast anticipates a marginal change from 983 FTEs in 2023–24 to 978 FTEs for both 2024–25 and 2025–26.

Estimates by vote

Information on the Canadian Nuclear Safety Commission's organizational appropriations is available in the 2023–24 Main Estimates[43].

Future-oriented condensed statement of operations

The future-oriented condensed statement of operations provides an overview of the Canadian Nuclear Safety Commission's operations for 2022–23 to 2023–24.

The forecast and planned amounts in this statement of operations were prepared on an accrual basis. The forecast and planned amounts presented in other sections of the Departmental Plan were prepared on an expenditure basis. Amounts may therefore differ.

A more detailed future-oriented statement of operations and associated notes, including a reconciliation of the net cost of operations to the requested authorities, are available on the Canadian Nuclear Safety Commission's website[44].

Future-oriented condensed statement of operations for the year ending March 31, 2024 (dollars)

Financial information	2022–23 forecast results	2023–24 planned results	Difference (2023–24 planned results minus 2022–23 forecast results)
Total expenses	177,901,000	186,206,000	8,305,000
Total revenues	124,982,000	132,205,000	7,223,000
Net cost of operations before government funding and transfers	52,919,000	54,001,000	1,082,000

The CNSC's 2023–24 net cost of operations of $54.0 million reflects an increase of $1.1 million (or 2.0%) when compared to the 2022–23 forecasted results. This change is a result of an increase in total expenses of $8.3 million (or 4.7%). This is primarily due to a forecasted increase in FTE use resulting from the continued staffing of new positions and cost-of-living increases, including salaries and wages. Total revenues are forecasted to increase by $7.2 million (or 5.8%), in part as a result of a new licence application. Regulatory-fee revenues fund most of the CNSC's expenses.

CORPORATE INFORMATION

Organizational profile

Appropriate minister: Jonathan Wilkinson

Institutional head: Rumina Velshi[45]

Ministerial portfolio: Natural Resources Canada[46]

Enabling instrument: *Nuclear Safety and Control Act*[47]

Year of incorporation: 2000

Other: The CNSC's headquarters are located in Ottawa, Ontario. The CNSC maintains 11 regional offices, both at major facilities and elsewhere, in order to conduct inspections of licensees across the country on a regular basis.

Raison d'être, mandate and role: who we are and what we do

Information on the Canadian Nuclear Safety Commission's raison d'être, mandate and role is available on the department's website[48].

Operating context

Information on the operating context is available on the Canadian Nuclear Safety Commission's website[48].

Reporting framework

The Canadian Nuclear Safety Commission's approved departmental results framework and program inventory for 2023–24 are as follows.

Core Responsibility: Nuclear Regulation	
Description: The CNSC regulates the development, production and use of nuclear energy and substances to protect health, safety, security of persons and the environment; implements Canada's international commitments on the peaceful use of nuclear energy; and disseminates objective scientific and regulatory information to members of the public. The CNSC maintains a regulatory framework and conducts licensing (including environmental protection reviews), compliance verification and enforcement. The CNSC is committed to building and maintaining the confidence of the public and Indigenous peoples through transparent, open and inclusive regulatory processes.	
Departmental Results	**Indicators**
R 1: The environment is protected from releases from nuclear facilities and activities.	Number of instances of radiological releases that exceeded regulatory limits
	Number of instances of hazardous releases that exceeded regulatory limits
	Percentage of Independent Environmental Monitoring Program (IEMP) samples (food, water, air, soil, sediment, sand and vegetation) that met guidelines

R 2: Canadians are protected from radiation resulting from nuclear facilities and activities.	Number of radiation doses to members of the public that exceeded regulatory limits
	Number of radiation doses to workers that exceeded regulatory limits
R 3: Nuclear material and substances, facilities and activities are secure and used for peaceful purposes.	Number of instances of non-peaceful or malicious use of Canadian exports of nuclear substances, equipment and information
	Number of lost or stolen radioactive sealed sources
	Canada's international commitments to the International Atomic Energy Agency (IAEA) with respect to nuclear safeguards and verification are met
R 4: Canadians, including Indigenous peoples, have meaningful information about, and the opportunity to participate in, the nuclear regulatory process.	Percentage of Commission proceedings that were accessible to members of the public and Indigenous peoples
	Percentage of CNSC proceedings for which the Participant Funding Program (PFP) was made available to members of the public and Indigenous peoples
	Percentage of public proceedings documents that were available in a timely manner upon request by members of the public and Indigenous peoples
	Number of self-identified Indigenous Nations, communities and organizations who participated in CNSC proceedings

Program Inventory				
Nuclear Fuel Cycle	Nuclear Reactors	Nuclear Substances and Prescribed Equipment	Nuclear Non-Proliferation	Scientific, Regulatory and Public Information
Internal Services				

SUPPORTING INFORMATION ON THE PROGRAM INVENTORY

Supporting information on planned expenditures, human resources, and results related to the Canadian Nuclear Safety Commission's program inventory is available in the GC InfoBase[39].

SUPPLEMENTARY INFORMATION TABLES

The following supplementary information tables are available on the Canadian Nuclear Safety Commission's website[48]:

- Details on transfer payment programs
- Gender-based analysis plus

FEDERAL TAX EXPENDITURES

The Canadian Nuclear Safety Commission's Departmental Plan does not include information on tax expenditures.

Tax expenditures are the responsibility of the Minister of Finance. The Department of Finance Canada publishes cost estimates and projections for government-wide tax expenditures each year in the Report on Federal Tax Expenditures[49]. This report provides detailed information on tax expenditures, including objectives, historical background and references to related federal spending programs, as well as evaluations, research papers and gender-based analysis plus.

ORGANIZATIONAL CONTACT INFORMATION

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Email: cnsc.info.ccsn@cnsc-ccsn.gc.ca

Website: www.nuclearsafety.gc.ca

APPENDIX: DEFINITIONS

appropriation (crédit)

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

budgetary expenditures (dépenses budgétaires)

Operating and capital expenditures; transfer payments to other levels of government, organizations or individuals; and payments to Crown corporations.

core responsibility (responsabilité essentielle)

An enduring function or role performed by a department. The intentions of the department with respect to a core responsibility are reflected in one or more related departmental results that the department seeks to contribute to or influence.

Departmental Plan (plan ministériel)

A document that sets out a department's priorities, programs, expected results and associated resource requirements, covering a three-year period beginning with the year indicated in the title of the report. Departmental Plans are tabled in Parliament each spring.

departmental result (résultat ministériel)

A change that a department seeks to influence. A departmental result is often outside departments' immediate control, but it should be influenced by program-level outcomes.

departmental result indicator (indicateur de résultat ministériel)

A factor or variable that provides a valid and reliable means to measure or describe progress on a departmental result.

departmental results framework (cadre ministériel des résultats)

A framework that consists of the department's core responsibilities, departmental results and departmental result indicators.

Departmental Results Report (rapport sur les résultats ministériels)

A report on a department's actual performance in a fiscal year against its plans, priorities and expected results set out in its Departmental Plan for that year. Departmental Results Reports are usually tabled in Parliament each fall.

full-time equivalent (équivalent temps plein)

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.

gender-based analysis plus (GBA Plus) (analyse comparative entre les sexes plus [ACS Plus])

An analytical tool used to support the development of responsive and inclusive policies, programs and other initiatives. GBA Plus is a process for understanding who is impacted by the issue or opportunity being addressed by the initiative; identifying how the initiative could be tailored to meet diverse needs of the people most impacted; and anticipating and mitigating any barriers to accessing or benefitting

from the initiative. GBA Plus is an intersectional analysis that goes beyond biological (sex) and socio-cultural (gender) differences to consider other factors, such as age, disability, education, ethnicity, economic status, geography, language, race, religion, and sexual orientation.

government-wide priorities (priorités pangouvernementales)

For the purpose of the 2023–24 Departmental Plan, government-wide priorities are the high-level themes outlining the Government's agenda in the 2021 Speech from the Throne: building a healthier today and tomorrow; growing a more resilient economy; bolder climate action; fighter harder for safer communities; standing up for diversity and inclusion; moving faster on the path to reconciliation and fighting for a secure, just, and equitable world.

high impact innovation (innovation à fort impact)

High impact innovation varies per organizational context. In some cases, it could mean trying something significantly new or different from the status quo. In other cases, it might mean making incremental improvements that relate to a high-spending area or addressing problems faced by a significant number of Canadians or public servants.

horizontal initiative (initiative horizontale)

An initiative in which two or more federal organizations are given funding to pursue a shared outcome, often linked to a government priority.

non-budgetary expenditures (dépenses non budgétaires)

Net outlays and receipts related to loans, investments and advances, which change the composition of the financial assets of the Government of Canada.

performance (rendement)

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.

plan (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 tend to focus on actions that lead up to the expected result.

planned spending (dépenses prévues)

For Departmental Plans and Departmental Results Reports, planned spending refers to those amounts 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 Departmental Plans and Departmental Results Reports.

program (programme)

Individual or groups of services, activities or combinations thereof that are managed together within the department and focus on a specific set of outputs, outcomes or service levels.

program inventory (répertoire des programmes)

Identifies all of the department's programs and describes how resources are organized to contribute to the department's core responsibilities and results.

result (résultat)

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.

statutory expenditures (dépenses législatives)

Expenditures that Parliament has approved through legislation other than appropriation acts. The legislation sets out the purpose of the expenditures and the terms and conditions under which they may be made.

target (cible)

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.

voted expenditures (dépenses votées)

Expenditures that Parliament approves annually through an Appropriation Act. The vote wording becomes the governing conditions under which these expenditures may be made.

ENDNOTES

1 Canada, Budget 2022: A Plan to Grow Our Economy and Make Life More Affordable, https://budget.gc.ca/2022/home-accueil-en.html

2 Natural Sciences and Engineering Research Council of Canada, NSERC-CNSC Small Modular Reactors Research Grant Initiative, https://www.nserc-crsng.gc.ca/Innovate-Innover/CNSC-CCSN_eng.asp

3 Justice Laws website, Canadian Nuclear Safety Commission Rules of Procedure, https://laws-lois.justice.gc.ca/eng/regulations/SOR-2000-211/page-1.html

4 Nuclear Energy Agency, Canada's first edition of the Country-Specific Safety Culture Forum, https://www.oecd-nea.org/jcms/pl_73839/canada-s-first-edition-of-the-country-specific-safety-culture-forum

5 Canadian Nuclear Safety Commission, Indigenous Knowledge Policy Framework, https://nuclearsafety.gc.ca/eng/resources/aboriginal-consultation/indigenous-knowledge-policy.cfm

6 World Nuclear News, US, Canadian regulators further SMR collaboration, https://www.world-nuclear-news.org/Articles/US,-Canadian-regulators-further-SMR-collaboration

7 Canadian Nuclear Safety Commission, Charter: Collaboration on GE Hitachi's BWRX-300 Design, https://nuclearsafety.gc.ca/eng/resources/international-cooperation/international-agreements/cnsc-usnrc-smr-advanced-reactor-charter.cfm

8 Canadian Nuclear Safety Commission, International agreements, https://nuclearsafety.gc.ca/eng/resources/international-cooperation/international-agreements.cfm

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16 Canadian Nuclear Laboratories, Whiteshell Reactor #1 Decommissioning, https://www.cnl.ca/environmental-stewardship/wr-1-reactor-decommissioning/

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18 Canadian Nuclear Safety Commission, CNSC Signs MOU with The Impact Assessment Agency of Canada, https://nuclearsafety.gc.ca/eng/acts-and-regulations/memorandums-of-understanding/mou-impact-assessment-agency-canada.cfm
19 Nuclear Waste Management Organization, About Adaptive Phased Management, https://www.nwmo.ca/en/Canadas-Plan/About-Adaptive-Phased-Management-APM
20 Canadian Nuclear Safety Commission, Pickering Nuclear Generating Station, https://nuclearsafety.gc.ca/eng/reactors/power-plants/nuclear-facilities/pickering-nuclear-generating-station/index.cfm
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26 Justice Laws website, *Nuclear Security Regulations*, https://laws-lois.justice.gc.ca/eng/regulations/sor-2000-209/
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29 Canada, Federal Nuclear Emergency Plan Part 1: Master Plan, https://www.canada.ca/en/health-canada/services/publications/health-risks-safety/federal-nuclear-emergency-master-plan-part-1.html
30 Canadian Nuclear Safety Commission, Participant Funding Program, https://nuclearsafety.gc.ca/eng/the-commission/participant-funding-program/opportunities/index.cfm
31 Canadian Nuclear Safety Commission, Point Lepreau Nuclear Generating Station, https://nuclearsafety.gc.ca/eng/reactors/power-plants/nuclear-facilities/point-lepreau-nuclear-generating-station/index.cfm
32 Let’s Talk Nuclear Safety, https://www.letstalknuclearsafety.ca/
33 Canada, Open Government, https://open.canada.ca/en
34 DraxImage event reported to the Commission in December 2019: Jubilant Draximage Inc. reported that its weekly sampling monitoring results were above the weekly release limit for iodine-131 (I-131) as specified in its licence. On November 20, 2019 the average weekly release concentration was calculated as 322 becquerels per cubic metre (Bq/m^3) for I-131, and the weekly release limit for I-131 is 175 Bq/m^3.
35 In fiscal year 2020–21, 94.9% of IEMP results met the guidelines. Exceedances for the 2020–21 fiscal year were expected, and similar to the values reported by CNSC licensees’ environmental monitoring programs. No unexpected exceedances were noted. There were 3 exceedances at the Port Hope Conversion Facility. Three fluoride concentrations measured in lake water samples were

slightly above the CCME freshwater quality guideline for the protection of aquatic life, but were below Health Canada's guidelines for drinking water quality and well below the CCME toxicity benchmark for sensitive aquatic biota. Thus, adverse effects are not expected. There were 26 exceedances at Cigar Lake out of 468 samples. The exceedances were selenium and polonium-210 in fish tissue samples collected at both the exposure station, which could potentially be impacted by the operation of the facility, and the reference station, which is not impacted by the operation of the facility. Thus, the exceedances are not attributed to the facility. These results were also within the natural background range for the region. Exceeding a guideline does not mean that there is an expected health impact; rather, it triggers a more in-depth assessment by CNSC staff to ensure that the health and safety of people and the environment are protected. In all noted cases, CNSC staff concluded that the public and environment are protected from ongoing releases from nuclear facilities and activities. More information in IEMP results for each site is available on the CNSC website.

36 Unexplained dose of 1.85 mSv on quarterly badge reading of a non-nuclear energy worker, which exceeded the annual dose limit of 1 millisievert per year (mSv/year). No health effects were observed or expected as a consequence of this event. This event was reported to the Commission in November 2019 in Commission member document 19-M41. Unexplained dose on quarterly badge reading of a nuclear medicine technologist. A nuclear energy worker (NEW) exceeded both the 1-year effective dose limit (recorded dose of 56.91 mSv) and equivalent dose limit for the lens (recorded dose of 174.9 mSv). Investigation concludes that the recorded dose is likely non-personal and due to contamination on the dosimeter, although this cannot be demonstrated conclusively. No health effects were observed or expected. This event will be reported to the Commission in 2020.

37 In 2020–21, there were 3 occurrences of a worker exceeding a regulatory dose limit. The first instance involved a non-NEW who received an effective dose of 1.28 mSv, which exceeded the annual dose limit of 1 mSv/year. The second instance involved a non-NEW who received an effective dose of 1.3 mSv, which exceeded the annual dose limit of 1 mSv/year. This event was reported to the Commission in January 2021 in CMD 21-M10. The third instance involved a non-NEW who received an effective dose of 1.05 mSv, which exceeded the annual dose limit of 1 mSv/year. Note that there was a fourth event reported to the Commission in 2020–21 (reported in September 2020 in CMD 20-M27), although the event occurred in 2019–20. This case involved a non-NEW who recorded a non-occupational effective dose of 3.54 mSv on their dosimeter. This exceeded the annual dose limit for non-NEWs of 1 mSv/year. In all cases, there was no health effect to the workers from the exposures.

38 The decrease in Indigenous participation in 2020–21 relative to 2019–20 is due to fewer overall proceedings, including public proceedings because of the COVID-19 pandemic.

39 GC InfoBase, https://www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start

40 Canada, A modern workplace for the new public service, https://www.tpsgc-pwgsc.gc.ca/biens-property/mt-wp/mt-wp-eng.html

41 Canadian Human Rights Commission, Pay Equity Act, https://www.payequitychrc.ca/en

42 Canada, Budget 2022: A Plan to Grow Our Economy and Make Life More Affordable, https://budget.gc.ca/2022/home-accueil-en.html

43 2023–24 Main Estimates, http://www.tbs-sct.gc.ca/hgw-cgf/finances/pgs-pdg/gepme-pdgbpd/index-eng.asp

44 Canadian Nuclear Safety Commission, Future-Oriented Statement of Operations, http://nuclearsafety.gc.ca/eng/resources/publications/reports/quarterly-financial-reports/index.cfm
45 Canadian Nuclear Safety Commission, President, https://nuclearsafety.gc.ca/eng/about-us/organization/president.cfm
46 Natural Resources Canada, http://www.nrcan.gc.ca/home
47 *Nuclear Safety and Control Act,* http://laws-lois.justice.gc.ca/eng/acts/N-28.3/
48 Canadian Nuclear Safety Commission, Departmental Plans, http://www.nuclearsafety.gc.ca/eng/resources/publications/reports/rpp/index.cfm
49 Report on Federal Tax Expenditures, https://www.canada.ca/en/department-finance/services/publications/federal-tax-expenditures.html