# **Canadian Nuclear Safety Commission**

**2006-2007 Estimates** 

Part III – Report on Plans and Priorities

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# **SECTION I – OVERVIEW**

# Message from the President and Chief Executive Officer



It is my pleasure to submit to Parliament the Canadian Nuclear Safety Commission's Report on Plans and Priorities for the years 2006-2009. This plan outlines priorities in all five strategic areas of the Canadian Nuclear Safety Commission (CNSC) – regulatory framework; licensing and certification; compliance; cooperative undertakings; and stakeholder relations. In addition we are committed to the continuous improvement of our governance and accountability, oversight and administrative processes.

Canadians look to the CNSC to be effective in its oversight of an industry whose scope is arguably the broadest, most wide-ranging and most international in the world. CNSC's regulatory regime is anchored by what is considered the most modern nuclear legislation in the world, separating the oversight of health and safety from economic and political interests.

The Canadian nuclear industry is experiencing substantial growth in all areas, including power generation, uranium mining and milling, nuclear waste facilities and industrial and medical uses of nuclear substances. This is creating a significant increase in the regulatory workload of the CNSC, which has been working to secure additional long term resources to perform its role. In its 2006 Budget, the Federal Government recognized the need for the CNSC to expand by allocating an increase in funding of over \$93 million to enable increased effective regulatory oversight over the next five years, 65% of which is cost recoverable from licensees. This decision recognizes unprecedented confidence in the CNSC. These additional resources will enable the CNSC to address four key priorities, - nuclear power reactor refurbishment projects; expansion of uranium mining, research facilities and waste management; licensing and compliance of the use of nuclear substances including health care facilities and mitigating risks to nuclear security. The CNSC will continue to make required preparations to meet emerging new demands relating to new nuclear power plants and domestic safeguards and non-proliferation regime.

The CNSC is growing to meet regulatory demands imposed by industry growth. The growth will bring an influx of new people into the organization and will require changes in business processes, and ongoing commitment to improvement initiatives based on strong leadership and people management. The CNSC has augmented its already vigorous accountability and governance regime with a new Quality Management System based on established international criteria for nuclear regulators.

It was a personal honour for me to be re-appointed as President and CEO of the Canadian Nuclear Safety Commission for a further five year term. These next years will prove to be challenging times for the CNSC and for the nuclear sector. As we move forward to meet the existing and new regulatory challenges, we will continue to demonstrate to Canadians that Canada has a strong, effective and independent nuclear regulator. The CNSC remains committed to the vision of being one of the best nuclear regulators in the world.

Linda J. Keen, M.Sc.

# **Management Representation Statement**

I submit for tabling in Parliament, the 2006-2007 Report on Plans and Priorities (RPP) for the Canadian Nuclear Safety Commission.

This document has been prepared based on the reporting principles contained in the *Guide for the Preparation of Part III of the 2006-2007 Estimates: Reports on Plans and Priorities and Departmental Performance Reports*:

- It adheres to the specific reporting requirements outlined in the TBS guidance;
- It is based on CNSC's approved Program Activity Architecture as reflected in its Management Resources and Results Structure (MRRS);
- 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 Secretariat.

Linda J. Keen, M.Sc. President & Chief Executive Officer

# Raison d'Être

#### Mandate

The *Nuclear Safety and Control Act* (2000) (NSCA) clearly specifies that nuclear regulatory activities are a federal responsibility. Under the provisions of the NSCA and certain policies and international commitments of the federal government, the CNSC's mandate is to:

- regulate the development, production and use of nuclear energy, nuclear substances, prescribed equipment, and prescribed information in order to:
  - o prevent unreasonable risk to the environment and to the health and safety of persons;
  - o prevent unreasonable risk to national security; and
  - o achieve conformity with measures of control and international obligations to which Canada has agreed
- disseminate scientific, technical and regulatory information concerning the activities of the CNSC and the effects of the development, production, possession, transport and use of nuclear substances on the environment and on the health and safety of persons.

#### Mission and Vision

The CNSC's mission 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 pursuing its mission, the CNSC<sup>1</sup> is working toward its vision of becoming one of the best nuclear regulators in the world.

To realize its vision, the CNSC is committed to:

- the effectiveness of its regulatory regime;
- operating with a high level of transparency;
- attracting and retaining excellent staff; and
- the efficiency of its regulatory regime.

#### **Regulatory Policy and Program Delivery**

The CNSC's Regulatory Fundamentals Policy (P-299) states that those persons and organizations that are subject to the *Nuclear Safety and Control Act* (NSCA) and regulations are directly responsible for managing regulated activities in a manner that protects health, safety, security, and the environment, while respecting Canada's international obligations. The CNSC is responsible to the Canadian public, through Parliament, for regulatory policies and programs which assure that these responsibilities are properly discharged.

Note: The Canadian Nuclear Safety Commission is referred to as the "CNSC" when referring to the organization and its staff in general, and as the "Commission" when referring to the tribunal component.

Under the NSCA, the CNSC regulations apply to all nuclear industries including, but not limited to:

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

The CNSC also administers the *Nuclear Liability Act*, conducts environmental assessments under the *Canadian Environmental Assessment Act* and is mandated to implement Canada's bilateral agreement with the International Atomic Energy Agency (IAEA) on nuclear safeguards verification.

#### Governance

As well as a federal regulatory agency, the CNSC Commission is an independent quasi-judicial administrative tribunal, both created in May 2000 when the *Nuclear Safety and Control Act* (NSCA) came into force. As an independent regulatory body, the CNSC considers it crucial to preserve public confidence and trust in the fairness of the regulatory decision-making process. Maintaining arm's length relationships to government and industry is a critical element of sustaining that confidence. The CNSC is a departmental corporation under Schedule II of the *Financial Administration Act*.

The CNSC reports to Parliament through the Minister of Natural Resources (NRCan). The Minister is answerable in general to Parliament for the activities of the agency, but it is the President and Chief Executive Officer (CEO) of the CNSC who is accountable to Parliament and the public for the exercise of her powers. As such, the President and CEO of the CNSC can be called upon to appear before parliamentary committees to account for the performance of the CNSC in achieving its objectives and plans, to answer questions on spending and administrative matters, and to address specific issues.

Financial and operational plans and performance are detailed in a *Report on Plans and Priorities*, an *Annual Report* and a *Departmental Performance Report* that are submitted each year to the Minister for tabling in the House of Commons. The CNSC has initiated for such as the Cost Recovery Advisory Group, and quarterly meetings with the Canadian Nuclear Association's Regulatory Affairs Committee, which are appropriate vehicles for industry to comment on the cost recovery program development and the regulatory process, respectively. CNSC is currently exploring other venues to encourage broader dialogue with other stakeholders.

All information held by the CNSC, including information submitted in support of licence applications and compliance-related reports, is available to the public upon request, with the exceptions of security-sensitive, commercially confidential and personnel information. The policy of the CNSC is to be transparent on regulatory matters and, where possible, to not have

Canadians use the formal process under the *Access to Information Act* to obtain CNSC-held information.

The CNSC adheres to the government policy of disclosure on contracts, travel and other expenses for senior management, reclassifications of personnel, grants and contributions, and audit reports by the internal audit and ethics group.

The separation of the Commission (the tribunal), whose members are appointed by the Governor in Council, from the CNSC staff, is an element of the tribunal's independence in making licensing and related decisions. The Commission sets overall regulatory policy, makes regulations as required, and decides on major licence applications, renewals and related questions. The members participate in training sessions on technical aspects of the nuclear industry and in special seminars on topics such as ethics. Benchmarking of the Commission against twelve other Canadian tribunals across several performance areas indicates that the Commission is in the forefront in many respects.

With respect to public hearings interested stakeholders and interested interveners are invited to make their views known to the Commission either in person or through written submissions. All decisions and the reasons for those decisions are published, generally, within 60 days of the respective hearing. The CNSC's staff provides advice to the tribunal, implements decisions made by the tribunal, and enforces compliance with regulatory requirements.

A robust governance framework, including an effective organizational structure, is in place to guide staff, and includes:

- a clear vision with well-articulated outcomes:
- a focused mission and mandate which sets direction for the CNSC's Strategic Plan;
- an initiative to implement an internationally established Quality Management System; and
- an effective and professional corporate services component that provides information and internal systems that ensure the effective stewardship of resources.

At the staff level, regulatory activities are reviewed quarterly, and bi-annual corporate reviews of results achieved against plans are conducted, with resources reallocated as necessary to the highest priorities. Performance management contracts are in place with all managers. These contracts are specific, results-based and identify accountabilities.

An independent internal audit and evaluation program is in place, reporting to the President. With respect to its internal audit program, the CNSC is in the process of adopting Treasury Board's new Audit Policy and has appointed an external member to its Internal Audit Committee.

A Values and Ethics Strategy tailored specifically to the CNSC was launched in 2005 and will be fully implemented in 2006-07. The Strategy advocates personal commitment and engagement by all leaders and employees and includes practical tools and techniques for building and maintaining ethical actions and habits.

The CNSC also has a Code of Conduct and Ethical Behaviour, and a Conflict of Interest Code. In 2005, the CNSC put in place a formal process for the Internal Disclosure of Wrongdoing, to allow staff to disclose wrongdoing in a safe and constructive manner, and to protect staff against any reprisals when they raise an issue or disclose wrongdoing in good faith.

In recent years the CNSC implemented significant management improvements under its "Modern Management" agenda. In 2005, CNSC formally committed to the establishment of a corporate-wide Quality Management System (QMS) that is being developed in accordance with the requirements and guidance in the <u>IAEA Safety Standard GS-R-1 and accompanying safety guides</u>, which includes the international standard for nuclear regulatory bodies. This QMS is consistent with the Treasury Board's Management Accountability Framework (MAF) to which the CNSC is accountable.

The Quality Management System (QMS) will capitalize on, and integrate the numerous improvement initiatives currently underway within the CNSC facilitating the development, implementation and continuous improvement of its business processes and practices. In addition, the QMS will include clear performance measurement and benchmarking of CNSC's practices and performance against its international peers. Ultimately, the QMS will enable sustainable measured improvements toward our vision of being one of the best nuclear regulators in the world.

#### **Funding of CNSC Operations**

The CNSC's operations are funded through an annual appropriation from Parliament. The CNSC's workload and therefore its resource requirements are largely driven by the level of demand for licensing and regulatory oversight, and by the nature of Canada's international commitments. When its workload increases, the CNSC applies to Treasury Board for permission to increase its cost recoverable expenditures and related fee revenues accordingly and/or to receive new program funding.

Most costs incurred for the CNSC's regulatory activities are recovered by the federal government from licensees in accordance with the *Canadian Nuclear Safety Commission Cost Recovery Fees Regulations* (2003). Fees are collected by the CNSC and deposited to the Consolidated Revenue Fund and are not a source of revenue for the CNSC. Some licensees, such as hospitals and universities, are exempted from paying fees.

Fees are not charged for activities that result from CNSC obligations that do not provide a direct benefit to identifiable licensees. This includes activities with respect to Canada's international obligations, including the non-proliferation of nuclear weapons, public responsibilities such as emergency management and public information programs, and maintenance of the NSCA and associated regulations.

# Additional Funding Resources for FY 2006-07

As a result of growing activity in all areas of the nuclear sector in the past several years, the CNSC has experienced a substantial increase in its workload in most areas of responsibility. The workload is forecast to continue to increase over the planning period. In order to fulfil its mandate, the CNSC received approval from Treasury Board in 2005 for additional short term monies, specifically, \$6.5 million in 2005-06 and \$14.5 million in 2006-2007 to address immediate resource shortfalls. In its 2006 Budget, the Federal Government recognized the need for the CNSC to expand by allocating an increase in funding of over \$93 million to enable increased effective regulatory oversight over the next five years. This approval represents approximately 74% of the funding that the CNSC requires to address current pressures. The additional resources will enable the CNSC to address four key priorities for health and safety, nuclear power reactor refurbishment projects, expansion of uranium mining, research facilities and waste management, licensing and compliance of the use of nuclear substances including health care facilities and mitigating risk to nuclear security. The CNSC will continue its efforts to secure required resources to meet emerging new demands relating to both new nuclear power plants and for domestic safeguards and non-proliferation support in accordance with Canada's international commitments.

The CNSC has established the following order of priority for allocation of its resources:

- 1. Deliver an effective regulatory program for existing facilities
- 2. Effectively manage growth of the regulatory program
- 3. Implement improvement initiatives

In 2006-2007, the CNSC's planned expenditures will be approximately \$86.4 million. Expected fees will be approximately \$61.6 million.

#### **The CNSC Protects Canadians**

The Treasury Board of Canada's annual report, *Canada's Performance 2005*, provides a government-wide statement of Canada's Performance in three policy areas:

- Sustainable economy, one of the Government of Canada's specific measure of which includes a "clean and healthy environment";
- Canada's social foundations, which includes health care and safe and secure communities; and
- Canada's place in the world, which recognizes the international dimension of government activity needed to advance national aspirations.

The CNSC is a key contributor to the Government of Canada's performance in each of these areas.

# **Summary Planning Information**

#### **CNSC Priorities**

The CNSC's ultimate or strategic outcome is:

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

The CNSC uses an established strategic framework, based on a logic model (Section IV) for developing its plans and priorities. The model includes intermediate as well as immediate outcomes. The strategic outcome is not entirely within the CNSC's control nor is it solely the CNSC's responsibility. The level of direct impact resulting from the CNSC's activities is greatest on the immediate outcomes.

The five immediate outcomes which represent the CNSC's five strategic priorities are:

- 1. A clear and pragmatic regulatory framework
- 2. Individuals and organizations that operate safely and conform to safeguards and non-proliferation requirements
- 3. High levels of compliance with the regulatory framework
- 4. CNSC cooperates and integrates its activities in national/international nuclear fora
- 5. Stakeholders' understanding of the regulatory program

Underlying the CNSC's strategic framework is its management and enabling infrastructure. This infrastructure consists of management, internal audit, legal services, human resources, finance, information services and infrastructure processes and programs that enable the CNSC to perform the activities required and to meet the requirements of good governance with a high level of accountability.

This CNSC strategic framework is consistent with the CNSC Program Activity Architecture that complies with the Treasury Board's common reporting requirements.

#### Financial Resources (\$ thousands)

2006-2007	2007-2008	2008-2009
86,499	93,488	93,488

#### **Human Resources**

2006-2007	2007-2008	2008-2009
651	684	682

**Departmental Priorities by Strategic Outcome** 

_		Pla	Planned Spending		
		2006-2007	2007-2008	2008-2009	
Outcome #1	Clear and pragmatic regulatory framework	6,432	6,952	6,952	
Outcome #2	Individuals and organizations that can operate safely and conform to safeguards and non-proliferation requirements	20,033	21,651	21,651	
Outcome #3	High levels of compliance with the regulatory framework	35,803	38,696	38,696	
Outcome #4	CNSC cooperates and integrates its activities in national/international nuclear fora	17,784	19,221	19,221	
Outcome #5	Stakeholders' understanding of the regulatory program	6,447	6,967	6,967	
	TOTAL	86,499	93,488	93,488	

#### **Strategic Challenges and Risks**

In 2005, the CNSC updated its annual, comprehensive review of pressures and risks it will have to address over the course of the next 10 years. Licensees contributed to this review on a commercially confidential basis. The review confirmed that the Canadian nuclear industry is experiencing significant growth in all segments of the nuclear cycle and in virtually all areas where nuclear substances are used in industry, medicine and research. The CNSC continues to monitor change in its operating context to ensure an ongoing effective and timely regulatory regime.

#### a. Life-extension of nuclear reactors

Canada has 22 nuclear power reactors, many of which are approaching the end of their designed operating lives. Two units at Ontario Power Generation's Pickering A nuclear power station in Ontario have been permanently shut down. With respect to the remaining 20 reactors, licensees and applicable governments are either embarking on refurbishment projects or are conducting feasibility studies for life extensions. In June 2006, New Brunswick Power was authorized to proceed with the refurbishment of its Point Lepreau nuclear power plant. Hydro-Quebec has also applied to the CNSC for authorization to refurbish its Gentilly-2 power plant. The environmental assessment for this project will be heard by the Commission in the fall of 2006. Bruce Power, having entered into an agreement with the Province of Ontario, has applied to refurbish two units at Bruce A that are currently shut down.

Looking forward, the CNSC anticipates requests for approval to proceed with other life extension projects. For example, the Ontario government has instructed Ontario Power Generation (OPG) to examine the feasibility of refurbishing the four units at the Pickering B nuclear power plant, as part of its response to the Ontario Power Authority's (OPA) December 2005 recommendations on the long-term electricity supply mix. Requests to approve the life extension of the four units at OPG's Darlington power plant, and the four units are Bruce B at also expected over the course of the next several years, subject to feasibility studies by their operators and agreement by the government of Ontario.

In May 2005, the CNSC released draft regulatory guide G-360, entitled "Life Extension of Nuclear Power Plants". Subject to Commission approval, G-360 sets out the CNSC's expectations of licensees with respect to the steps and phases to consider when undertaking a proposal to extend the life of a nuclear power plant.

In addition, CNSC is reviewing an application by Atomic Energy of Canada Limited requesting to be permitted to continue operation of the National Research Universal (NRU) reactor at the Chalk River Laboratories until 2012.

### b. Plans for building new power reactors

There has been a significant shift in the outlook of governments and nuclear operators in 2005-2006 with respect to the prospects for the construction of new power reactors in Canada. As part of its response to the recommendations of the Ontario Power Authority, the government of Ontario instructed the OPA to include 14,000 MW of nuclear power in its long-term, Integrated Power Supply Plan. Given the loss of supply due to the decision to not refurbish two units at Pickering A, on June 13, 2006, Ontario instructed OPG to begin planning for approximately 1,000 MW of replacement power from new nuclear plants, starting with an environmental assessment at an existing site.

To clarify the licensing process for licensees, governments and the public, in February 2006 the CNSC published Information Document 0756, entitled "Licensing Process for New Nuclear Plants in Canada". The CNSC will also need to develop a modern, up-to-date regulatory framework for the design, construction, commissioning and operation of new nuclear power plants. This work is not planned within current financial envelope. This framework will take into account modern international standards to the extent practicable. The CNSC is neutral with respect to the choice of technology to be used to generate nuclear power; that is the responsibility of the proponents. However, any newly built reactors would require extensive environmental assessment and licensing reviews before the Commission could proceed with licensing of site preparation, construction and operation.

# c. Nuclear medicine, radiation therapy, nuclear substances and radiation devices

Licensing and compliance activities associated with the regulation of nuclear substances, radiation devices, prescribed equipment and Class II nuclear facilities (where prescribed equipment is used for medical, industrial and research purposes) have increased substantially. The number of licences issued for Class II nuclear facilities (principally cancer treatment

facilities) has grown 86%, from 153 to 285, from 2000 to 2005. The number of such licensed facilities is forecasted to total at least 500 by the year 2015. In addition to the licensing and compliance work associated with the construction of new cancer facilities, the CNSC needs to license the refurbishment of existing cancer treatment facilities.

#### d. Uranium mines, mills and processing facilities

Increased demand for uranium has been triggered by the construction of new nuclear power plants in Asia, improved reactor operations throughout the world, and the extension of the operating lives of reactors. Canada produces 30% of the world's uranium, of which 80% is exported. To meet demand, licensees are accelerating production from existing mines, developing currently known smaller deposits of ore and exploring for new sources of uranium throughout Canada. Any new mining will involve CNSC approvals, amendments and/or the issuance of new licences by the Commission and, depending on the scope of the proposal, some projects may require environmental assessments.

## e. Nuclear waste management

Both industry and governments are moving forward with a number of initiatives to address nuclear waste management issues to ensure that nuclear waste is handled effectively and expeditiously. There are several initiatives underway by both federal and provincial governments to deal with legacy 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 the increased volumes of nuclear waste associated with on-going operations as well as waste arising from reactor life-extension projects.

OPG and the Municipality of Kincardine, Ontario recently entered into a "hosting agreement" for the permanent disposal of low and intermediate radioactive waste in a deep geological waste repository on the Bruce Power's "Bruce A" nuclear site. The CNSC has received notice from OPG of its intent to file an application with the Commission to license this permanent radioactive waste disposal site. In addition, the Nuclear Waste Management Organization (NWMO) submitted a report to the Minister of Natural Resources on options and recommendations with respect to the long-term storage or disposal of spent nuclear fuel. The CNSC will be responsible for regulating any facilities designed and constructed for long-term spent fuel storage or disposal.

### f. Nuclear Security and Emergency Management

National security and emergency management remain priorities. The CNSC continuously verifies, through its regulatory compliance program, that licensees are maintaining the enhanced security measures that have been implemented following September 2001. CNSC will be enhancing security oversight in specific areas. Nuclear security programs include policies that regulate the physical security of nuclear power plants, nuclear facilities licensed to process nuclear substances, e.g. research facilities, and the security of high risk nuclear substances and materials, performance testing and personnel security clearance of the armed response forces and participation in international nuclear security initiatives. The CNSC is working closely with officials of other agencies in Canada, the United States and the international community to be an effective partner in intelligence gathering and analysis, and in maintaining the world-wide

nuclear security network and appropriate emergency management plans to deal with unexpected events.

One of the critical nuclear security issues is protection against the diversion of nuclear material and radioactive sources for unauthorized or malicious acts. International expectations in this area are set out in the new IAEA *Code of Conduct on the Safety and Security of Radioactive Sources* (the Code) which Canada has committed to implement. CNSC will implement this commitment over the next two years.

#### g. International Safeguards

In recent years, new demands have been placed on Canada and therefore on the CNSC to increase the scope of the nuclear materials and facilities that must be declared to the IAEA and the IAEA has significantly increased its verification efforts. The CNSC is responsible for implementing the safeguards agreements between Canada and the IAEA. As a follow-up to the conclusion received from the IAEA in September 2005, the CNSC will be working with the appropriate Government departments and agencies to design the policy framework and obtain resources necessary to ensure that Canada's new national safeguards program is effective and responsive to the needs of Canadians and the international community.

#### h. Public hearings and stakeholder consultation

As governments and licensees make decisions related to nuclear power plant life-extensions, investments in new nuclear plants, and waste management, the CNSC expects heightened public interest in nuclear matters. The expansion in all regulated sectors of the nuclear industry is driving the need for more frequent Commission hearings. In addition, citizens are requesting that more hearings be conducted in the communities most affected by the licensing decision. There are also requests for easier and faster access to information related to matters before the Commission.

#### i. Staffing requirements to meet the increased workload

One of the CNSC's most critical challenges is to ensure it has an adequate number of staff, with the appropriate mix of scientific, technical and other professional knowledge, skills and experience. With the growth in nuclear sector activity creating an increase in industry demand for the same skilled resources, the CNSC is facing increasing challenges to attract and retain the required expertise.

#### **Planning Assumptions**

The strategic plan for 2006-2007 to 2008-2009 is based on a number of planning assumptions. As changes in the CNSC's operating environment occur, these assumptions are reviewed and the plans are adjusted accordingly. The planning assumptions are as follows:

- 1. Resource levels currently approved for the CNSC will continue. This includes the addition of \$14.5 million approved by Treasury Board for 2006-07 as well as the additional funding allocated to the CNSC in the Government of Canada's Budget 2006 (\$4.5 million for 2006-07 and \$22.5 million for each of 2007-08 and 2008-09).
- 2. No changes in the structure of the cost recovery program with respect to exemptions from fees and with respect to activities related to international obligations.
- 3. The CNSC has the ability to attract and retain knowledgeable and skilled staff and is able to absorb the impact of losing knowledge through retirement. This also assumes that the existing compensation levels are adequate to meet this requirement.
- 4. The Commission Tribunal structure and functions remain as currently established, but the number of hearings are expected to increase.
- 5. Resources allocated to infrastructure activities related to human resource management, information technology, finance and administration, and communications will increase to reflect the added support required.

# SECTION II – PLANS AND PRIORITIES

# The CNSC Strategic Plan 2006-2009

The following plan reflects the strategic priorities that need to be addressed, the range of activities to be undertaken and the respective resource implications for each of CNSC's immediate outcomes discussed in the CNSC Logic Model (Section IV).

# 1. A clear and pragmatic regulatory framework

The CNSC's regulatory framework is composed of:

- The *Nuclear Safety and Control Act* (NSCA), regulations and regulatory documents
- The *Safeguards Agreement* and *Additional Protocol* between Canada and the International Atomic Energy Agency (IAEA); and Canada's bilateral and multilateral Nuclear Cooperation Agreements
- The Canadian Environmental Assessment Act (CEAA)
- The *Nuclear Liability Act* (NLA)

The cornerstone of the CNSC's regulatory framework is the NSCA, which was passed into law in 2000. This *Act* is modern, comprehensive and world class.

The Government of Canada has entered into bilateral agreements with the IAEA on nuclear safeguards verification and with numerous countries on nuclear non-proliferation frameworks for nuclear trade. The CNSC is identified as Canada's Competent Authority on these matters.

The Government of Canada has also made multilateral commitments through treaties, codes of conduct, conventions and arrangements on transportation, nuclear export controls, physical protection, power reactor safety as well as the safety of spent fuel and radioactive waste management, radioactive materials and research reactors.

The CNSC is mandated to implement Canada's bilateral and multilateral commitments on the peaceful use of nuclear energy in each of these areas.

The CEAA stipulates that an environmental assessment of a project is required before any federal department or agency issues a permit or licence, grants an approval or takes any other action for the purpose of enabling the project to be carried out in whole or in part. The NSCA is listed in Schedule I of the CEAA Law List regulations and therefore, environmental assessments are required when the CNSC, pursuant to certain subsections of the NSCA, issues or amends a licence or grants an approval under a licence for the purpose of enabling a project to proceed.

With respect to protecting the environment, both the CNSC (under the NSCA) and Environment Canada (under the CEAA) have the mandate to prevent or control the amount of uranium and uranium compounds released into the environment from uranium mines and mills. Under an agreement between the CNSC and Environment Canada, the CNSC has been assigned primary

responsibility to ensure that preventive or control measures are developed and implemented in a manner that is consistent with and comparable to the *Canadian Environmental Protection Act*.

The CNSC also administers the NLA on behalf of the federal government. Under the NLA, operations of designated nuclear installations are required to possess basic and/or supplementary insurance coverage. Premiums for any required supplementary coverage are credited to the Nuclear Liability Reinsurance Account in the Consolidated Revenue Fund. This account is administered by the CNSC, however, the insurance coverage is provided directly by the federal government.

The CNSC has the following plans for its regulatory framework, some of which are to be completed in a specific timeframe and others which are in the nature of ongoing work. These plans are described in terms of (1) legislation, (2) regulations and (3) regulatory standards and documents.

Logislation

1.1 Legislation			
Plans	06-07	07-08	08-09
Review the effectiveness of the NSCA on an ongoing basis			
and assess aspects for possible improvement			
Work with the Canadian Environmental Assessment Agency			
to contribute to any changes to the CEAA which impact			
either the CNSC's role as a regulatory authority or its			
environmental planning oversight responsibilities under the			
NSCA			

There is no statutory review period for the NSCA and the Commission has no plans at this time to request such a review by the government in the period of this plan. However, in line with good governance, the CNSC regularly reviews the NSCA to ensure that it provides a sufficiently vigorous mandate, regulation-making powers and the administrative tools required to effectively and efficiently carry out the responsibilities assigned to it by Parliament. If it becomes clear that the NSCA fails to meet these expectations, the CNSC will recommend to the Minister of Natural Resources that amendments to the NSCA be introduced to Parliament.

The CNSC is the Responsible Authority for all nuclear projects and has designed a process to efficiently integrate CEAA and NSCA requirements. The CNSC is working with the Canadian Environmental Assessment Agency to ensure that the process remains effective and efficient.

#### 1.2 Regulations

<sup>\*</sup> See also Section III, Table 6; Major regulatory Initiatives

The CNSC performs a risk-informed review of existing and potential new regulations on a continued cycle. It focuses on amendments to those regulations of greatest benefit to protecting health and safety, security and the environment and to respecting Canada's international commitments on the non-proliferation of nuclear weapons. Consistent with the Government of Canada's *Regulatory Policy*, the development and amendment of regulations is performance-based and, in line with international standards and recommendations on nuclear regulations, where practical.

In accordance with the IAEA's verification system, there is an increased need for States to demonstrate to the international community, as well as to their national constituencies, that all nuclear material within their jurisdiction is solely for peaceful, non-explosive use and is appropriately accounted for. The CNSC is continuing its efforts to update its regulatory framework by developing *Nuclear Safeguards Regulations* to reflect these requirements. In addition, the *Nuclear Non-Proliferation Import and Export Control Regulations* will be amended over the next two years to reflect the current regulatory environment.

Work continues in the revision of a number of regulations, including *Nuclear Security Regulations* (expected to be submitted to the Governor in Council in 2006), *Nuclear Substances and Radiation Devices Regulations* and *Class II Nuclear Facilities and Prescribed Equipment Regulations* (which will result in their publication in the Canada Gazette in 2006-2007).

Based on a 2005 benchmark analysis conducted to compare the Commission tribunal's hearing and meeting processes against those of 12 other Canadian federal and provincial administrative tribunals and a consultation process with stakeholders, the Secretariat is determining the extent

of amendments required to the Commission Rules of Procedure. In 2006-07, the Secretariat will proceed with the formal review of the *CNSC Rules of Procedure* and *CNSC By-laws*. The goal is flexible rules and practices (such as an expedited licensing process for more routine applications) with new guidance documents.

1.3 Regulatory Standards and Documents			
Plans	06-07	07-08	08-09
Review on an ongoing, systematic and consultative basis,			
regulatory practices codified in regulatory documents			
Develop regulatory policies, standards and guides and			
influence and adopt international standards where applicable			
to the Canadian context			
Strengthen the multilateral guidelines and export control lists			
on nuclear supply to counter contemporary nuclear			
proliferation threats			

There has been a sustained effort by the CNSC, in the development of regulatory documents that elaborate on requirements in the NSCA and the supporting regulations. The documents to be prepared over the planning period have been identified and prioritized in a risk-informed, multi-year plan.

Over the planning period there will be a significant need for new and revised regulatory documentation in the areas of power reactor life-extension, construction of new power reactors, new uranium mines and geological repositories for nuclear waste.

CNSC staff evaluates and participates in the development of international and national standards and guides that are relevant to the regulation of the Canadian nuclear industry.

The CNSC, in collaboration with Foreign Affairs and International Trade Canada, will continue work to strengthen the multilateral nuclear supply guidelines and control lists that are the basis of CNSC control measures and regulations in this area.

# 2. Individuals and organizations that operate safely and conform to safeguards and non-proliferation requirements

The NSCA authorizes the CNSC to issue licences or certify persons to conduct nuclear-related activities in Canada. In order to issue a licence or perform a certification, the CNSC must obtain evidence of the licensees' ability to operate safely and conform to safeguards and non-proliferation obligations.

### 2.1 Licensing by the Canadian Nuclear Safety Commission Tribunal

Plans	06-07	07-08	08-09
Evaluation on an ongoing basis of the Commission Tribunal			
licensing process to identify and implement improvements in			<b></b>
effectiveness and efficiency.			

### 2.2 Licensing and Certification activities by the CNSC Staff organization

Plans	06-07	07-08	08-09
Complete implementation of a consistent, risk-informed			
methodology for licensing across all licensing areas		`	
Formulate strategies for licensing of new nuclear power	<b>—</b>		
plants			
Formulate strategies for licensing of long-term waste			
management and disposal facilities			
Formulate an approach for the regulatory oversight of aging			
nuclear power facilities	Ĭ .		
Provide regulatory oversight of licensee life extension	<b>—</b>		
projects			
Clarify licensing and certification expectations through			
improved documentation of processes and clearer	<b>-</b>		
communication with licensees			
Prepare licensing recommendations as required for Tribunal			
Hearings or Designated Officer consideration			
Implement electronic technology solutions for submission			
and information management of licensee documentation	<b>•</b>		

Risk-informed licensing methodologies have already been put in place in two of the CNSC's three licensing directorates, specifically in the Directorate of Nuclear Substance Regulation and in the Directorate of Nuclear Cycle and Facilities Regulation. The implementation of the risk-informed licensing methodology for power reactors is planned for completion in 2007-2008.

CNSC published the *Licensing Process for New Nuclear Power Plants in Canada*, an information document in February 2006. As resources become available, strategies will be developed for regulation of the construction and operation of new power reactors.

In addition, a strategy will be developed for regulatory oversight of activities leading up to the eventual construction and operation of long-term waste management and disposal facilities, whether they are low-, medium- or high-level waste management and disposal facilities. The strategy will include a review of the scope of the CNSC's regulatory requirements in this area.

Canadian nuclear power plants are aging and some are coming close to the end of their "useful" life. Aging affects nuclear plants in many ways, by changing material properties and equipment characteristics. The CNSC has in place measures that provide for the systematic regulatory

oversight of aging facilities. CNSC staff is also clarifying standards in the area of maintenance and aging management of nuclear power reactors. This will lead to regulatory guidance and an oversight approach that ensures that the refurbishment work and subsequent extended operations are done to acceptable standards and pose no unreasonable risk to public health, safety, security or the environment.

The CNSC is clarifying licensing and certification steps by mapping key processes, and resolving inconsistencies or unclear steps. Communication of these expectations will improve licensing efficiency.

The CNSC will also continue to perform its ongoing licensing work including analysis of licensing submission and preparation of licensing recommendation for tribunal hearing or for consideration by a Designated Officer. Under the NSCA, certain licensing function may be assigned by the tribunal to a designated officer, a member of the CNSC staff.

The CNSC will also, as resources permit, implement electronic documentation systems, including e-filing of regulatory information. In order to provide comprehensive and timely regulatory reviews and approvals and ongoing compliance and communications with licensees, secure communications networks, new electronic document handling technologies and the necessary administrative procedures will be created and implemented.

# 3. High levels of compliance with the regulatory framework

Achieving high levels of compliance is fundamental to the CNSC and therefore the largest allocation of resources is devoted to this outcome. Effective oversight of compliance with regulatory requirements is critical to providing assurance to Parliament and the Canadian public that nuclear energy and materials are being used safely and securely and in a manner which respects Canada's international commitments concerning their peaceful use.

In addition to overseeing the compliance of licensees with the CNSC's regulatory regime, an important aspect of the CNSC's compliance work involves ensuring that Canada meets the international commitments made by the Government of Canada.

## 3.1 Compliance by licensees with the CNSC's Regulatory Regime

Plans	06-07	07-08	08-09
Complete the implementation in all regulated sectors of a			
consistent, risk-informed approach for the selection of level	-	•	
and type of compliance verification required, with a focus			
on power reactor regulation			
Finalize the development and implementation of a revised			
baseline compliance program for nuclear facilities.			
Strengthen the CNSC's safety performance rating system for			
applicable licensees through more consistent application, as	•		
well as better communication of the rating basis to licensees			
and the Canadian public			
Conduct ongoing compliance promotion, verification and			
enforcement activities			
Develop and implement a licensee information management			
system for CNSC staff to record, report and access current			•
compliance information, inspection results and trends			

Risk-informed approaches are systematically applied by the CNSC in the planning and conduct of compliance activities in most regulated sectors. A focus for the CNSC for the planning period is to expand its systematic risk-informed approach to the area of power reactor regulation. The baseline compliance program establishes the minimum regulatory effort required to maintain and confirm performance levels for a facility/licensee that consistently meets safety performance expectations. The baseline program is risk-informed with the result that decreasing safety performance by a facility/licensee would typically require a risk-informed selection of additional compliance activities above the minimum baseline.

Currently, the CNSC reviews and reports on compliance program results by the nuclear power plant sector through the *Annual CNSC Staff Report on the Safety Performance of the Canadian Nuclear Power Industry*. The safety performance and compliance of these major licensees are reported in public meetings before the Commission Tribunal and are published in report cards and annual reports in paper format and on the CNSC Web site (<a href="http://www.nuclearsafety.gc.ca">http://www.nuclearsafety.gc.ca</a>). Efforts are underway to strengthen the performance rating system and to provide more information on the rating basis used by the CNSC so that applicable licensees will be better informed in order to improve their respective ratings.

With the increase in workload, the complexity and volume of information maintained about licensees is increasing. The CNSC must invest in an effective licensee information management system across the various regulated sectors to consistently capture compliance information and inspection results and to integrate information from licensees. The CNSC will take an Integrated Information Management/Information Technology Systems approach. Additionally, to provide consistent, more effective and timely analysis, the selection and implementation of an enterprise-wide business intelligence (BI) solution is currently underway. This will improve on the levels of performance measures and reporting.

# 3.2 Compliance by Canada with the international regulatory regime

Plans	06-07	07-08	08-09
Apply the requirements of multilateral conventions and arrangements			-
Exercise non-proliferation controls with bilateral partners in transfers of nuclear items			<b></b>
Implement the requirements of the Canada-IAEA Safeguards Agreement and Additional Protocol for the verification of the peaceful use of nuclear energy in Canada			<b>•</b>
Develop and implement a comprehensive regulatory regime for high-risk radioactive sealed sources and nuclear materials			
Implement the electronic information management solutions to assist in compliance reporting for international safety and security obligations. Further development and implementation of a Nuclear Materials Accounting System		•	

The CNSC is responsible on behalf of the Government of Canada for applying the requirements of multilateral conventions relating to: the Physical Protection of Nuclear Material; Nuclear power reactor safety; spent fuel and radioactive waste management safety; and the safe transportation of radioactive material. Reports on compliance with the obligations in these multilateral conventions such as the Convention on Nuclear Safety and the Joint Convention on Spent Fuel Management and Radioactive Waste Management will be submitted by the CNSC for peer review at regular meetings of Contracting Parties during this period.

The CNSC's responsibility for the negotiation and implementation of Administrative Arrangements to implement reciprocal nuclear non-proliferation provisions of bilateral Nuclear Corporation Agreements between Canada and its nuclear trading partners will continue to be exercised. Assuring compliance with these reciprocal provisions includes exercising controls on nuclear transfer notifications and reporting, and the maintenance of verified nuclear inventory accounts.

The CNSC will continue to fulfil its role as the State System of Accounting and Control for nuclear material in Canada. CNSC will meet requirements for: reporting on nuclear activities and nuclear material; facilitating and managing IAEA safeguards inspector access; and ensuring that safeguards inspections and inspector access are consistent with agreed approaches. The CNSC will assure compliance by the nuclear industry with CNSC safeguards requirements established in facility licences.

The Government of Canada has endorsed the IAEA Code of Conduct on the Safety and Security of High Risk Radioactive Substances. To meet the requirement and to assure Canadians, the CNSC will; enhance its comprehensive regulatory regime for control and licensing of high-risk radioactive sealed sources; and develop and implement a comprehensive regulatory regime for

nuclear material. The regulatory controls will include: enhanced import and export control measures; enhanced verification of security measures in place during the transport and storage of radioactive sources; security checks to verify the trustworthiness of persons with unrestricted access to those sources; and e-business applications for sealed source tracking and Nuclear Materials Management and Accounting.

# 4. CNSC cooperates and integrates its activities in national/international nuclear fora

The CNSC works cooperatively, on an ongoing basis, with a number of other domestic and international organizations.

At the international level, the CNSC's cooperation and involvement in international nuclear organizations includes the IAEA and the Nuclear Energy Agency of the Organization for Economic Co-Operation and Development (OECD). The CNSC's role is to promote Canadian interests and evaluate international recommendations, standards and guides for adoption in the CNSC's regulatory framework. The CNSC also contributes technical and policy advice and expertise on nuclear non-proliferation and export control activities to Foreign Affairs and International Trade Canada, other government departments and international stakeholders on implementation of Canadian policies and on strengthening multilateral non-proliferation and export control regimes, treaty instruments and control measures. The CNSC is instituting an enhanced system to track and report on its international activities.

At a national level, cooperation by the CNSC with appropriate federal, provincial and private sector organizations contributes to more effective and efficient nuclear regulation. Such cooperation makes the best use of relevant expertise on specific regulatory issues, while at the same time minimizes the potential for duplication of regulatory effort. These organizations include Environment Canada, the Canadian Environmental Assessment Agency, Fisheries and Oceans Canada, Human Resources and Social Development Canada, Health Canada, Public Safety Canada, Foreign Affairs and International Trade Canada and the Canadian Standards Association, among others.

### 4.1 Contributing to a safe and secure world on an international level

Plans	06-07	07-08	08-09
Track and report CNSC participation in international			
activities on nuclear-related matters			
Provide technical advice to Foreign Affairs Canada, other			
government departments and international stakeholders.			

Internationally, the CNSC has cooperative relationships with international organizations (including the IAEA and the OECD's Nuclear Energy Agency) and with a number of foreign nuclear regulators for the sharing of regulatory information and best practices. CNSC staff conducts training in other countries on the CNSC's regulatory approach to the use of nuclear technology and materials. These activities involve a number of CNSC staff with technical expertise across the fields of nuclear science. One example of information sharing is with the

OECD's Nuclear Energy Agency (NEA) involving their Committee on Nuclear Regulatory Activities and the Committee on Safety of Nuclear Installations.

The CNSC is also an active member of the CANDU Senior Regulators Group, an organization established under the auspices of the IAEA to enable sharing of regulatory information specific to CANDU reactors.

In addition, the CNSC continues to work closely with its counterpart, the United States Nuclear Regulatory Commission, on a range of issues of mutual interest. This includes physical security and emergency management, regulatory assessment and controlling the use, export and import of radioactive sources.

# Plans Of-07 Of-08 Work with federal, provincial, municipal and international emergency management organizations to ensure an effective, efficient and cooperative CNSC emergency management framework and infrastructure Establish and review cooperative arrangements with federal and provincial organizations, departments and agencies, and foreign nuclear regulators on an evergreen basis

There are a number of federal departments and agencies, including the CNSC, with defined responsibilities under the Federal Nuclear Emergency Plan. There are also provincial and municipal departments and organizations with legislated responsibilities for emergency management.

The CNSC is reviewing its current program and will implement improvements to the CNSC Nuclear Emergency Management Program by April 2007. The central element of this program is the Nuclear Emergency Management Policy which provides guiding principles and direction for CNSC activities relating to nuclear emergencies. A final version was presented to the Commission for approval in early 2006. Once the policy is in place, the improved response plan, detailed response procedures and program-related documents will be developed. Until a revised Emergency Management Plan has been completed and implemented, the CNSC's current Emergency Management Plan will remain in effect.

Domestically, the CNSC's mandate is clearly outlined in the NSCA which specifies that nuclear regulatory activities are a federal responsibility. However, there are areas where other federal and provincial departments have parallel or complementary responsibilities. These include security, emergency management, environmental protection and regulatory oversight of uranium mining. The CNSC has in place a number of agreements to coordinate involvement in these cases such as an Administrative Agreement with the Province of Saskatchewan related to regulatory activities at uranium mines. The CNSC also participates on the Federal/ Provincial/Territorial Radiation Protection Committee which comprises of Radiation Protection

Authorities from all of the provinces and territories, Health Canada, the Department of National Defence, Human Resources and Skills Development Canada and the CNSC.

# 5. Stakeholders' understanding of the regulatory program

The CNSC is committed to operating with a high level of transparency. This involves engaging stakeholders through a variety of appropriate consultation processes, effective information sharing and communications.

5.1	5.1 Awareness of and participation in the licensing and hearings process by stakeholders					
	Plans	06-07	07-08	08-09		
	ore improvements to processes for Commission					
proce	redings	Ĭ				

Citizens are encouraged to participate in licensing hearings for major nuclear facilities to ensure that the diverse concerns of Canadians are taken into account when licensing decisions for these major facilities are made. Notices of upcoming hearings are posted on the CNSC Web site and are publicized in the area surrounding the facility. Members of the public are welcome to observe hearings, and are encouraged to participate orally or in writing in the official language of their choice.

All hearing documentation such as notices, agendas, transcripts of the proceedings, news releases, Records of Decisions, the hearing process and the *CNSC Rules of Procedure* can be found on the CNSC Web site at <a href="www.nuclearsafety.gc.ca">www.nuclearsafety.gc.ca</a>. The CNSC is exploring other methods including web-casting (which was tested in 2005-2006).

5.2 Communications, consultation and outreach with stakeholders					
Plans	06-07	07-08	08-09		
Conduct a well-structured and sustainable Outreach					
Program					
Monitor the public environment and issues and develop					
and implement proactive and reactive communications	•		<b></b>		
plans for external stakeholders.					
Develop and implement a strategic communications plan					
	•	•			
Develop a CNSC External Communication Regulatory	•				
Policy					

A formalized Outreach Program was implemented in 2004 to ensure that the CNSC's outreach activities are focused, effective and make the best use of resources. Outreach activities include meetings with town councils, public hearings of the tribunal, consultations with licensees and other stakeholders, presentations by the CNSC and participation in international conferences. The CNSC will continue these activities during this planning period. An active communications

program uses various tools such as an up-to-date Web site and general, plain-language brochures about the CNSC to increase Canadians' level of awareness of the CNSC and its role as Canada's nuclear regulator and to enhance public confidence.

In parallel with the Outreach Program, the CNSC will continue to monitor the public environment and issues. A strategic communications plan for external stakeholders will enhance the information for Canadians. The CNSC will continue to provide information to the media on both a proactive and reactive basis.

A CNSC External Communications Policy will be developed, as a Regulatory Policy, to describe the philosophy, principles and fundamental factors used by the CNSC in its communications, consultation and outreach programs.

# 6. Management and Enabling Infrastructure

The CNSC's management and enabling infrastructure ensures that the Commission and CNSC staff have the necessary leadership, resources, information, processes and infrastructure to perform the activities required to achieve the CNSC's strategic outcomes.

In 2005, the CNSC proactively undertook a self-assessment against the ten elements of the Treasury Board's Management Accountability Framework (MAF) using indicators provided by the Treasury Board Secretariat. The results of this assessment, which were provided to the Treasury Board Secretariat, indicated that governance, accountability and stewardship are strong at the CNSC. The Secretariat staff noted the progress of the CNSC in instituting risk-informed regulatory practices that help ensure good governance and in actively engaging stakeholders and other partners to inform its cost recovery regime. Treasury Board staff noted the following challenge for the CNSC:

"The CNSC recently received partial funding to address increased regulatory workload associated with nuclear industry growth. The CNSC will need to secure the remaining funding through the Budget process in order to ensure a stable financial footing to support its future operations. The CNSC will also need to manage significant financial and human resource challenges caused by the significant increase to its funding and staffing levels."

# 6.1 Governance, Accountability and Stewardship

Plans	06-07	07-08	08-09
Implement a Quality Management System	-		
Perform a self-assessment of the CNSC's management system and develop a follow-up action plan as appropriate.		•	
Undergo an independent peer review by an International Regulatory			
Review Team (IRRT) from the IAEA to determine level of effectiveness of CNSC's management system as applied for the			
regulation of power reactors			

In 2005, the CNSC formally committed to the establishment of a corporate-wide Quality Management System (QMS). The QMS will be developed in accordance with the requirements and guidance in the IAEA Safety Standard GS-R-1 and accompanying safety guides. The Quality Management System (QMS) will capitalize on, and integrate the numerous improvement initiatives currently underway within the CNSC, facilitating the development, implementation and continuous improvement of its business processes and practices. In addition, the QMS will include clear performance measurement and benchmarking of CNSC's practices and performance against its international peers. Ultimately, the QMS will enable sustainable measured improvements toward CNSC's vision of being one of the best nuclear regulators in the world.

The CNSC has undergone, in 2006-2007, an independent self-assessment of its management system against the IAEA standards. It is developing and implementing a follow-up action plan.

The CNSC has requested the IAEA to send an International Regulatory Review Team (IRRT) to assess the CNSC's regulatory practices against international safety standards with respect to nuclear power reactors. In 2007-2008, the CNSC will undergo an independent peer review by the IRRT to determine the level of effectiveness of the CNSC management system as it is applied to the regulation of nuclear power reactors.

#### 6.2 Values and Ethics

Plans	06-07	07-08	08-09
Continue to implement a Values and Ethics Strategy			
Internal disclosure			
			_

A Values and Ethics Strategy tailored specifically to the CNSC was launched in March 2005 and will be fully implemented in 2006-2007. Under the theme "Helping good people do the right thing", the Values and Ethics Strategy fits well into the CNSC's culture of professionalism, integrity and service to Canadians. The Strategy advocates personal commitment and

engagement on the part of all leaders and employees and includes practical tools and techniques for building and maintaining ethical actions and habits.

Values and Ethics training has already been completed by current CNSC staff and will be integrated into the orientation process for all new employees. This will be especially important as the CNSC will be hiring a significant number of new employees over the planning period.

The CNSC is developing guidance on the building of ethical relationships with stakeholders. This guidance is being prepared in consultation with licensees, contractors, public interest groups and other departments and agencies.

The CNSC has recently developed an internal disclosure function to help staff disclose wrongdoing in a safe and constructive manner. An annual report will be prepared which provides an overview of case management and operations of the internal disclosure process.

## 6.3 Results and Performance

Plans	06-07	07-08	08-09
Manage the integration of significant new financial and human			
resources			
Implement an integrated planning and performance management			
framework which includes a financial and non-financial			
corporate performance measurement framework and improved			
accountability processes			
Implement an integrated information management improvement			
plan including electronic records management		T	

With its substantial increase in workload, funding and staffing levels, the CNSC will need to manage significant financial and human resource challenges. The CNSC requires all growth initiatives to be supported by a results-based business case. Resource allocation decisions are based on a risk-informed analysis of corporate priorities. The CNSC will manage and report on performance for each growth initiative based on results achieved against required deliverables.

The CNSC recognizes that successful integration of significant numbers of new staff will change the organization. Orientation programs are being enhanced, targeted training is a priority and a renewed leadership development program is being developed to ensure front-line managers are able to maximize the effectiveness of recruitment and retention efforts. The CNSC's enabling functions such as Human Resources, Information Management and Technology, Finance and Administration and Communications will adjust services, as required, to accommodate the increased volume of new staff.

The CNSC has identified Integrated Planning and Performance Management as a key corporate priority under the Quality Management System. A cross functional Integrated Planning and Performance Management Committee (IPPMC) was formed in 2006 with a strong mandate and appropriate resources to develop and implement the required processes, procedures and tools that ensure integration of all levels of planning and performance management including a

comprehensive performance measurement framework. This will build upon and integrate the wide number of related initiatives that have been undertaken in many areas of the CNSC, adopting consistent best practices across the agency. With its growth, CNSC is committed to implementing a more results-based management approach to determine priorities, allocate resources and measure success.

The CNSC actively monitors changes to its operating environment in all areas of regulatory oversight. This is a critical input into the planning and resource management processes. The CNSC maintains evergreen documentation of the potential changes, risks and opportunities that may affect it, measures the potential impacts, and drives changes to plans as required. In 2006-07, under the direction of the Regulatory Affairs Division, the CNSC will implement a renewed and more structured Environmental Scanning Framework as part of the Integrated Planning and Performance Management Initiative.

6.4	Risk Management			
	Plans	06-07	07-08	08-09
Integra	tte a corporate risk framework into the strategic planning and			
manag	ement processes			

Formal risk management methodologies have been implemented in certain of the regulatory and support processes and further implementation over the planning period has been discussed in earlier sections of this report. In 2006-2007, the CNSC management team will incorporate an integrated risk management framework into the strategic planning and management processes.

Plans	06-07	07-08	08-09
Leadership and Learning	-		
Sustain proactive approaches for recruitment and retention initiatives			
Implement the first collective agreement upon completion of arbitration process	+		
Continuous improvement to human resources planning including management accountabilities			
Develop and Implement an Informal Conflict Management System (ICMS)	+		

It is important for the organization to have excellent managers and leaders to design and implement policies and programs for the staff. In order to strengthen leadership and management capacities, the Leadership Development Program, which is in place, will be strengthened. The

leadership team assembles two times per year to address timely issues of leadership importance; for example - management improvement; values and ethics; and communications.

Staff, with their specialized knowledge, is the main resource of the CNSC. Many knowledgeable individuals with specific scientific expertise are expected to retire over the next ten years. Continuing industry and therefore CNSC growth will intensify the competition for the same diminishing pool of expertise. The CNSC is addressing this issue through an increased focus on knowledge management, training and recruitment of both experienced and junior staff.

In 2004, the Professional Institute of the Public Service of Canada (PIPSC) was certified to represent part of the CNSC workforce. The rest of the employees remain non-unionized. The CNSC's management is in negotiations with the PIPSC for the first collective agreement with employees in the bargaining unit.

Consistent with the Integrated Planning and Performance Management initiative discussed previously, the CNSC will strengthen its processes for identifying immediate and longer-term human resource needs. A Human Resources Planning Tool will be implemented in 2006-2007 to assist managers in linking their future business needs to human resource requirements. The action plans which will follow this process will address both short and long-term human resource requirements in support of business plans. The CNSC will explore new strategies for recruiting, including job fairs in international markets.

The CNSC will develop an Informal Conflict Management System (ICMS) adapted to its needs in consultation with bargaining agent representatives and representatives of non-unionized staff. The goal in implementing an ICMS is to prevent disputes from arising wherever possible, and when they do arise, to facilitate their resolution informally, and quickly, while preserving the right of all parties to seek assistance at any time through existing formal dispute resolution mechanisms.

#### **Measures of Performance**

The CNSC recognizes the importance of being able to measure both the effectiveness and the efficiency of its programs and has initiated the development of an integrated performance management framework. Overall effectiveness of regulatory oversight requires **outcome measures** relating to the collective impact of activities conducted by, not only the CNSC, but also by licensees and other stakeholders. As stated in the CNSC's Regulatory Fundamentals Policy (P-299) those persons and organizations that are subject to the NSCA and regulations are directly responsible for managing regulated activities in a manner that protects health, safety, security, and the environment, while respecting Canada's international obligations. The CNSC is responsible for regulatory policies and programs which assure that these responsibilities are properly discharged. Since CNSC is not in control of all results, its measures reflect expectations of sound risk-informed oversight.

Efficiency, on the other hand, will be measured using ongoing monitoring of the CNSC's performance against external and internal **performance standards** relating to individual activities undertaken and their associated outputs.

#### **Outcome Measures**

The outcome measurement framework is derivative of the CNSC Logic Model (see Section IV). Table 1 (Immediate Outcome Measures) presents the list of outcome measures to be published in the 2006-07 Annual Report and Departmental Performance Report. Certain of the CNSC's outcome measures indicate licensee performance within the regulatory framework. These measurements inform firstly, the licensee and the CNSC on the licensee's performance and secondly, the CNSC on the overall effectiveness of the regulatory framework. The outcome measurement framework will undergo significant development in the planning period under the direction of the Integrated Planning and Performance Management project discussed earlier in the document.

**Table 1 – Immediate Outcome Measures (see Logic Model - Section IV)** 

	Immediate Outcome	Outcome Measure	Target 2006-07		
1.	A clear and pragmatic regulatory framework	Percentage of regulations under review / revision in each year (This will ensure a complete rolling review over 5 years)			
		Number of regulations published in Canada 3 Gazette			
		Number of regulatory documents finalized and published	15		
2.	Individuals and organizations that operate safely and conform to safeguards and non-proliferation requirements.	Number of cases of delays in implementing effective regulatory control (licensing action) pursuant to the NSCA or Significant Development Reports subsequent to licence approval.			
3.	High levels of compliance with the regulatory framework	Level of licensee performance ratings assessed by the CNSC on each of the power reactors, as per the CNSC Report Card on Nuclear Power Plant Performance. (The CNSC publishes an annual report on the performance nuclear power plants  http://www.nuclearsafety.gc.ca/eng/safety/RC_01_05.cestablished safety areas. The CNSC measures separa (i) the quality of the existing safety program and (ii) its implementation. The ratings provided are:			
		<ul> <li>A = Exceeds requirements</li> <li>B = Meets requirements</li> <li>C = Below requirements</li> <li>D = Significantly below requirements</li> <li>E = Unacceptable</li> </ul>			
		Levels of performance of non- power reactor licensees a measured by the CNSC through inspections, events, assessments, and evaluations of compliance with licence requirements. Performance ratings are recorded in formal licensing documents.			
		Annual IAEA statement indicating Canada's complinternational standards with respect to safeguards proliferation.			
		100% provision by the CNSC of nuclear transfer notifications and reports pursuant to bilateral Admir Arrangements	nistrative		

	Immediate Outcome	Outcome Measure	Target 2006-07
4.	CNSC cooperates and integrates its activities in national/international nuclear fora	100 % Verification by the CNSC of bilateral nuclear inventory reports, annually.	r material
5.	Stakeholder understanding of the regulatory program	Level of stakeholder confidence in the CNSC's abil regulate the use of nuclear energy and materials.  Level of stakeholder participation in the CNSC's demaking process.  To obtain this information, the CNSC will conduct a of stakeholders every three years and will publish t results.	ecision- a survey

#### **Performance Standards**

Performance standards have been developed for interactions with both external and internal stakeholders. It is important to note that as an independent regulator, it is inappropriate for the relationship between licensees and the CNSC to be considered a service; hence there are no service standards. In line with the *Users Fees Act* (2004) and the Treasury Board *Policy on Service Standards for External Fees*, an initial list of performance standards focusing on the needs and expectations of external stakeholders has been developed in consultation with stakeholders and work continues to progress on implementing such standards. Internal reporting has commenced and the CNSC will report in the 2005/06 Departmental Performance Report – in line with reporting commitments included in the *Users Fees Act*. In addition, internal performance standards have been put in place to monitor and report on the ability of corporate service functions to meet the needs and expectations of internal clients in supporting the delivery of the overall regulatory program. Performance against all standards is monitored on a regular basis to ensure continual progress is made and that all performance standards accurately reflect the operational reality.

 $\label{thm:continuous} \textbf{Table 2-External performance standards to be reported against during the planning period include:}$ 

Activity	Performance standard	Target
Compliance	50014012	
<b>Verification</b> : upon completion of the verification activity, the CNSC wi	11:	
Issue Type I Inspection Report	Within 60 business days	80%
Issue Type II Inspection Report <sup>1</sup>	Within 40 business days	80%
Issue Desktop Review Report	Within 60 business days	90%
18500 Desktop Neview Report	William oo business days	7070
Complete review(s) of Annual Compliance Report(s)	Within 60 business days (of receipt)	80%
Enforcement: upon an Order being made, the CNSC will	•	
Confirm, amend, revoke or replace the Order (see Regulatory Guide – G-273)	Within 10 business days	100%
<b>Licensing</b> – for requests pertaining to an <u>existing</u> licence, the CNSC v	will	
<b>Screen</b> the request for completeness and issue notification that the licensing request is / is not complete	Within 20 business days	90%
<b>Issue</b> a licensing decision when a public hearing is not required (assuming an environmental assessment under the CEAA is not required)	Within 80 business days	80%
<b>Issue</b> a licensing decision when a public hearing is required (assuming an environmental assessment under the CEAA is not required) (see INFO-0715)	Within 160 business days	90%
Publish the Records of Proceedings, including Reasons for	Within 30 business days	90%
Decisions, upon conclusion of the public hearing	-	
Access to Information (ATI)		
Respond to requests under the ATI and Privacy Acts	Within legislated time	90%
F-4	periods as stated in the Acts	
External Communications		1000/
Place Public Hearings Advertisements	Within deadlines stipulated in the regulations	100%
Response time to public inquiries	Same-day acknowledgement of request with response time for completion of request depends on complexity: Low – same day; Medium – within 5 business days; High – within 10 business days	100%
External Reporting to Central Agencies	1	100-
File annual Report on Plans and Priorities (Strategic Plan) and Departmental Performance Report (Annual Report on Performance)	Within required timelines	100%

**Note 1**: In Power Reactors, unless major issues arise, findings from Field Inspections and Control Room Inspections will be reported on a quarterly basis, within 40 business days of end of quarter

# **SECTION III – SUPPLEMENTARY INFORMATION**

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Table 1: Departmental Planned Spending and Full Time Equivalents

(\$ thousands)	Forecast Spending 2005-2006	Planned Spending 2006-2007	Planned Spending 2007-2008	Planned Spending 2008-2009
Nuclear Regulation	66,330	78,671	64,988	64,988
Total Main Estimates	66,330	78,671	64,988	64,988
Adjustments:				
Procurement Savings	(70)	(390)	0	0
Supplementary Estimates:				
Advanced CANDU Reactors	2,928	643	0	0
Pre-regulatory review of New Reactor Designs	0	3,075	6,000	6,000
Carry Forward	2,015	0	0	0
Workload Pressures*	6,025	4,500	22,500	22,500
Severance Pay, Maternity, etc	1,108	0	0	0
Lapse of Frozen Allotment in Main Estimates	(289)	0	0	0
Public Account Lapse	(3,384)	0	0	0
Other:				
TB Vote 15	379	0	0	0
Employee Benefit Plan (EBP)	508	0	0	0
Total Adjustments	9,220	7,828	28,500	28,500
Total Planned Spending**	75,550	86,499	93,488	93,488
Total Planned Spending	75,550	86,499	93,488	93,488
Less: Non-Respendable Revenue ***	52,577	61,618	66,145	66,145
Plus: Cost of services received without charge	8,139	8,011	8,517	8,556
Net cost of Program	31,112	32,892	35,860	35,899
Full Time Equivalents	532	651	684	682

<sup>\*</sup> The above table includes approved resources of \$6,064 (\$ thousands) plus EBP for 2005-2006. For 2006-2007, \$13,676 has been reflected in the Main Estimates. Approval was received in June 2006 for additional resources for Workload Pressures and has been reflected for 2006-2007 through to 2008-2009 as indicated.

- \*\* The planned spending amount for 2005-2006 represents the actual amount printed in the 2005-2006 Public Accounts.
- \*\*\* The increase in the Non-Respendable Revenue has been done in accordance with expected cost recovery revenues associated with increased planned spending.

Table 2: Resources by Program Activity

			Budg	getary						
Program Activity	Operating	Capital	Grants and Other Transfer Payments	Gross	Respendable Revenue	Net	Total Main Estimates	Adjustments (planned spending not in Main Estimates)	Total Planned Spending	
Nuclear Regulation	78,471	0	200	78,671	0	78,671	78,671	7,828	86,499	
Total	78,471	0	200	78,671	0	78,671	78,671	7,828	86,499	

Table 3: Voted and Statutory Items

	2006-2007							
Vote or Statutory Item	Truncated Vote or Statutory Wording	2006-2007 Main Estimates	2005-2006 Main Estimates					
20	Program expenditures	70,321	58,713					
(S)	Contributions to employee benefit plans	8,350	7,617					
	<b>Total Department or Agency</b>	78,671	66,330					

Note: The 2006-2007 main estimates are \$12,341 thousand greater than 2005-2006 main estimates. In 2005-2006, the CNSC received approval from Treasury Board for additional short term monies, specifically, \$6.5 million in 2005-2006 and \$13.7 million in 2006-2007 to address immediate resource shortfalls.

Table 4: Services Received Without Charge

(\$ thousands)	2006-2007
Accommodation provided by Public Works and Government Services Canada	4,570
Contributions covering the employers' share of employees' insurance premiums and expenditures paid by the Treasury Board of Canada Secretariat (excluding revolving funds) Employer's contribution to employees' insured benefits plans and expenditures paid by TBS	3,338
Salary and associated expenditures of legal services provided by the Department of Justice Canada	91
Worker's compensation coverage provided by Social Development Canada	12
Total 2006-2007 Services received without charge	8,011

Table 5: Sources of Respendable and Non-Respendable Revenue

Respendable Revenue

(\$ thousands)	Forecast	Planned	Planned	Planned
	Revenue	Revenue	Revenue	Revenue
	2005-2006	2006-2007	2007-2008	2008-2009
Total Respendable Revenue	0	0	0	0

Non-Respendable Revenue

Non-Respendable Revenue				
(\$ thousands)	Forecast* Revenue 2005-2006	Planned Revenue 2006-2007	Planned Revenue 2007-2008	Planned Revenue 2008-2009
Nuclear Regulation				
Cost Recovery Revenue	52,577	61,618	66,145	66,145
<b>Total Non-Respendable Revenue</b>	52,577	61,618	66,145	66,145
Total Respendable and Non- Respendable Revenue	52,577	61,618	66,145	66,145

<sup>\*</sup> For 2005-2006 this represents the actual Non-Respendable Revenue as reflected within the Public Accounts.

# Table 6: Major Regulatory Initiatives

The preparation of regulations pursuant to the *Nuclear Safety and Control Act* is a key regulatory initiative undertaken by the CNSC. Specific regulations that the CNSC expects to submit for legal examination or final approval over the three-year planning period are:

Regulations	Expected Results
Nuclear Safeguards Regulations	Establish generic safeguards regulations in lieu of existing safeguards licence conditions to facilitate compliance with international safeguards agreements.
Nuclear Security Regulations - Amendment	Ensure that Canada's security requirements are compatible with international standards.
Nuclear Substances and Radiation Devices Regulations - Amendment	Address issues that have been noted by the Parliamentary Standing Joint Committee on Regulations; correct regulatory deficiencies that have come to light since the regulations came into force on May 31, 2000; and, adopt the latest exemption values in IAEA Basic Safety Standards.
Class II Nuclear Facilities and Prescribed Equipment Regulations - Amendment	Address issues that have been noted by the Parliamentary Standing Joint Committee on Regulations; and, correct a number of regulatory deficiencies that have come to light since the regulations came into force on May 31, 2000.
Nuclear Non-proliferation Import and Export Control Regulations - Amendment	Ensure that the export and import provisions and licensing requirements are compatible with developments in international agreements and guidance; address issues raised by the Parliamentary Standing Joint Committee on regulations; and, clarify minor ambiguities.
Canadian Nuclear Safety Commission Rules of Procedure and Canadian Nuclear Safety Commission By-laws	Up-to-date <i>Rules of Procedure</i> and <i>By-laws</i> , to reflect best practices in the area of administrative tribunals.

#### Table 7: Internal Audits and Evaluations

#### Planned Internal Audits and Evaluations (2006-07 to 2008-09)

The CNSC has developed a Risk-informed Internal Audit and Evaluation Work Plan which is shared annually with the Treasury Board of Canada Secretariat. The following table describes scheduled audits and evaluations pertaining to the CNSC's mandate to regulate the use of nuclear energy and materials.

### Audit of the CNSC's regulatory program for uranium mines and mills

Estimated Start Date: 2006 with completion planned for Fiscal Year 2006-2007

**Audit of Domestic Safeguards** 

Estimated Start Date: 2006 with completion planned for Fiscal Year 2006-2007

Audit of Nuclear Substances Regulations, Medical Institutions

Estimated Start and Completion Dates: Fiscal Year 2007-2008

Audit of the Contaminated Lands Evaluation and Assessment Network (CLEAN) initiative

Estimated Start and Completion Dates: Fiscal Year 2007-2008

Audit of Power Reactor Regulations (Power Reactor Regulatory Improvement Program)

Estimated Start and Completion Dates: Fiscal Year 2008-2009

Audit of International Activities – Monitoring and Coordination

Estimated Start and Completion Dates: Fiscal Year 2008-2009

Evaluation of the CNSC's Outreach Program

Estimated Start Date and Completion Dates: Fiscal Year 2006-2007

Evaluation of Research and Support Program Grants and Contributions

Estimated Start and Completion Dates: Fiscal Year 2007-2008

Evaluation of IAEA-CNSC Contribution Agreement for Canadian Safeguards Support

Program

Estimated Start and Completion Dates: Fiscal Year 2008-2009

## SECTION IV – OTHER ITEMS OF INTEREST

### **Organizational Information**

The CNSC consists of two separate organizations as follows:

- (i) a Commission of up to seven members; and
- (ii) a staff of approximately 530 employees.

#### (i) Commission

The Commission, supported by the Secretariat, is a quasi-judicial administrative tribunal. It 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. The Commission also delegates to Designated Officers the authority to render licensing decisions for certain categories of nuclear facilities and activities in accordance with the requirements of the *Nuclear Safety and Control Act* (NSCA) and its associated regulations.

The NSCA provides for the appointment of up to seven Commission members by the Governor in Council (GIC) serving at good behaviour. Part-time 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. This position is currently held by Linda J. Keen.

#### (ii) CNSC Staff

The staff organization consists of a headquarters in Ottawa, site offices located at each of the five nuclear generating stations in Canada, and five regional offices. CNSC staff is permanently located at each nuclear generating station in Canada 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 as well as respond to unusual events involving nuclear substances.

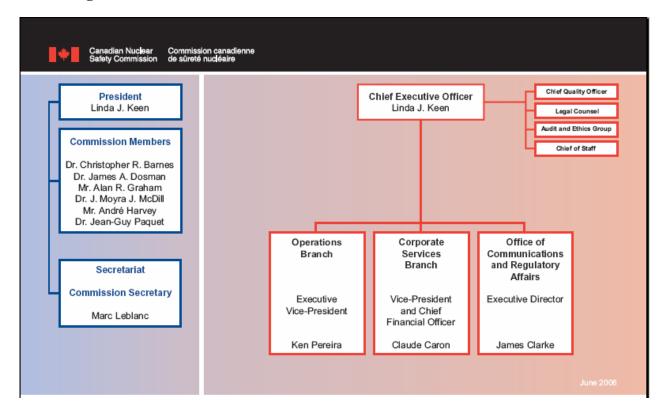
CNSC staff supports the Commission by developing regulatory frameworks and recommending regulatory policies, carrying out licensing, certification, compliance inspections and enforcement actions, coordinating the CNSC's international undertakings, developing CNSC-wide programs in support of regulatory effectiveness, maintaining relations with stakeholders and providing administrative support to the organization.

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 delegated, staff renders licensing decisions.

#### **CNSC Locations**

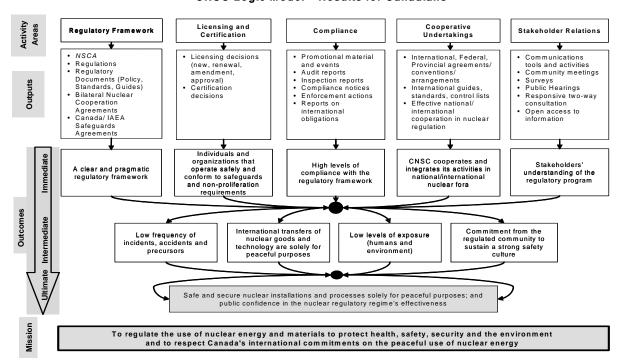


### **CNSC Organization Chart**



### The CNSC Logic Model

The logic model is a tool for planning, for focusing activities and programs, for evaluating the contribution of initiatives to the CNSC outcomes and for illustrating the role of the CNSC as an agency in terms of achieving Results for Canadians.



CNSC Logic Model - Results for Canadians

#### **Information Sources**

#### For further information or to request publications, contact:

Canadian Nuclear Safety Commission Office of Communications and Regulatory Affairs 280 Slater Street, P.O. Box 1046, Station B Ottawa, Ontario K1P 5S9

Telephone: (613) 995-5894 or 1-800-668-5284 (within Canada) Fax: (613) 995-5086

e-mail: info@ccsn-ccsn.gc.ca

Further information is available on the CNSC Web site at <a href="https://www.nuclearsafety.gc.ca">www.nuclearsafety.gc.ca</a>

#### Information on the plans, priorities, and activities of the CNSC may be found in:

Canadian Nuclear Safety Commission, *Annual Report*Canadian Nuclear Safety Commission, *Report on Plans and Priorities* 

## Canadian Nuclear Safety Commission, Departmental Performance Report

### The CNSC administers the following Acts and associated regulations:

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

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