Canadian Nuclear Safety Commission

2008-2009 Estimates

Part III – Report on Plans and Priorities

The Honourable Gary Lunn, P.C., M.P. Minister – Natural Resources Canada

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SECTION I: OVERVIEW

Message from the President

I am pleased to submit to Parliament the Canadian Nuclear Safety Commission's (CNSC) 2008–2009 Report on Plans and Priorities, my first as President of the CNSC.

The Canadian nuclear industry stands on the verge of unprecedented growth, bringing some equally unprecedented challenges and opportunities to Canada's nuclear regulator. Virtually every sector of the nuclear industry that the CNSC regulates is undergoing expansion. There are applications for new nuclear power plants in Ontario and Alberta, with others being considered for elsewhere in Canada and around the world. High prices for uranium are driving industry initiatives to expand uranium mining and processing in northern Saskatchewan and elsewhere in Canada. There will also be new nuclear waste management projects and activities accompanying the growth in the industry. Significant growth is also occurring in nuclear medicine, including expansions in cancer treatment facilities. And in this context, nuclear safety, security and international safeguards remain important priorities in the regulation of Canada's nuclear industry.

Within this operating environment, the CNSC will remain a leader in nuclear regulation through the delivery of the following: a clear and pragmatic regulatory framework; an efficient licensing and certification regime; continued effective monitoring of compliance of the Canadian nuclear industry; launching of new cooperative undertakings with other governments domestically and internationally; and more proactive stakeholder relations and engagement. This report outlines how the CNSC will, through these regulatory activities, address the challenges and opportunities to make significant contributions to the well-being of Canadians.

Leadership in nuclear regulation requires continuous improvement. The CNSC and its regulatory activities received much attention in late 2007 following the shutdown of Atomic Energy of Canada Limited's (AECL's) National Universal Research (NRU) Reactor in November 2007. The CNSC will abide by the Government's Directive issued on December 10, 2007, to take into account the health of Canadians in its future regulatory activities and in implementing the lessons learned for improvements in the CNSC's performance stemming from these events. The report also outlines other important management priorities, such as the implementation of a sustainable funding regime, and improvement initiatives relating to enhanced planning and licensing and compliance.

As the CNSC continues its improvement initiatives and responds to the *Cabinet Directive on Streamlining Regulation* that came into effect last year, it will also strive for increased efficiencies in its regulatory processes. To this end, the CNSC remains committed to a single-window for nuclear regulation and will participate in government-wide improvement initiatives, specifically, the Major Projects Management Office established to improve Canada's regulatory system. Efficiencies will also be derived from greater regulatory clarity provided through initiatives related to the regulatory framework, through greater attention to risk-informed decision-making, to regulatory deliverables and timelines, and through enhanced delineation of roles and responsibilities.

The CNSC strives to ensure that, in the context of a growing and evolving nuclear industry, nuclear facilities and nuclear-related activities are among the safest and most secure in the world. Furthermore, the CNSC seeks to ensure that the health of Canadians and the environment are protected in a manner that supports sustainable development and that nuclear energy and nuclear substances are used solely for peaceful purposes.

As the public focuses increasingly on nuclear activities and the regulatory regime that governs them, the CNSC will continue to operate with transparency, accountability, and good governance, and to work with Canadians to protect their health, safety, security and their environment.

Michael Binder President

Management Representation Statement

I submit for tabling in Parliament the 2008-2009 Report on Plans and Priorities (RPP) for the Canadian Nuclear Safety Commission (CNSC).

This document has been prepared based on the reporting principles contained in the *Guide to the Preparation of Part III of the Estimates* — Reports on Plans and Priorities and Departmental Performance Reports:

- it adheres to the specific reporting requirements outlined in the Treasury Board of Canada Secretariat guidance;
- it is based on the CNSC's strategic outcome and program activities that were approved by the Treasury Board;
- it presents consistent, comprehensive, balanced, and reliable information;
- it provides a basis of accountability for the results achieved with the resources and authorities entrusted to it; and
- it reports finances based on approved planned spending numbers from the Treasury Board of Canada Secretariat.

Michael Binder	
President	

Raison d'être and Summary Information

CNSC Mandate

Under legislation enacted by Parliament, policies and international commitments of the Government of Canada, the CNSC:

- regulates the development, production and use of nuclear energy in Canada;
- 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 international control of the development, production, transport and use of nuclear energy and nuclear substances, including measures respecting the non-proliferation of nuclear weapons and nuclear explosive devices; and
- disseminates scientific, technical and regulatory information concerning the activities of the CNSC and the effects on the environment and on the health and safety of persons, of the development, production, possession, transport and use of nuclear substances.

Mission

The mission of the Canadian Nuclear Safety Commission (CNSC)¹ is to regulate the use of nuclear energy and materials to protect health, safety, security, and the environment and to respect Canada's international commitments on the peaceful use of nuclear energy. In carrying out its mandate, the CNSC upholds the values of quality, integrity, competence, dedication and respect for others.

Regulatory Framework

The CNSC was created under and derives its mandate from the *Nuclear Safety and Control Act* (NSCA). It regulates the entire nuclear cycle and all aspects of nuclear safety in Canada, as these aspects are a matter of federal jurisdiction. The CNSC regulatory framework is evergreen, and consists of regulations and regulatory documents under the NSCA that apply to all nuclear applications in Canada which include, but are not limited to, the following:

- nuclear power reactors;
- non-power nuclear reactors, including research reactors;
- nuclear substances and radiation devices used in industry, medicine and research;
- the nuclear fuel cycle, from uranium mining through to waste management; and
- the import and export of controlled nuclear and dual-use substances, equipment and technology identified as proliferation risks.

The CNSC also has certain functions under the *Nuclear Liability Act*, conducts environmental assessments under the *Canadian Environmental Assessment Act*, implements reciprocal non-

¹ The Canadian Nuclear Safety Commission, or CNSC, refers to the total organization. The tribunal component is referred to as the Commission and the staff component as CNSC staff.

proliferation provisions of bilateral nuclear cooperation agreements between Canada and its nuclear trading partners, and implements Canada's bilateral agreement with the International Atomic Energy Agency for the application of international safeguards on all nuclear material in Canada in all peaceful nuclear activities.

Governance

The Canadian Nuclear Safety Commission is an independent, quasi-judicial administrative tribunal and federal regulatory agency. The CNSC is a departmental corporation under Schedule II of the *Financial Administration Act* and reports to Parliament through the Minister of Natural Resources. As a tribunal, the Commission sets overarching regulatory policy, establishes regulations as required, and decides on major licence applications and related requests. The Commission tribunal consists of members who are appointed by the Governor in Council at good behaviour. The CNSC staff members are employees of the federal agency and part of the broader Canadian public service.

The CNSC staff advises the Commission, implements Commission decisions and enforces compliance with regulatory requirements (see Organizational Information for more details).

Funding of CNSC Operations

The CNSC's workload, and therefore its resource requirements, is largely driven by the demand for licensing and regulatory oversight of Canada's expanding nuclear industry and by Canada's international commitments respecting nuclear safety, security and non-proliferation. The CNSC's operations were traditionally funded exclusively through an annual appropriation from Parliament. When its workload increased, the CNSC was required to submit an application to the Treasury Board Secretariat to increase funding for cost-recoverable expenditures or to receive new program funding.

However, the length of time for the CNSC to receive additional funding to respond to its continually increasing regulatory workload was compromising its ability to carry out its mandate. To address this issue, the CNSC recently received approval for a phased implementation of revenue-spending authority for its cost-recoverable activities. As of the 2008-2009 fiscal year, the CNSC will implement revenue spending for cost-recovered activities involving specifically defined new licence applications, including applications for new nuclear power plants already received by the CNSC. Phase I will include activities related to new license applications for the following:

- Class I Nuclear Facilities as defined in the *Class I Nuclear Facilities Regulations*, inclusive of all new licence applications received on or after October 1, 2007;
- Applications for licenses for new reactors from Bruce Power, Ontario Power Generation, and Energy Alberta, effective August 17, 2006;
- Uranium mines or mills, as defined in the *Uranium Mines and Mills Regulations*, inclusive of all applications for a licence received on or after October 1, 2007, to construct or operate a mine or mill;
- All nuclear waste activities not located at a Class I or Class II nuclear facility or at a mine or mill received on or after October 1, 2007.

In the subsequent phase, following a state-of-readiness assessment, the revenue-spending regime will apply to all cost-recoverable activities from fee-paying licensees only.

The Government of Canada will continue to recover most costs associated with the CNSC's regulatory activities from licensees, in accordance with the *Canadian Nuclear Safety Commission Cost Recovery Fees Regulations* (2003). Some licensees, such as hospitals and universities, are exempt from paying fees. In addition, fees are not charged for activities that result from CNSC obligations or for activities that do not provide a direct benefit to identifiable licensees. The latter include activities with respect to Canada's international obligations (including the non-proliferation of nuclear weapons), public responsibilities such as emergency preparedness and public information programs, and the ongoing oversight of the NSCA and associated regulatory documents as appropriate.

In order to ensure a sustainable funding regime for the CNSC to effectively regulate the expanding nuclear industry in Canada, the CNSC will continue to work with central agencies and the Government of Canada to address regulatory capacity issues relating to growth in licensing activities associated with fee-exempt licensees. Along with implementation of the revenue spending authority, these sustainable funding matters will be a priority activity for the reporting period.

The CNSC will face numerous challenges as it adopts a sustainable funding regime, and a team is working to identify and mitigate potential impacts.

Operating Environment

The CNSC licenses the siting, construction, operation, decommissioning and abandonment of all nuclear facilities in Canada, as well as nuclear substances and radiation devices used in industry, medicine and research. Examples of these applications include equipment for industrial radiography, teaching, research, and medical diagnosis and treatment, including cancer and heart disease. In addition, the CNSC licenses the import and export of nuclear substances and controlled nuclear material, equipment and information, and ensures that Canadians and Canadian companies comply with Canada's international obligations related to non-proliferation of nuclear weapons and peaceful use of nuclear energy.

The Canadian nuclear industry is undergoing significant growth in all sectors, from uranium mining and milling to power production, waste management, and health care applications. The CNSC will continue to put in place a modern, up-to-date regulatory framework for all facilities — one that considers all available science as well as input and operating experience from Canadian operators and other stakeholders. It will also continue to draw upon recommendations of the International Atomic Energy Agency and best practices from the domestic and international community wherever practicable. The resulting regulatory framework will, however, always be Canadian.

The following topics are key components of the CNSC's operating environment.

a. Life extension of nuclear reactors and plans for new nuclear power plants

Canada has 22 nuclear power reactors, several of which are approaching the end of their designed operating lives. As a result, nuclear power plant licensees are moving forward with projects to refurbish these plants for continued operation. To date, seven reactors have been refurbished, are in the process of being refurbished, or have refurbishments planned. Significant regulatory oversight activities are ensuring the safety and security of Bruce Power's refurbishment of Bruce Unit 2. During the 2008-2009 fiscal year, New Brunswick Power will commence refurbishing its single-unit station at Point Lepreau Generating Station. Refurbishment decisions pertaining to Pickering and Gentilly-2 reactors are pending. In all cases, refurbishment licensing applications must meet CNSC requirements for safe operation.

Given that new reactors have not been constructed in Canada for many years and that worldwide operational and regulatory environments have changed, licensees, governments and the public require clarification of the modern regulatory requirements and processes for new nuclear power plants. In response, the CNSC has developed a licensing process and is creating a modern regulatory framework for the siting, design, construction, and operation of new nuclear power plants, while considering modern domestic and international standards.

The CNSC has received three applications for new nuclear power plants. Bruce Power submitted an application in August 2006, which is proceeding through the initial phases of environmental assessment. Ontario Power Generation submitted an application in September 2006 which the Commission has recently recommended referral to a panel and is pending consideration by the Minister of the Environment. The application submitted by the company formerly known as Alberta Energy Corporation (now known as Bruce Power-Alberta) is on hold pending further steps by the proponent. The CNSC has also received initial indications that it may receive other applications for new nuclear power plants.

Given the complexity of these projects as well as the number of actual and potential applications, the regulation of new nuclear power plants will continue to present significant challenges to the CNSC and to the Canadian nuclear industry.

b. Uranium mines, mills and processing facilities

Several factors have triggered an increased demand for uranium: global economic growth, which is driving the increase in energy demand; worldwide construction of new nuclear power plants; improved reactor operations around the world; extension of the operating lives of reactors; and significant depletion of existing uranium stockpiles. To meet this demand, mining licensees are expanding production in existing mines and developing known deposits of ore in Saskatchewan.

To date, the CNSC has received five letters of intent for new mining projects. During the reporting period under consideration in this RPP, the CNSC also anticipates additional applications from mineral exploration companies and current licensees involved in new mine exploration.

c. Nuclear waste management

Both the federal government and provincial governments are undertaking numerous initiatives to address nuclear waste issues in several provinces and territories. In addition, the nuclear power industry is moving forward with projects to expand its waste storage facilities to accommodate waste associated with on-going operations, as well as waste arising from reactor life-extension projects.

Long-term initiatives are underway to manage and store radioactive waste. These include the Government of Canada's Port Hope Area Initiative managed by the Low Level Radioactive Waste Management Office under Natural Resources Canada, as well as Ontario Power Generation's proposal for a deep geologic repository in Kincardine, Ontario, to house low- and intermediate-level radioactive waste. Over the next several years, remediation activities will continue at Atomic Energy Canada Limited's legacy waste management areas at the Chalk River site. Also planned are projects for the long-term management and disposal of spent fuel in accordance with the Government of Canada's response to the recommendations of the Nuclear Waste Management Organization. These projects present significant technological, geological and community relations challenges for both industry and the CNSC. To prepare for these challenges, the CNSC is developing a Canadian waste classification system.

d. Accelerators, nuclear medicine, and nuclear substances and radiation devices

Among the facilities that the CNSC licenses are high-power accelerators at TRIUMF at the University of British Columbia and the Canadian Light Source at the University of Saskatchewan.

Licensing and compliance activities associated with the regulation of nuclear substances, radiation devices and equipment and Class II nuclear facilities (where equipment is used for medical, industrial and research purposes) have increased substantially and are forecasted to continue growing over the next several years. Due to higher activity in oil and gas, logging and other related industries, the use of industrial radiography is rising rapidly. New procedures and new radioisotopes are also being introduced in nuclear medicine. As per the Government of Canada's directive of December 10, 2007, the CNSC will take into account the "health of Canadians who, for medical purposes, depend on nuclear substances produced by rectors." In addition, equipment that is past its useful life is being re-commissioned or replaced with newer technologies that will require additional

licensing and compliance work by the CNSC. An ongoing challenge will be to manage the growth in nuclear facilities while maintaining current licensing and compliance activities for existing Class II nuclear facilities, nuclear substances and radiation devices.

e. Nuclear security and emergency management

Nuclear security will remain an area of concern for the CNSC for the foreseeable future. The CNSC, with the new *Nuclear Security Regulations*, has a comprehensive regulatory framework to ensure rigorous and consistent oversight of facilities and processes. The CNSC works closely with officials of security agencies in Canada, the United States and the international community to gather and share security-related intelligence that is essential to maintaining integrity of the worldwide nuclear security network. Such cooperation and liaison, coupled with the CNSC's regulatory oversight and licensee vigilance, enables Canadian nuclear facilities to put in place appropriate security measures based on ongoing assessment of domestic and international risk.

Nuclear security also includes measures to prevent the diversion of nuclear material and radioactive sources for unauthorized or malicious acts. International and Canadian expectations in this area are set out in the January 2004 IAEA *Code of Conduct on the Safety and Security of Radioactive Sources*, which Canada has committed to implementing. To this end, the CNSC maintains a Sealed Source Tracking System that is integrated with the CNSC's National Sealed Source Registry, and it recently significantly strengthened its regulatory processes for controls on the export and import of risk-significant radioactive sources.

The CNSC will continue its role in developing and delivering training for emergency first responders in responding to radiological and nuclear events. It has been working to formalize arrangements with key provincial governments to ensure regular communication (during both emergencies and routine activities) and to integrate emergency response planning (for example, on-site and off-site emergency response). New arrangements are expected to be finalized with the Province of Ontario during this reporting period, and negotiations with other provinces should begin shortly thereafter.

f. International safeguards

As a signatory to the Treaty on the Non-Proliferation of Nuclear Weapons, Canada is required to conclude an agreement with the IAEA to enable the IAEA to verify that Canada is meeting its obligations not to develop, manufacture, or otherwise acquire nuclear weapons or other nuclear explosive devices. Pursuant to this agreement, the IAEA employs a number of measures (collectively referred to as "safeguards") to ensure that declared nuclear material is not diverted to nuclear weapons or other nuclear explosive devices and to provide credible assurance of the absence of undeclared nuclear material and activities. The

CNSC is the designated governmental authority responsible for implementing the safeguards agreement between Canada and the IAEA. In recent years, the IAEA has significantly increased its verification efforts in Canada, particularly with respect to the detection of undeclared nuclear material and activities. In addition, concern about nuclear terrorism has emphasized the need to control and account for nuclear material in Canada. These demands will increase as more facilities and nuclear material require regulatory domestic and international oversight.

The CNSC's principal challenge is to ensure effective regulatory oversight of nuclear materials and activities in Canada in a manner that meets the expectations of Canadians and conforms to the requirements of the Canada/IAEA safeguards agreement. To this end, the CNSC is working with other departments and agencies to develop a policy framework for a new national verification system. CNSC will need to seek additional resources to implement this new verification program, which will effectively complement the IAEA's efforts to draw positive conclusions, on an annual basis, for the international community.

Canada's nuclear non-proliferation policy stems from its obligations under the Non-Proliferation Treaty. The treaty aims to assure Canadians and the international community that Canada's nuclear exports are used solely for peaceful, non-explosive purposes, and to promote an effective and comprehensive non-proliferation regime. A key requirement of the policy is that nuclear exports can only go to those states that have concluded legally-binding nuclear cooperation agreements (NCA) with Canada. Canada has 26 NCAs covering some 43 countries. The CNSC is responsible for administering and implementing the non-proliferation provisions of NCAs, including regulatory licensing controls on nuclear exports and imports, in cooperation with Foreign Affairs and International Trade Canada. The CNSC also contributes technical expertise in support of Canadian nuclear non-proliferation initiatives and control measures.

There is increasing global interest in the development of nuclear energy programs, including those that use Canadian-supplied nuclear material and technology. This heightened interest is placing greater demands on the CNSC to ensure the establishment and maintenance of effective administrative arrangements to implement existing and new NCAs.

g. International leadership

The CNSC maintains good working relationships with its regulatory counterparts through the International Nuclear Regulators Association, the CANDU Senior Regulators group, the IAEA and its Commission on Safety Standards, and the Nuclear Energy Agency of the Organization for Economic Cooperation and Development (OECD). In addition, it co-operates with key bilateral partners, particularly the United States, France, the United Kingdom, Finland and the Republic of Korea. The CNSC plays a key role in a number of international missions, such as the IAEA's International Regulatory Review Service.

Several factors will influence the CNSC's international activities: multilateral initiatives aimed at harmonizing nuclear regulatory approaches and safety goals (for example, the Multinational Design Evaluation Program under the OECD's Nuclear Energy Agency for standardizing regulatory approaches to new nuclear power plants); expanding nuclear cooperation with foreign regulatory counterparts; and the introduction of new technologies into Canada or introduction of Canadian technologies into foreign countries. These activities may also be affected by the recent decision by the Government of Canada's recent decision to join the Global Nuclear Energy Partnership or to enter into new international nuclear arrangements. However, the CNSC's international involvement will be limited by the organization's capacity to commit resources to these activities while it fulfils its primarily domestic regulatory mandate for health, safety and security.

h. Public hearings and stakeholder consultation

Nuclear facilities and materials have always attracted significant attention from the public, governments, public interest groups, and Aboriginal groups. Expansion in all sectors of the nuclear industry is driving the need to communicate more information, especially in communities most affected by nuclear facilities. This need is resulting in more frequent Commission hearings, more hearings in communities most affected by licensing decisions, greater consultation with Aboriginal groups on whom projects may have an impact, and stakeholder desire for easier and faster access to information related to matters before the CNSC.

The CNSC must respond to these emerging demands by providing the public with information to understand the nuclear regulatory regime and with opportunities for meaningful participation in the development of regulations and regulatory document development and licensing decisions. This approach will be key to upholding public confidence in the Canadian nuclear regulatory regime.

i. Staffing requirements to meet increased workload

One of the CNSC's most critical ongoing challenges is sustaining an adequate workforce with the appropriate mix of scientific, technical and other professional knowledge, skills and experience. With the growth in nuclear sector activity creating industry competition for skilled resources, the CNSC continues to have difficulty attracting, recruiting and retaining experts.

In Brief: The Licensing Process for New Nuclear Power Plants in Canada

There are five phases in the life-cycle of a nuclear power plant, each requiring a separate licence. Before any licensing decision can be made with respect to a new power plant, however, an environmental assessment (EA) must be completed with a decision that the project is not likely to cause significant adverse environmental effects with the available mitigation measures. By considering environmental effects and mitigation early in project planning, potential delays and unnecessary costs can be avoided or reduced.

An EA is initiated by an application for a licence to prepare a site under the NSCA, and is carried out under the *Canadian Environmental Assessment Act*.

An EA will be conducted before any further work can be carried out for the required five licences in the life-cycle of a new power plant. The five life-cycle phases are as follows: preparation of the site, construction, operation, decommissioning, and abandonment. Some of these activities may progress in parallel.

Licence applicants are responsible for providing comprehensive, complete information so the CNSC can assess applications as effectively and efficiently as possible and identify design concerns in a timely manner.

Licences for each phase would be issued in sequence over a minimum 10-year period. However, applications to prepare a site, to construct and to operate a new nuclear power plant can be assessed in parallel.

More information on the CNSC and the information document *Licensing Process for New Nuclear Power Plants in Canada* (INFO-0756) is available on the CNSC Web site at **Error! Hyperlink reference not valid.**.

Program Activities, Expected Results, Planned Spending, and Priorities by Strategic Outcome

The CNSC's Program Activity Architecture is aligned with the management resources and results structure prescribed by the Treasury Board for government-wide planning and resource management. The CNSC works to achieve its **strategic outcome** through a single operational **program activity**: nuclear regulation. This program activity is subdivided into five key programs or **sub-activities**.

The following table outlines the CNSC's program activity architecture and estimated planned spending:

	D 0.1			(\$ thousands)	Estimated Planned Spending* (\$ thousands)		
	Program Sub-		2008-2009	2009-2010	2010-2011		
	Activity	Expected Results	Expenditures	Expenditures	Expenditures		
Program Activity:	Regulatory Framework	A clear and pragmatic regulatory framework	\$11,583	\$11,954	\$11,642		
Nuclear Regulation Expected Results Low frequency of incidents,	Licensing and Certification	Individuals and organizations that operate safely and conform to safeguards and non-proliferation requirements	\$34,458	\$42,513	\$40,700		
accidents and precursors; and international transfers of nuclear materials and	Compliance	A high level of compliance with the regulatory framework	\$33,355	\$38,833	\$42,221		
technology are solely for peaceful purposes.	Cooperative Undertakings	CNSC cooperates and integrates its activities in national/international nuclear fora	\$16,655	\$17,261	\$16,853		
	Stakeholder Relations	Increased stakeholder understanding of the regulatory program	\$7,376	\$7,765	\$7,650		
Total Planned Spending (\$ thou Total Human Resources (Full-7			\$103,427 817	\$118,326 880	\$119,066 899		

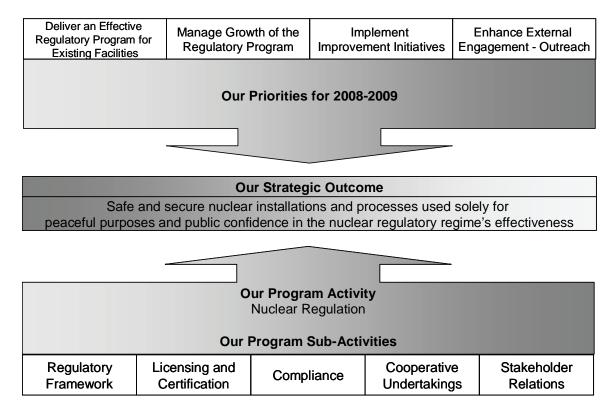
^{*} Estimated planned spending includes internal services (human resources, finance, administration, information technology and other corporate services). Most costs incurred for the CNSC's regulatory activities are recovered by the federal government from licensees under the CNSC Cost Recovery Fees Regulations (2003). Fees are collected by the CNSC and deposited into the Consolidated Revenue Fund and are not currently a source of revenue for the CNSC. In 2007-2008 the CNSC received approval from Treasury Board granting revenue spending authority commencing in 2008-2009. This authority is being phased in over a two year period with full implementation of revenue spending authority for all cost recoverable activities effective 2009-2010. This authority will enable the CNSC to address the growth associated with fee paying licensees. In 2008-2009 the CNSC projects to recover approximately 70% (about \$72.0 million) of its total operating costs from cost recoverable activities, with approximately \$12.0 million of those fees generated under the new revenue spending authority.

Detailed CNSC plans to deliver expected results are presented in Section II – Analysis of Program Activities by Strategic Outcome.

CNSC Plans and Priorities

This section articulates the CNSC's priorities in two dimensions: program priorities and management priorities. These priorities were established to achieve the CNSC's strategic outcome in consideration of the challenges and risks anticipated over the planning period.

Program Priorities



The CNSC's program priorities aim to provide Canadians with a transparent and reliable regulatory process that protects health, safety, security, and the environment and respects Canada's international commitments on the peaceful use of nuclear energy. The CNSC's **program priorities** are as follows:

1. Deliver an effective regulatory program for existing facilities

When allocating resources, the CNSC's first priority is to assure Canadians of the safety and security of nuclear activities in Canada. The organization is committed to maintaining adequate regulatory oversight of existing facilities. The following plans to improve the CNSC's regulatory program for existing facilities have been developed:

- Continue the current regulatory documents development program and make necessary amendments to regulations for existing facilities;
- Implement baseline compliance program requirements across all regulatory programs;

- Develop strategies to educate licensees and enforce compliance where licensee deficiencies have been identified, while responding to risk-significant licensee reports and findings;
- Review and make staff recommendations to the Commission with respect to applications for renewal of current licences across the regulatory program; and
- Improve the effectiveness of implementation of Canada's obligations under its International Atomic Energy Agency safeguards agreements, including proposal of a domestic verification program, and pursuant to Canadian nuclear non-proliferation policy and related nuclear cooperation agreements.

2. Effectively manage growth of the regulatory program

The Canadian nuclear industry is growing in all sectors. The CNSC must ensure that new facilities and uses, expansions and/or life extensions of existing facilities and increased international security issues are subject to the same risk-informed regulatory oversight as existing facilities. The CNSC requested and received additional resources to expand its oversight to meet growing regulatory demand and will continue efforts to secure required resources to meet emerging demands. The following plans are identified to achieve this priority of effectively managing growth of the regulatory program:

- Provide regulatory clarity through regulatory documents for new activities (for example, new nuclear power plants, uranium mining and milling expansion, waste repositories, Class II facilities, etc.) to ensure a modern framework;
- Provide regulatory oversight for power reactor refurbishment and projects for construction of new nuclear power plants by developing and implementing regulatory activity plans;
- Conduct environmental assessments to respond to licence applications for new mines, new reactor construction, refineries, waste repositories and Chalk River Laboratories legacy projects;
- Provide clarity on regulatory approaches to design reviews for new nuclear power plants;
- Implement the *Code of Conduct on the Safety and Security of Radioactive Sources*, by strengthening import/export licensing and control of risk-significant sources;
- Implement the *Code of Conduct on the Safety of Research Reactors*;
- Implement environmental assessment (EA) processes including panel review processes for EAs of new projects; and
- Design and implement a new national verification system to complement international agreements.

3. *Implement improvement initiatives*

The CNSC is committed to continuous improvement of its regulatory structure and management practices so it can maintain an effective regulatory regime that is efficient, modern and evergreen. Improvement plans are as follows:

- Enhance and complete documentation for integrated environmental assessment and oversight programs; and
- Institute more policy improvements to the regulatory framework to make it more strategic, and in line with international benchmarks, while maintaining its transparency.

4. Enhance external engagement – outreach

The CNSC is committed to being a transparent regulator, as transparency is a key expectation of Canadians as well as the international community in the regulation of nuclear facilities. Effective communication and consultation are important elements of transparency. The CNSC is proactive in its engagement and outreach activities to communicate and consult with stakeholders on issues and information of mutual interest. It listens to views received—and acts, where appropriate. The CNSC views outreach as communication and consultation with stakeholders on issues or information of mutual interest, listening to the views received, and acting where appropriate. Outreach and stakeholder engagement include activities that are over and above licensing and compliance activities required by the *Nuclear Safety and Control Act* and regulations.

CNSC outreach and engagement activities will continue to include meetings with federal/provincial/territorial/municipal officials and community groups, interactions with non-government organization and the public as well as appropriate meetings with licensees on non-licence-specific issues (for example, meetings with the Canadian Nuclear Association and the Cost Recovery Advisory Group).

The CNSC will also continue working to fulfill the fiduciary duty of the Government of Canada to consult Aboriginal groups as appropriate in the context of ongoing and new nuclear projects in Canada.

Management Priorities

Management priorities focus on improving management practices, controls and enabling infrastructure to ensure effective delivery of the regulatory program. CNSC management is focused on a variety of initiatives under broad headings: strengthening governance; strengthening capacity; quality management; and continuing the implementation of the Integrated Improvement Initiatives Programme. The CNSC's **management priorities** are as follows:

Strengthening Governance

CNSC management will work to implement changes resulting from the *Federal Accountability Act*, and address the results of the Management Accountability Framework Assessment, which include strengthening corporate risk management, and the internal audit and evaluation functions. As well, CNSC will complete the Corporate Services Policy Suite Renewal project to ensure operations are supported by effective corporate services policies, which also fully reflect central agency policies.

Strengthening Capacity

CNSC has assessed key elements necessary to plan and support the growth of the organization in terms of sustainable funding, facilities, and information technology, and will continue to develop and implement recruiting and retention strategies to ensure the CNSC has a qualified staff to meet the demands of growth and change. The CNSC will continue to deliver a leadership development program to support the development of its current and future leaders. Additionally, the CNSC has initiated discussions with Public Works and Government Services Canada regarding its long-term accommodation requirements.

Quality Management

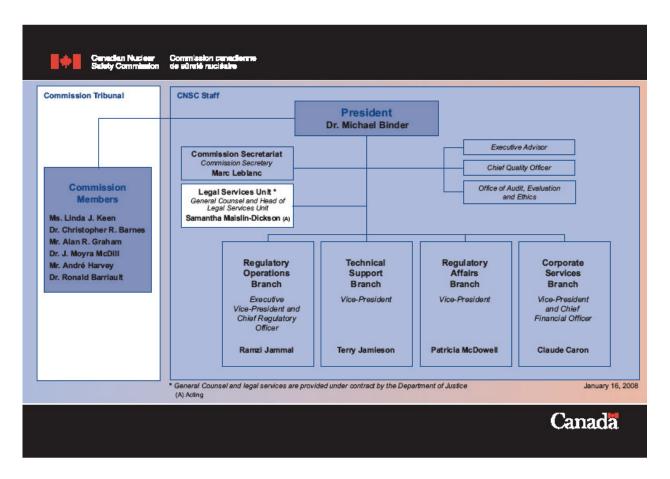
The CNSC will complete the Integrated Client Service Delivery Initiative to ensure CNSC operations benefit from effective and efficient client support services. The CNSC will also renew information technology infrastructure and complete solutions architecture to ensure its operations have the resources required to support growth and change. Additionally, the CNSC will develop and initiate a new headquarters building project to make suitable facilities available as the organization grows.

Integrated Improvement Initiatives Programme (I3P)

The Integrated Improvement Initiatives Programme (I3P), under the direction of the Quality Council, is comprised of several projects that were identified in the June 2006 Corrective Action Plan that was developed by the International Regulatory Review Service. All the projects under the I3P umbrella – the Licensing and Compliance project, the Integrated Planning and Performance Management project (IPPM), and the Integrated Systems project (ISP) – will deliver integrated solutions that support the framework established by the Management System and that will lead to improved efficiency, effectiveness and standardization in achieving the CNSC's mandate.

Organizational Information

CNSC Organization Chart



The CNSC consists of two components: the Commission and the CNSC Staff.

a. Commission

The Commission is an independent, quasi-judicial administrative tribunal, court of record, and federal regulatory agency. As a departmental corporation under Schedule II of the *Financial Administration Act*, it reports to Parliament through the Minister of Natural Resources.

Commission members are appointed by the Governor in Council at good behaviour. The Commission, supported by the Secretariat, sets regulatory policy direction on matters relating to health, safety, security and environmental issues affecting the Canadian nuclear industry; makes independent decisions on the licensing of nuclear-related activities in Canada; and establishes legally binding regulations. The Commission takes into account the views, concerns and opinions of interested stakeholders, and authorizes Designated Officers to render licensing decisions for certain categories of nuclear facilities and activities in accordance with the requirements of the NSCA and its associated regulations.

The NSCA provides for the appointment of up to seven Commission members by the Governor in Council serving at good behaviour. Six members serve as permanent members for a term not exceeding five years. One member of the Commission is designated as the President of the Commission.

b. CNSC Staff

The CNSC staff is based at a headquarters in Ottawa, site offices located at each of the five nuclear generating stations in Canada, a site office at Atomic Energy of Canada Limited's Chalk River Laboratories and five regional offices. CNSC staff is permanently located at each nuclear generating station in Canada, in Saskatoon and at Chalk River to assess performance against regulations and specific conditions of operating licences. Regional offices conduct compliance activities for nuclear substances, transportation, radiation devices and equipment containing nuclear substances. They also respond to unusual events involving nuclear substances.

CNSC staff supports the Commission by serving as expert advisors; developing proposals for regulatory development and recommending regulatory policies; carrying out licensing, certification, compliance inspections and enforcement actions; coordinating the CNSC's international undertakings; developing CNSC-wide programs in support of regulatory effectiveness; maintaining relations with stakeholders and providing administrative support to the organization. With respect to compliance, statutory authority is vested in inspectors and Designated Officers to issue orders.

In addition, staff prepares recommendations on licensing decisions, presents them to the Commission for consideration during public hearings and subsequently administers the Commission's decisions. Where authority has been given, staff who are Designated Officers render licensing decisions.

Voted and Statutory Items Displayed in the Main Estimates

		2008-2009		
Vote	or Statutory Item	Truncated Vote or Statutory Wording	2008-2009 Main Estimates	2007-2008 Main Estimates
	15	Operating expenditures	80,140	84,553
	(S)	Contributions to employee benefit plans	10,040	9,932
		Total Department or Agency	90,180	94,485

Note: The 2008-2009 Main Estimates are \$4.3 million or 4.6% less than the 2007-2008 Main Estimates. The major changes are associated with a reduction of \$3.1 million in Workload Pressures funding; a reduction of \$5.8 million in licensing of New Nuclear Facilities funding; an increase of \$5.5 million for Compensation Agreements; a \$0.6 million reduction from the PWGSC Procurement Reform Initiative; a decrease of \$0.7 million for the statuatory Employee Benefits Plan; and an increase of \$0.4 million for Grants and Contributions.

Planned Spending and Full-Time Equivalents

(\$ thousands)	Forecast Spending 2007-2008	Planned Spending 2008-2009	Planned Spending 2009-2010	Planned Spending 2010-2011
Nuclear Regulation	<u> </u>			
Total Main Estimates	94,485	90,180	36,801	36,376
Revenue Spending:	,	,	,	,
Revenue Spending Authority		12,956	81,234	82,399
Supplementary Estimates:				
Incremental Compliance Funding	940			
Other:				
Carry Forward Estimate	1,990			
Incremental Audit Funding	70			
TB Vote 15	4,643	243	243	243
EBP	948	48	48	48
Total Adjustments	8,591	13,247	81,525	82,690
Total Planned Spending	103,076	103,427	118,326	119,066
Total Planned Spending	103,076	103,427	118,326	119,066
Less: Non-Respendable Revenue	68,898	60,756	0	0
Respendable Revenue	0	12,956	81,234	82,399
Plus: Cost of services received without charge	9,953	11,749	8,128	8,223
Net cost of Program	44,131	41,464	45,220	44,890
Full Time Equivalents	750	817	880	899

Note: In 2007-2008 the CNSC received approval from Treasury Board granting revenue spending authority commencing in 2008-2009. This authority is being phased in over a two year period with full implementation of revenue spending authority for all cost recoverable activities effective 2009-2010. This authority will enable the CNSC to address the growth within the nuclear industry. Planned revenue has been estimated for future years based on existing workloads, environmental scans of expected industry growth, and the growth in cost recovery fees.

Note: Accommodation costs associated with recoverable activities falling under the CNSC revenue spending authority are not included under services received without charge. The accommodation fees included within the respendable revenue projections are \$1.0 million in 2008-2009, and \$6.3 million and \$6.5 million in 2009-2010 and 2010-2011 respectively.

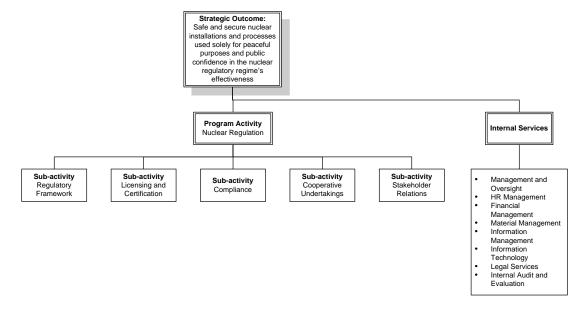
SECTION II: ANALYSIS OF PROGRAM ACTIVITIES BY STRATEGIC OUTCOME

Analysis of Program Activities

The Canadian Nuclear Safety Commission has a single strategic outcome: to ensure safe and secure nuclear installations and processes that are used solely for peaceful purposes, and public confidence in the nuclear regulatory regime's effectiveness. To support this outcome, the CNSC has one program activity: nuclear regulation.

Within the nuclear regulation program activity, the CNSC has five program sub-activities, each with a distinct expected result. These program sub-activities represent key program areas for the CNSC to achieve the priorities identified in Section I, the expected results of its program activity, and the organization's strategic outcome.

The CNSC's program activity architecture is presented diagrammatically below.



The program sub-activities, their expected results, plans, performance indicators, and planned spending are presented in the following tables.

Program Sub-Activity:	Regulatory Framework
Expected Result:	A clear and pragmatic regulatory framework

Performance Indicators:

- Satisfaction levels of licensees across key performance areas
- Number of legal challenges to the regulatory framework

Description:

Development of a modern, evergreen, Canadian regulatory regime that considers all available science, the CNSC's external environment, operating experience and input of Canadian operators, other stakeholders and the international community. This involves developing new and amending existing CNSC regulations; and creating regulatory documents that set out the CNSC's regulatory criteria and expectations of staff.

Plans/Initiatives			Timeline
Obtain Commission approval f initiatives	Fall 2008		
Complete the amendments to the Regulations, and develop the su	2008-2009		
Complete the amendments to the and develop the supporting reg	ne Nuclear Substances and Radioulatory documents.	ation Devices Regulations,	2008-2009
	eral Administrative Agreements Cooperation Agreements (South	0 1	2008-2009
Complete the amendments to the Regulations (Radiation Safety Radiation Safety Officers, and	cation and decertification of	2008-2010	
Amend the <i>Class I Nuclear Fac</i> power plants and update the rec supporting regulatory documen	2008-2010		
Amend the Canadian Nuclear Nuclear Safety Commission By	2008-2010		
Amend the <i>Packaging and Tra</i> most recent version of IAEA st documents.	2010-2012		
Develop new <i>Nuclear Safeguar</i> Agreement and Additional Prof	2010-2012		
<u>Resources</u> :	2008-2009	2009-2010	<u>2010-2011</u>
(\$ thousands)	\$11,583	\$11,954	\$11,642
Full-Time Equivalents	60	60	60

Program Sub-Activity:	Licensing and Certification
Expected Result:	Individuals and organizations that operate safely and conform to safeguards and non-proliferation requirements

Performance Indicators:

• Number of licences issued as per service standards

Description:

Issuance of licences or certifying persons to conduct nuclear-related activities in Canada. In order to issue a licence or a certificate, the CNSC must obtain evidence of licensee ability to operate safely and conform to safeguards and non-proliferation obligations.

Plans/Initiatives			Timeline
Implement processes for licensing plants, new uranium mines and new plants.	2008-2010		
Develop and implement the mana Research Universal (NRU) reactor	2008-2009		
Complete documentation of the C programs, and incorporate identif	2008-2009		
Develop Environmental Assessment training modules and initiate training for CNSC staff.			2008-2009
Prepare review plans and review reactor licence applications.	2008-2010		
Conduct environmental assessme reactor construction (see Figure 1	Ongoing		
Laboratories legacy projects. Conduct assessments of licence applications for new reactor site preparation and construction.			Ongoing
Implement further the provisions <i>Radioactive Sources</i> , including in of risk significant sources.	Ongoing		
Evaluate the tribunal process and implement recommendations.			Ongoing
Resources:	2008-2009	<u>2009-2010</u>	<u>2010-2011</u>
(\$ thousands)	\$34,458	\$42,513	\$40,700
Full-Time Equivalents	286	325	319

Figure 1: Planned Environmental Assessments (EA) to Respond to Licence Applications

- Deep Geologic Repository
- Bruce Power new build
- Darlington new build
- Darlington refurbishment
- Alberta New Build Review
- New Brunswick new build
- Pickering A (Safe Storage)
- Pickering B refurbishment
- Aurora Mine
- Kiggivik Mine
- Shea Creek Mine
- Millennium Mine
- McClean Lake (Caribou)
- Midwest Mine
- McArthur River
- Rabbit Lake
- Pele Mountain
- Gunnar
- Lorado
- GE-Hitachi Fuel Low Enriched Uranium
- Deloro Waste Management Facility
- Port Granby
- Saskatchewan Research Council Slowpoke Decommissioning
- Atomic Energy Canada Limited (Chalk River)
 - o Bulk Material Landfill (existing)
 - o New Dry Storage (existing)
 - o Building 250 Relocation (existing)
 - o 3 new projects to begin during 2008-2009

Program Sub-Activity:	Compliance
Expected Result:	A high level of compliance with the regulatory framework

Performance Indicators:

- Degree/level of reconciliation between Canada and other countries of nuclear inventories subject to bilateral nuclear cooperation agreements
- Compliance inspections closed as per standard
- Adherence with Sealed Source Tracking requirements
- Nuclear material 'ledger' reconciliations between the CNSC and licensees

Description:

Effective oversight of compliance with regulatory requirements, which is critical to assuring Parliament and the Canadian public that nuclear energy and materials are being used safely and securely and in a manner that respects Canada's international commitments concerning their peaceful use.

Plans/Initiatives			Timeline
Execute baseline compliance programs (power reactors; nu nuclear substances, transport controls).	Ongoing		
Develop strategies to promote/enforce compliance where licensee deficiencies have been identified and respond to risk significant licensee reports and findings.			Ongoing
Develop a program to assess licensee management of ageing nuclear facilities.			Ongoing
Apply the requirements of multilateral conventions and arrangements.			Ongoing
Implement the provisions and requirements of bilateral nuclear cooperation agreements and associated administration arrangements.			Ongoing
Implement the requirements of the Canada-IAEA Safeguards Agreement and Additional Protocol.			Ongoing
<u>Resources</u> :	<u>2008-2009</u>	<u>2009-2010</u>	<u>2010-2011</u>
(\$ thousands)	\$33,355	\$38,833	\$42,221
Full-Time Equivalents	310	334	359

Program Sub-Activity:	Cooperative Undertakings
Expected Result:	CNSC cooperates and integrates its activities in national/international nuclear fora.

Performance Indicators:

 Number of international and domestic initiatives for strengthening the nuclear non-proliferation regime that are supported by CNSC technical and policy expertise

Description:

Involvement with domestic and international nuclear organizations, promoting Canadian interests, implementing requirements of international obligations and commitments, and evaluating international recommendations, standards and guides for adoption in the CNSC's regulatory framework.

adoption in the CNSC s regula	tory mannework.		
Plans/Initiatives			Timeline
Negotiate new agreements v provinces.	with other federal government	t departments and appropriate	By 2009: New agreements in place with Health Canada, Transport Canada, Public Safety Canada, Ontario, Quebec, and New Brunswick
Establish and review cooperati provincial organizations, depar	Ongoing		
Conduct annual reviews of cooperative arrangements with foreign regulatory counterparts and international organizations.			Annual
Collaborate with Foreign Affai issues, including establishment	Ongoing		
Determine, evaluate, track and nuclear matters.	Ongoing		
Establish bilateral arrangements with regulatory counterparts to efficiently implement radioactive source import/export controls, pursuant to the International Atomic Energy Agency Code of Conduct on the Safety and Security of Radioactive Sources			2008-2009: Japan, United Kingdom, Brazil, Argentina, Australia, India
Provide technical support and other resources necessary to the IAEA's safeguards program.			Ongoing
Resources: (\$ thousands)	2008-2009 \$16,655	2009-2010 \$17,261	2010-2011 \$16,853
Full-Time Equivalents	98	98	98

Program Sub-Activity:	Stakeholder Relations
Expected Result:	Increased stakeholder understanding of the regulatory program

Performance Indicators:

- Timeliness of responses to public enquires
- Increased stakeholder understanding of CNSC's regulatory mandate
- Increased stakeholder confidence in CNSC's ability to regulate

Description:

Regular meetings with industry groups and non-government organizations on matters related to the administration of the regulatory regime; outreach to communities hosting nuclear facilities; presentations and speeches at conferences and other fora; media relations; and provision of information to the public on regulatory matters.

Plans/Initiatives	Timeline		
Develop and implement stakeh framework.	2008-2011		
Develop and implement outrea including media and select con licensing and compliance of: r sites; new uranium fuel process nuclear medicine facilities, sub applications received for new r	2008-2011		
Track and communicate key or stakeholders, including the med to demonstrate transparency and	2008-2011		
Identify and profile CNSC's ke undertakings/activities to stake	2008-2011		
Consult with Aboriginal commimpacts of nuclear projects, inc nuclear waste management fac be triggered by a variety of CN	2008-2011		
<u>Resources</u> :	2008-2009	<u>2009-2010</u>	<u>2010-2011</u>
(\$ thousands)	\$7,376	\$7,765	\$7,650
Full-Time Equivalents	63	63	63

SECTION III: SUPPLEMENTARY INFORMATION

Financial Information

Table 1: Departmental Link to the Government of Canada Outcomes

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

	Planne	Alignment to Government of		
	2008-2009	2009-2010	2010-2011	Canada Outcome Areas
Program Activity: Nuclear Regulation	103,427	118,326	119,066	Social Affairs: Safe and Secure Communities

Table 2: Financial Resources by Program Activity

2008-2009									
	Budgetary (\$ thousands)								
	Operating	Capital	Grants	Contributions and Other Transfer Payments	Gross Budgetary Expenditures	Net Budgetary Expenditures	Total Main Estimates	Adjustments (Planned Spending in Main Estimates)	Total Planned Spending
	trategic Outcome: Safe and secure nuclear installations and processes used solely for peaceful purposes; and public confidence in the nuclear egulatory regime's effectiveness.								
Program Activity: Nuclear Regulation	89,335	0	75	770	90,180	90,180	90,180	13,247	103,427
Regulation									

Additional Tables

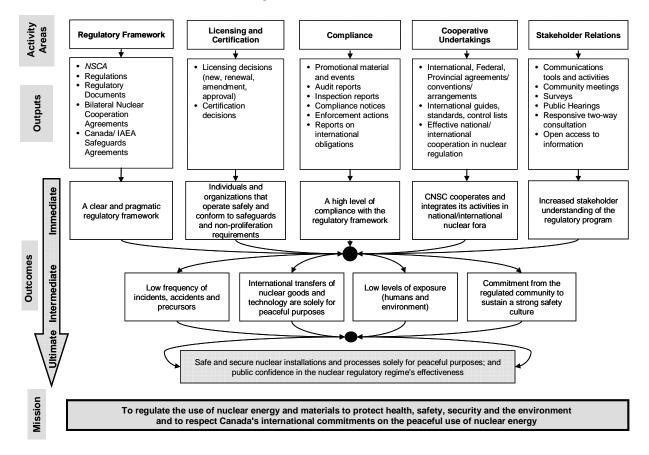
The following tables can be found electronically on the Treasury Board Secretariat's website at: http://www.tbs-sct.gc.ca/est-pre/estimE.asp:

- Services Received Without Charge
- Sources of Respendable and Non-Respendable Revenue
- CNSC's Regulatory Plan
- Internal Audits
- Evaluations



CNSC Logic Model

CNSC Logic Model – Results for Canadians



CNSC Locations



Information Sources

For further information or to request publications, contact:

Mailing address:

Canadian Nuclear Safety Commission Headquarters 280 Slater Street P.O. Box 1046, Station B Ottawa, ON K1P 5S9

Telephone: 1-800-668-5284 (in Canada) or 613-995-5894 (outside Canada)

Fax: 613-995-5086

E-mail: info@cnsc-ccsn.gc.ca

Further information is available on the CNSC Web site at www.nuclearsafety.gc.ca

Information on the plans, priorities, and activities of the CNSC may be found in various documents and reports (including Reports on Plans and Priorities, Departmental Performance Reports, and Annual Reports) at the following CNSC link:

http://www.nuclearsafety.gc.ca/eng/resource/reports/

The CNSC administers the following acts and associated regulations:

Nuclear Safety and Control Act, 1997, c.9 Nuclear Liability Act, 1985, c. N-28