



Canadian Nuclear Safety Commission

Departmental Performance Report

For the period ending March 31, 2009

The Honourable Lisa Raitt, P.C., M.P.
Minister of Natural Resources



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President's Message

It is with great pleasure that I present the Canadian Nuclear Safety Commission (CNSC) 2008–09 Departmental Performance Report (DPR). I am proud of the evolution of our organization and the accomplishments of the staff in my first full year as President of the CNSC.

While recent global economic trends have slowed growth in the worldwide demand for energy over the short term, projections indicate that energy needs will increase substantially here in Canada and globally over the long term. In the 2008 *Speech from the Throne*, the Government of Canada publicly recognized the importance of nuclear energy as a reliable and proven technology for helping to meet people's increasing need for power. The government stated, "[i]n Canada and around the world, energy authorities are investing in nuclear power to meet both energy security and climate change goals."



While continuing to meet our day-to-day regulatory responsibilities, the CNSC has indeed been readying for the possibility of new technologies and for the new demands that will inevitably be placed on us as a regulatory agency. To prepare, we have modernized our regulatory framework and, to help promote efficiency, we have increased our engagement with a wide range of government partners. Our management team has also established clear direction and priorities that are based on our 4 C's: **Commitment** to on-going improvement; **Clarity** of requirements; **Capacity** for action; and **Communications**. This allowed us to better explain to Canadians our roles and responsibilities with respect to nuclear power, medical and industrial uses of nuclear substances, and nuclear security.

Over a demanding fiscal year, we realized many significant accomplishments that are outlined in this DPR. We held 20 public hearings and meetings, listening to Canadians from across the country. The Commission made 40 licensing decisions concerning Canada's nuclear facilities, including 13 related to environmental assessments. Also, as part of our day-to-day work in carrying out regulatory oversight of the more than 3,000 nuclear licences in Canada, we conducted nearly 2,000 inspections and assessed many licence applications, renewals and amendments.

In response to the extended shutdown of the National Research Universal (NRU) reactor in December 2007, which resulted in concerns about the supply of radioactive isotopes used for medical diagnostics and treatment, the CNSC and Atomic Energy of Canada Limited (AECL) jointly commissioned consultancy Talisman International, LLC to conduct an external review of the events leading up to the shutdown to learn lessons that would prevent a similar occurrence in the future. The lessons learned from this event were presented in the Talisman Report. As a result, the CNSC created the Harmonized Plan to bring these and other corporate-wide improvement initiatives under one umbrella. I am pleased to confirm

that the CNSC completed all Talisman Report recommendations related to the NRU during this fiscal year.

Also this year, we reviewed several new nuclear power plant designs to verify their acceptability against Canadian safety criteria. We completed Phase I of the review for AECL's ACR-1000 and initiated reviews of Westinghouse's AP1000 and AREVA's US-EPR. These reviews will provide vendors with the CNSC's regulatory expectations for new nuclear power plants.

Since our regulatory scope stretches from nuclear power reactors, uranium mines and mills, fuel fabrication facilities and waste management to nuclear substances, radiation devices and many other facilities and activities in between, the recruitment and retention of skilled staff remained an important priority this year. We were able to attract highly skilled and qualified people to fill positions in key technical areas. Overall, we met our recruitment objectives.

On the international front, we continued to participate vigorously in the activities of the International Atomic Energy Agency and the Nuclear Energy Agency. These fora provide opportunities to share best practices in nuclear safety and strengthen Canada's commitments to non-proliferation and the peaceful use of nuclear materials.

In 2008–09, three external members were appointed to the CNSC Audit Committee whose role is to ensure that, as President, I have independent, objective advice, guidance and assurance on the adequacy of the CNSC's control and accountability processes. The Committee reinforces the independence of internal audits. Its oversight responsibilities extend to key areas and processes that include values and ethics, risk management, management control, and accountability reporting. This will be a valuable resource for our organization and I look forward to the Committee's oversight and advice.

Finally and most importantly, in my role as the CNSC's President, I can assure Canadians that the use of nuclear materials in nuclear facilities in Canada is safe and secure.

With respect,

Michael Binder
President
The Canadian Nuclear Safety Commission

Section I: Departmental Overview

1.1 Summary Information

Raison d'être and Responsibilities

In 1946, Parliament passed the *Atomic Energy Control Act (AECA)*, creating the Atomic Energy Control Board and giving it the power to make regulations for the development and use of atomic energy.

The *Nuclear Safety and Control Act (NSCA)* came into effect in May 2000 and established the Canadian Nuclear Safety Commission (CNSC) as the Atomic Energy Control Board's successor.

The CNSC is an independent regulatory agency with powers of a quasi-judicial nature that has jurisdiction over all nuclear-related activities and substances in Canada.

Our vision

To be the best nuclear regulator in the world.

Our mission

To regulate the use of nuclear energy and materials so that the health, safety and security of Canadians and the environment are protected, and to respect Canada's international commitments on the peaceful use of nuclear energy.

Our mandate

Under the NSCA, the CNSC's mandate involves four major areas:

- Regulate the development, production and use of nuclear energy in Canada to protect health, safety, security and the environment;
- Regulate the production, possession, use and transport of nuclear substances, and the production, possession and use of prescribed equipment and prescribed information;
- Implement measures respecting international control of the development, production, transport and use of nuclear energy and substances, including measures respecting the non-proliferation of nuclear weapons and nuclear explosive devices; and
- Disseminate objective scientific, technical and regulatory information about the activities of CNSC and about the effects of those activities on the environment and the health and safety of persons, and of the development, production, possession, transport and use of nuclear substances.

The CNSC is also responsible for complying with the Government of Canada's December 2007 *Directive to the Canadian Nuclear Safety Commission Regarding the Health of Canadians*. This Directive requires that the CNSC take into account the health of Canadians (who, for medical purposes, depend on nuclear substances produced by nuclear reactors) when

regulating the production, possession and use of nuclear substances to prevent unreasonable risk to the health of persons.

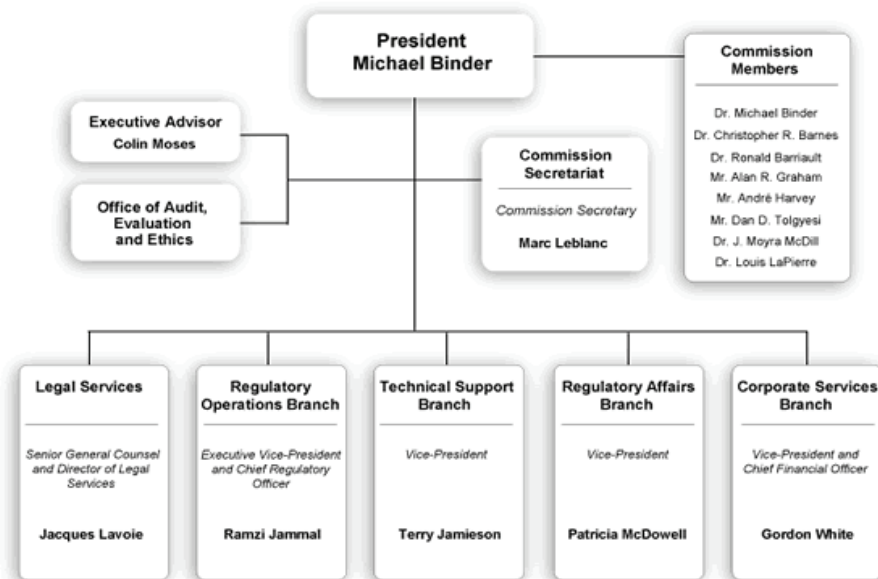
The CNSC also administers the *Nuclear Liability Act* and, as a Responsible Authority under the *Canadian Environmental Assessment Act*, carries out Environmental Assessments (EAs) for nuclear projects in accordance with this legislation.

Furthermore, the CNSC is Canada’s authority with respect to nuclear safeguards as set out in the *Agreement Between the Government of Canada and the International Atomic Energy Agency for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons*.

The Commission has up to seven permanent members, appointed by the Governor in Council and is supported by more than 800 employees. The President of the CNSC is a permanent full-time member, and other members may be appointed to serve full or part-time. Temporary members can also be appointed by the Governor in Council as required. Commission members are chosen based on their credentials and are independent of all political, governmental, special interest group or industry influences.

The Commission makes independent, fair and transparent decisions on the licensing of nuclear-related activities, makes legally binding regulations, and sets regulatory policy direction on matters relating to health, safety, nuclear security and the environment. With respect to licensing matters related to major nuclear facilities, the Commission considers applicant proposals, recommendations of CNSC personnel, and stakeholder views before making its decisions. To promote openness and transparency, the Commission conducts business to the greatest extent possible in public hearings and meetings and, where appropriate, in communities affected by the decision at hand. Commission hearings are conducted in a public forum approximately 10 times per year and decisions are released within 30 business days after the closing of the hearings.

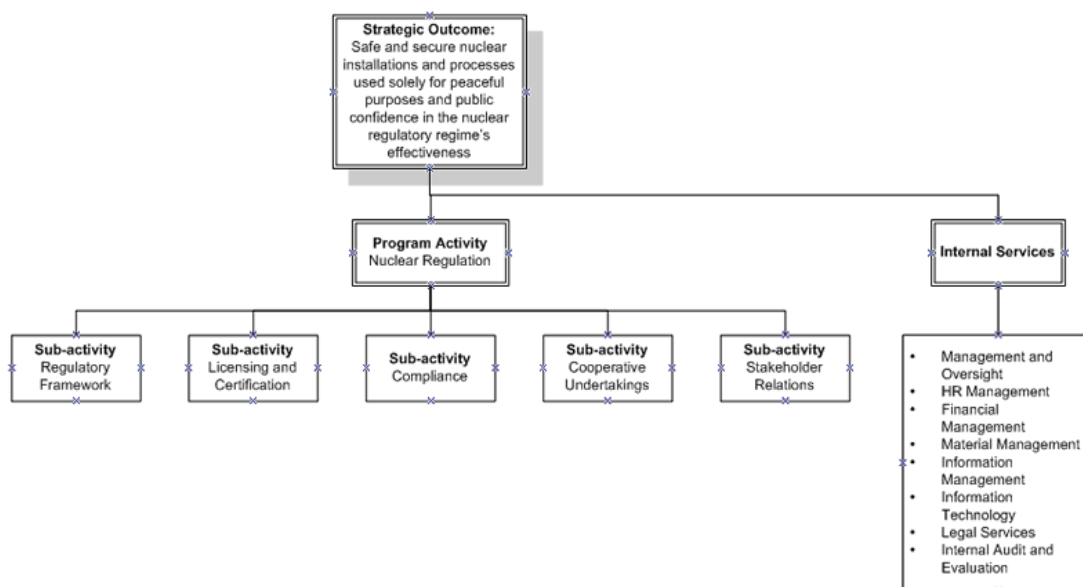
The following organizational chart provides additional details about the CNSC’s structure.



Strategic Outcome(s) and Program Activity Architecture (PAA)

In 2008-09, the CNSC undertook an exercise to change its PAA to better reflect the functions of the organization in terms of Program Activities. However, to remain consistent with information presented in the CNSC's [2008-09 Report on Plans and Priorities \(RPP\)](#), the 2008-09 performance information is presented according to that corresponding PAA.

The following chart illustrates the CNSC's 2008-09 framework of program activities and program sub-activities, which roll up and contribute to the CNSC's single strategic outcome:



See Section II for further details on the CNSC's individual Sub-activities.

1.2 Summary of Performance

2008-09 Financial Resources (\$thousands)

Planned Spending	Total Authorities	Actual Spending
103,427	120,516	118,023

2008-09 Human Resources (FTEs)

Planned	Actual	Difference
817	758	59

Performance Summary

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 sub-divided into **five key programs or sub-activities**.

Section I: Departmental Overview

Strategic Outcome: Safe and secure nuclear installations and processes used solely for peaceful purposes; and public confidence in the nuclear regulatory regime's effectiveness.		
Performance Indicators	Targets	2008-09 Performance
Compliance rating of licensees	B or better ¹	Met The CNSC has produced a 2008 CNSC Staff Integrated Safety Assessment of Canadian Nuclear Power Plants , formerly titled the <i>Annual CNSC Staff Report on the Safety Performance of the Canadian Nuclear Power Industry</i> , and abbreviated to the "NPP Report", in which Nuclear Power Plants were rated. All Plants obtained a Satisfactory or Fully Satisfactory rating, using the new rating system.
# of radiation exposures over the allowable limits	Zero (0) reported cases	Mostly met In December 2008, a licensee reported that an incident occurred in which the improper transport of a radioactive substance may have resulted in two transport workers receiving a dose in excess of the regulatory public dose limit of 1 millisievert (mSv) per year (a millisievert is a unit of radiation dose). CNSC staff verified and confirmed the results of the dose calculations provided by the licensee who received the package. Based on the most conservative assumptions, it was determined that these individuals may have received 1.36 mSv from the event. The workers have been informed of the potential doses they may have received and have been advised that there are no known health effects from exposures at this level. An investigation is ongoing to determine the causes of the incident and what corrective measures can be introduced to ensure that similar incidents do not happen in the future.
Positive IAEA Safeguard Conclusion	Positive Annual Attestation of Safeguards	Met In 2008, the IAEA drew what is called a positive safeguards conclusion for Canada, ensuring through international oversight that all nuclear materials and facilities were used for peaceful purposes, once again granting the country its highest safeguards rating for an IAEA Member State. ²

Performance Summary by Program Activity

(\$ thousands)	Program Sub-activity	2007-08 Actual Spending	2008-09 Main Estimates	2008-09 Planned Spending	2008-09 Total Authorities	2008-09 Actual Spending	Alignment to Government of Canada Outcomes
Program Activity:	Regulatory Framework	12,583	11,560	11,583	13,543	11,743	Social Affairs: A Safe and Secure Canada
Expected Results:	Licensing and Certification	22,670	21,420	34,458	42,279	41,460	
• <i>Low frequency of incidents, accidents and precursors;</i>	Compliance	36,176	33,232	33,355	38,284	37,494	
• <i>International transfers of nuclear materials and technology are solely for peaceful purposes.</i>	Cooperative Undertakings	18,644	16,617	16,655	18,304	17,899	
	Stakeholder Relations	9,772	7,351	7,376	8,106	9,427	
Total		99,845	90,180	103,427	120,516	118,023	

¹ The 2008 Nuclear Power Plant Report has undergone some changes aimed at making it clearer and the underlying assessment more process-based. This new approach better integrates all the findings over the year and introduces an integrated plant rating. This will allow the CNSC to better identify and monitor Nuclear Power Plant performance trends over time.

² Note: IAEA conclusions are based on calendar years and therefore cover a slightly different period than the CNSC's fiscal year.

This table provides a summary of resource levels for the last two years as well as the evolution of the 2008-09 resources. The increase in authorities for 2008-09 is primarily a result of the implementation of phase one of a two-phase revenue spending authority. The CNSC also received funding to address workload growth associated with fee exempt licensees as well as funding to support additional office accommodation and system infrastructure. The variance between authorities and actuals is mainly the result of funding for initiatives released late in the fiscal year; therefore actual expenditures reflect only a partial year's worth of activities and costs.

Contribution of Priorities to Strategic Outcome

With renewed focus on nuclear power, medical and industrial uses and nuclear security, the CNSC has had to adapt its operations to regulate, license, and ensure compliance with requirements in a simple, clear, and timely fashion to protect the health, safety and security of persons, national security and the environment, and to assure that measures required to meet Canada's international obligations are implemented. This need for adaptability required the CNSC to strengthen how it operates in the fiscal year; ensure licensees understand requirements; enhance the CNSC's capacity; and communicate with various stakeholders. Thus, our program and management priorities were recast to fall under the four pillars that support progress towards the CNSC's strategic outcome. In 2008-09, we have clearly communicated these priorities and continue to reinforce with staff and stakeholders, our priorities for **Commitments** to ongoing improvements; **Clarity** of requirements; **Capacity** for action; and **Communications**. These four pillars and their associated priorities supported progress towards the CNSC's strategic outcome.

Commitments to Ongoing Improvements

(Ongoing, Successfully Met)

In addition to conducting core licensing and compliance activities, this pillar includes prioritizing and completing outstanding improvement initiatives, plans, and commitments, particularly those resulting from the *Talisman Report* of 2008. It also includes findings of other audits and evaluations, and ensuring that the health of Canadians and the safety of facilities are central considerations in all licensing and compliance activities through initiatives such as isotope contingency planning and dealing with environmental concerns. (This pillar now covers the *Delivery of an effective regulatory program for existing facilities*, *Strengthening governance*, and *Integrated Improvement Initiatives Program (I3P)* operational and management priorities described in the CNSC's *2008-09 Report on Plans and Priorities*).

Summary of achievements against 2008-09 priorities:

- The CNSC developed a Harmonized Plan of improvement initiatives. This plan responds to lessons learned from NRU shutdown in December 2007 and other relevant audit findings. It harmonizes improvement initiatives under a single umbrella. All NRU-specific actions were closed in 2008-09.
- Worked with interdepartmental partners during the medical isotope shortages in November and December 2008 and led discussions on isotope supply with international regulators.

Clarity of Our Requirements

(Ongoing, Successfully Met)

This pillar includes creating broad awareness among proponents of the CNSC's requirements stemming from the NSCA, licensees and vendors of technology related to the CNSC's requirements, particularly in terms of the initial phases of new builds (for example, design reviews, review guides, joint review panels); revitalizing the CNSC's regulatory framework; clarifying regulatory documents and guidance, including specific attention to guidance for licence applications and EAs; engaging government partners through the [Major Projects Management Office](#); and continuing the implementation of an improved protocol for NRU licence renewal. (This pillar now covers *Effectively manage growth of the regulatory program* and *Implement improvement initiatives* operational priorities described in the CNSC's 2008-09 RPP).

Summary of achievements against 2008-09 priorities:

- The CNSC regulatory framework was strengthened to clarify regulatory requirements, particularly with respect to the environmental assessments, siting and design of new nuclear power plants and uranium mines. New regulatory documents related to the siting and design of new nuclear power plants were published, and staff review guides for the review of licence applications and environmental assessments have been prepared to ensure consistent reviews for all applications.
- The CNSC published nine key regulatory documents (three were published for consultation and six were produced in the final format). A full list of regulatory documents can be found on our Web site: nuclearsafety.gc.ca.
- The [Nuclear Substances and Radiation Devices Regulations](#) and the [Class II Nuclear Facilities and Prescribed Equipment Regulations](#) were amended to correct a number of regulatory deficiencies and to adopt the latest relevant international standards.
- The CNSC engaged government partners through the [Major Projects Management Office](#) to clarify requirements and improve efficiency in regulating new nuclear projects for:
 - Bruce Power's New Nuclear Power Plant Project in Tiverton, Ontario
 - Bruce Power's New Nuclear Power Plant Project in Nanticoke, Ontario
 - Ontario Power Generation's Darlington New Nuclear Power Plant Project in Bowmanville, Ontario
 - Ontario Power Generation's proposed Deep Geologic Repository Project in Tiverton, Ontario
- The CNSC continued to implement an improved protocol that will enable Atomic Energy of Canada Ltd. (AECL) and all Canadians to know clearly and in advance what the CNSC will require to extend the Chalk River National Research Universal (NRU) reactor's operating licence in 2011.
- Provided pre-project vendor design reviews to verify whether, at a high level, the acceptability of a nuclear power plant design would respect Canadian safety principles and criteria. In 2008–09, Phase I (Review Process and Focus Areas) for the ACR-1000 design review was completed. The CNSC also began to review designs being considered for new build projects in Canada—namely, Westinghouse's AP1000 and AREVA US-EPR.
- Completed the Port Hope Area Initiative licensing protocol as lead to licensing.

Capacity for Action*(Ongoing, Successfully Met)*

This pillar includes maintaining and renewing the CNSC's workforce to ensure sufficient knowledge and skills to fulfill our mandate. This means continuing efforts to make the CNSC an employer of choice through renewal, retention and recruitment initiatives; fully implementing the new Revenue Spending Authority (RSA) as the CNSC's primary funding mechanism; strengthening planning and operational processes; and renewing critical infrastructure (for example, information technology and accommodations). (This pillar now covers the *Strengthening capacity* management priority described in CNSC's 2008-09 RPP).

Revenue Spending Authority (RSA)

Prior to 2007-08, the CNSC's operations were funded exclusively through an annual appropriation from Parliament while funds collected from industry pursuant to the *Canadian Nuclear Safety Commission Cost Recovery Fees Regulations* were directed to the Consolidated Revenue Fund with no authority to re-spend. However, effective April 2008-09 (on a limited basis) and as of April 2009, the CNSC is authorized to re-spend fees recovered from specific licensees that relate to the full costs of regulatory activities. Full implementation of the Revenue Spending Authority (RSA) represents the CNSC's primary funding source.

Summary of achievements against 2008-09 priorities:

- Instituted Phase I of its conversion to the RSA, a more sustainable funding regime to facilitate the CNSC growth in response to growth in the nuclear sector.
- Continued its successful recruitment efforts by attracting new employees in a competitive industry. The organization's employee headcount grew by 17.3 percent.
- Undertook research and support to help acquire and maintain critical knowledge on existing and emerging science and advanced technology.
- Leased approximately an additional 6,000 square metres of office space to accommodate the growth in new staff associated with anticipated growth in the nuclear industry.

Communications*(Ongoing, Successfully Met)*

This pillar includes work to strengthen communications with the CNSC's licensees, stakeholders, Aboriginal peoples, international counterparts, other government departments and central agencies. (This pillar now covers the *Enhance external engagement – outreach* operational priority described in the CNSC's 2008-09 RPP.)

Summary of achievements against 2008-09 priorities:

- The CNSC revamped its Web site, nuclearsafety.gc.ca, to provide licensees, stakeholders and the public with convenient access to information.
- Twenty public hearings and meetings were held with 260 intervenors participating. Several of the hearings were held in directly affected communities. The Commission made 40 decisions, including 13 related to environmental assessment and two CNSC orders, concerning Canada's nuclear facilities.
- The CNSC collaborated with Indian and Northern Affairs Canada to facilitate training for CNSC operational staff on the legal duty to consult Aboriginal peoples. Aboriginal consultation plans were drafted for the new nuclear power plants

proposed for the Bruce Power New Nuclear Power Plant Projects in Tiverton, Ontario and Nanticoke, Ontario and the Ontario Power Generation Darlington New Nuclear Power Plant Project in Bowmanville, Ontario.

- Outreach initiatives were held throughout communities such as Port Hope, Bowmanville, Pickering, Kincardine, Point Lepreau, Gentilly/Bécancour and in various communities in Saskatchewan. These activities touched on issues such as performance of nuclear power plants, radiation protection requirements, uranium exploration and mining and environmental assessments.

Risk Analysis

In response to recommendations from the 2006 Management Accountability Framework (MAF) Assessment, the CNSC developed a draft Enterprise Risk Profile to serve as a basis for senior management discussions regarding organizational risk, and to inform organizational planning and, in particular, Management Committee strategic planning. Moving forward, the CNSC's newly established Audit Committee (composed of individuals who are both external and internal to the CNSC) will review the risk profile and provide its assessment of mitigation strategies.

It should be noted that in the past few years, as the CNSC anticipated increases in the number of major nuclear projects advancing in Canada, the organization was at risk of not having sufficient staff: an impediment to the realization of certain projects. To mitigate this risk, the CNSC developed and implemented an aggressive recruitment strategy, and successfully met its recruitment targets.

As part of its ongoing risk management for the organization, the CNSC must recognize the inherent risks in the shift to a re-spendable funding regime (in which the organization recovers fees from licensees), particularly in the event of delayed or cancelled projects, when the CNSC would be required to operate with reduced revenues.

Expenditure Profile – Funding of Operations

The CNSC's workload, and therefore its resource requirements, is largely driven by the demand for licensing and regulatory oversight of Canada's nuclear industry and by Canada's international commitments respecting nuclear safety, security and non-proliferation.

The CNSC has traditionally been funded exclusively through an annual appropriation from Parliament. However, the Government of Canada recovers most costs associated with CNSC's regulatory activities from licensees, in accordance with the [*Canadian Nuclear Safety Commission Cost Recovery Fees Regulations*](#) (2003), and they are credited directly to the Consolidated Revenue Fund. The regulations also provide for some licensees, such as hospitals and universities, to be exempt from paying fees for the public good. In addition, fees are not charged for activities that result from certain CNSC obligations, such as those with respect to Canada's international obligations (including the non-proliferation of nuclear weapons), emergency management, public information programs, updating of the NSCA and associated regulations as appropriate.

In 2007-08 the CNSC received approval from Treasury Board for the phasing-in of a Revenue Spending Authority commencing in 2008-09, with full implementation in 2009-10. In 2008-09, the Revenue Spending Authority was applied to cost recovered activities

involving specifically defined new licence applications, and including applications for new nuclear power plants already received by the CNSC.

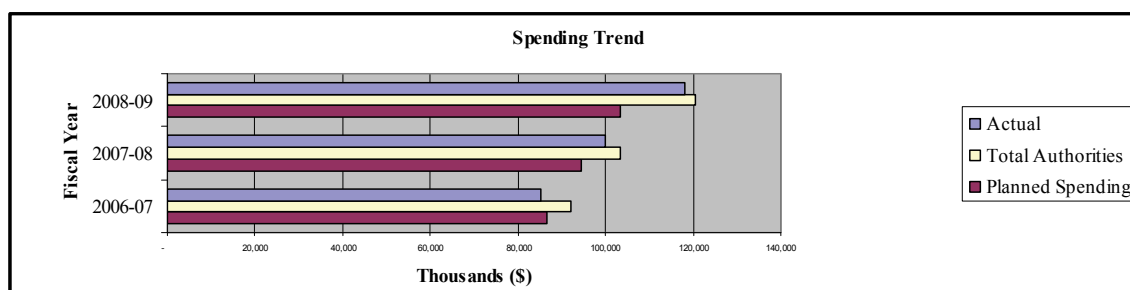
Effective 2009-10, the CNSC's cost recovered activities will no longer be funded through an appropriation but rather will be funded through re-spendable revenues authorized by the Revenue Spending Authority. This will provide a sustainable and timely funding regime to address regulatory oversight workload requirements associated with Canadian nuclear industry growth.

Additional Funding Resources Received for 2008–09

For 2008–09, CNSC's actual expenditures were \$118.0 million. Fees received were \$87.0 million of which \$19.1 million were from CNSC revenue spending authority. In addition to the Main Estimates level of \$90.2 million, the CNSC sources of funds were further increased by a total of \$30.3 million during the course of the year through the approval of the revenue spending authority, Supplementary Estimates and transfers from Treasury Board. The \$30.3 million increase to the CNSC's funding relates mainly to the following initiatives: \$15.5 million for regulatory licensing activities and pre-licensing design reviews of new nuclear power plants and uranium mines under the revenue spending authority; \$3.2 million for operating budget carry forward from 2007-2008; \$3.8 million for repayable funding for priority investments in office accommodation and system infrastructure to support CNSC growth; \$3.7 million to address workload pressures associated with fee-exempt licensees; and \$2.6 million for various compensation items.

The CNSC's cost of operations includes actual expenditures as identified above as well as services received without charge, depreciation and increase to severance and vacation liability for a total cost of operations of \$131.9M.

The following graph shows the financial spending trend for planned and actual spending as well as total authorities over time:



As presented above, the CNSC's overall authority, planned and actual spending has been increasing over the last few fiscal years. This is mainly due to the following approvals: resources provided in the 2006 Budget to meet existing demands and forecasted increases in the regulatory workload associated with industry growth; resources to deal with workload pressures associated with fee-exempt licensees; funding from the Management Reserve for priority investments in office accommodation and systems infrastructure to support CNSC growth; and collective agreement funding.

Voted and Statutory Items (\$thousands)

Vote # or Statutory Item (S)	Truncated Vote or Statutory Wording	2006-07 Actual Spending	2007-08 Actual Spending	2008-09 Main Estimates	2008-09 Actual Spending
15	Operating expenditures	76,841	88,875	79,295	89,971
15	Grants and contributions	239	995	845	1,030
(S)	Contributions to employee benefit plans	8,181	9,975	10,040	11,533
(S)	Expenditures pursuant to paragraph 29.1(1) of the <i>Financial Administration Act</i>	-	-	-	15,488
Total		85,262	99,845	90,180	118,023

Note: numbers may not add due to rounding

This table presents resources that have been voted to the CNSC by Parliament. It should be noted that Parliament approves the voted funding whereas the statutory information is provided for information purposes. Explanation of variance in resource levels can be found in the table "Performance Summary by Program Activity".

Section II: Analysis of Program Activities by Strategic Outcome

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

As previously indicated, the CNSC has a single Strategic Outcome which is in place to protect Canadians, in particular: the protection of health, safety, security, and the environment, as well as respect for Canada's international commitments on the peaceful use of nuclear energy.

To support this Strategic Outcome, the CNSC had a single Program Activity, Nuclear Regulation, for this reporting period.

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 its priorities, the expected results of the Program Activity, and the organization’s strategic outcome.

Performance information will be presented according to this Program Activity and Sub-activity structure.

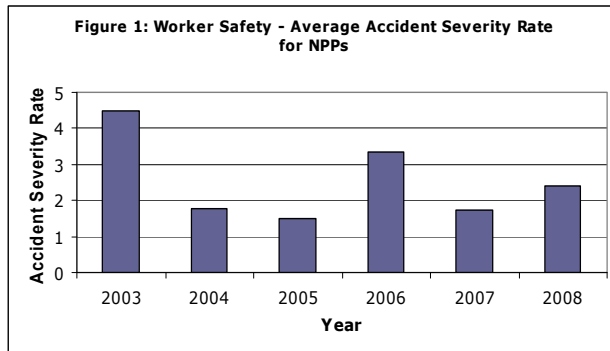
Program Activity: Nuclear Regulation					
2008-09 Financial Resources (\$ thousands)			2008-09 Human Resources (FTEs)		
Planned Spending	Total Authorities	Actual Spending	Planned	Actual	Difference
103,427	120,516	118,023	817	758	59

Expected Results	Performance Indicators	Targets	Performance Status
Low frequency of incidents, accidents and precursors.	# of events above zero on the International Nuclear Event Scale (INES).	Zero events.	Met There were 0 events above zero on the INES in 2008-09.
	Frequency and severity rate of accidents/events.	Zero reported cases.	Mostly met All events have been tracked and monitored. The CNSC monitors Nuclear Power Plants to ensure worker safety standards are met. One key indicator is a plant’s accident severity rate, which measures the total number of days lost due to injury for every 200,000 person hours worked at the site. Figure 1 shows the average accident severity rates for NPPs from 2003 to 2008, demonstrating that NPP occupational health and safety practices are very safe for personnel. The overall trend has decreased from 4.48 in 2003 to 2.39 in 2008.
International transfers of nuclear goods	Nuclear goods and technology exported from Canada under	Positive IAEA conclusion	Met The International Atomic Energy Agency (IAEA) drew a positive safeguards conclusion

and technology are solely for peaceful purposes.	bilateral Nuclear Cooperation Agreements (NCAs) remain in peaceful use.	reached in all recipient countries.	for all recipient countries.
	Number of Administrative Arrangements (AAs) for implementing NCAs negotiated/amended to remain effective.	Targets set on annual work planning basis	Met The NCA with Jordan was signed February 2009; the CNSC negotiated a corresponding AA technical draft with the Jordan Nuclear Regulatory Commission in March 2009 (currently undergoing final technical/legal reviews). The CNSC participated in NCA and AA bilateral consultations held with China in January 2009; progress was made on resolution of uranium transfer issues.

Performance Summary

Each year, CNSC staff review applications for operating licences, including renewals and amendments to assess licensees’ qualifications to safely operate a nuclear generating station. Applications and CNSC staff recommendations are then presented to the Commission Tribunal. If satisfied that the proponent is qualified and will make adequate provisions to protect the health, safety and security of Canadians and the environment, the Commission Tribunal may issue a licence that contains conditions that are appropriate for the facility. CNSC operating licences are for closed-term periods, and are subject to renewal on the basis of compliance with the licence terms.



As a result of their compliance inspections and verification activities, CNSC staff concluded that nuclear power plants in Canada operated safely during 2008:

- There were no serious process failures at the nuclear power plants.
- No workers at any nuclear power plant, or a member of the public, received a radiation dose above the regulatory limits.
- No environmental releases from the plants were above regulatory limits.
- Canada was able to meet its international obligations regarding the peaceful use of nuclear energy.

As a result of the CNSC’s work, the use of nuclear materials and nuclear facilities in Canada continued to be safe and secure this year.

Benefits for Canadians

The benefits of this Program Activity to Canadians are that the Canadian nuclear industry remained safe and secure, with no major nuclear accidents or events occurring. The CNSC is the sole federal authority to regulate nuclear energy and substances in Canada and to protect the health, safety and security of Canadians. The majority of the CNSC’s core functions involve undertaking licensing and compliance activities in a risk-informed fashion

to ensure that licensees meet regulatory requirements set out in their licences. Typically, in a fiscal year, the CNSC will undertake between 1,500 and 2,000 inspections. In 2008-09, the CNSC's regulatory oversight spanned 3,300 licences and 2,000 licensees from all across Canada.

As well, Canada once again ensured that international transfers of nuclear goods and technology were solely for peaceful purposes.

The CNSC licenses the NRU reactor as well as the hospitals and clinics across Canada that use medical isotopes. The shutdown in December 2007 and subsequent legislation passed by Parliament underscores the continuing importance of a clear and pragmatic regulatory framework for effective and efficient assessment and licensing decision-making to ensure the safety of Canadians and protection of the environment.

Program Analysis

The CNSC demonstrated effective nuclear regulation this year, and made progress towards the achievement of expected results as illustrated by positive performance in all five of the supporting Sub-Activities: Regulatory Framework, Licensing and Certification, Compliance, Cooperative Undertakings, and Stakeholder Relations.

As part of the CNSC's day-to-day work in carrying out regulatory oversight of nuclear licences in Canada, the organization conducted nearly 2000 inspections and assessed many licence applications, renewals and amendments.

Also this year, the CNSC reviewed several new nuclear power plant designs to verify their acceptability against Canadian safety criteria. The CNSC completed Phase I of the review for AECL's ACR-1000 and initiated reviews of Westinghouse's AP1000 and Areva's US-EPR. These reviews will provide vendors with the CNSC's regulatory expectations for new nuclear power plants. While continuing to meet our day-to-day regulatory responsibilities, the CNSC has indeed been readying for the possibility of new technologies and for the new demands that will inevitably be placed on us as a regulatory agency. To prepare, the CNSC has modernized its regulatory framework and, to help promote efficiency and effectiveness, has increased its engagement with a wide range of government partners.

On the international front, the CNSC continued to participate vigorously in the activities of the International Atomic Energy Agency and the Nuclear Energy Agency. These fora provide opportunities to share best practices in nuclear safety and strengthen Canada's commitments to non-proliferation and the peaceful use of nuclear materials.

Because of a renewed focus on nuclear power, medical and industrial uses of nuclear substances, and nuclear security, the CNSC had to adapt its operations and focus its efforts on priority areas in 2008-09. Throughout the year, we worked to clarify our role and communicate what we do for Canadians.

Further details can be found in the following performance tables.

Lessons Learned

Although the CNSC had positive performance results this year, the organization has been focused on a number of opportunities for improvement in recent years. In response to the extended shutdown of the National Research Universal (NRU) reactor in December 2007, which resulted in concerns about the supply of radioactive isotopes used for medical diagnostics and treatment, the CNSC and AECL jointly commissioned an external review (the Talisman Report) of the events leading up to the shutdown to learn lessons that would prevent a similar occurrence in the future. As a result, the CNSC created the Harmonized Plan to bring these and other corporate-wide improvement initiatives under one umbrella.

The CNSC completed all NRU-specific actions from the Talisman Report recommendations during this fiscal year.

As well, the CNSC has been preparing for an Integrated Regulatory Review Service (IRRS) mission – a voluntary peer review by International Atomic Energy Agency and foreign regulatory experts to compare the CNSC’s regulatory practices with international standards and equivalent good-practices in other parts of the world. Results of this review and other internal assessments are expected to inform additional improvements for the CNSC to pursue in the next fiscal year.

Analysis by Program Sub-activity

The following analysis presents the results of the five Program Sub-activities that fall under the Nuclear Regulation Program Activity. These Sub-activities represent key areas for achieving the priorities identified in Section I.

Program Sub activity: Regulatory Framework					
2008-09 Financial Resources (\$ thousands)			2008-09 Human Resources (FTEs)		
Planned Spending	Total Authorities	Actual Spending	Planned	Actual	Difference
11,583	13,543	11,743	60	44	16

Expected Results	Performance Indicators	Targets	Performance Status
A clear and pragmatic regulatory framework.	Satisfaction levels of licensees across key performance areas.	Increasing trend in survey results over a 3 year period, stable thereafter.	N/A Due to Government of Canada directive not to proceed with any polling activities.
	Number of legal challenges to the regulatory framework.	Minimal/declining number of challenges and/or high success rate of defending challenges.	Met There were no legal challenges to the regulatory framework in 2008-09.

Performance Summary

Progress continued towards maintaining a clear and pragmatic regulatory framework. Although polling activities to assess licensee satisfaction levels were not conducted, the CNSC showed positive results in that there were no legal challenges to the regulatory framework.

Successes this year included the approval of key regulatory documents for public consultation and publication, the purpose of which is to provide a clear, transparent and risk-informed set of requirements and direction or guidance in meeting the requirements of the NSCA and other associated legislation. The CNSC also provided support for new nuclear projects and refurbishment work.

The *Nuclear Substances and Radiation Devices Regulations* and the *Class II Nuclear Facilities and Prescribed Equipment Regulations* were amended to correct a number of regulatory deficiencies and to adopt the latest relevant international standards.

The CNSC is continuing ongoing efforts to update its regulatory framework for nuclear power plants to draw upon international standards and best practices where provinces choose to move towards nuclear power. The CNSC published [*Design of New Nuclear Power Plants*](#) and [*Site Evaluation for New Nuclear Power Plants*](#). These regulatory documents complement [*Safety Analysis for Nuclear Power Plants*](#), which was released in late 2008-09.

The CNSC engaged government partners through the [Major Projects Management Office \(MPMO\)](#) to ensure clarity of requirements and efficiency in regulating new nuclear projects for:

- Bruce Power's New Nuclear Power Plant Project in Tiverton, Ontario
- Bruce Power's New Nuclear Power Plant Project in Nanticoke, Ontario
- Ontario Power Generation's Darlington New Nuclear Power Plant Project in Bowmanville, Ontario
- Deep Geologic Repository Project in Tiverton, Ontario

Benefits for Canadians

Under this Sub-activity, the CNSC maintains an evergreen assessment of the *Nuclear Safety and Control Act* (NSCA), to ensure that the Act continues to provide the CNSC with the regulatory powers and authorities needed to protect Canadians' health, safety, environment and security, and to enforce compliance with Canada's international obligations regarding the peaceful use of nuclear energy, including the administrative powers to do so as effectively and efficiently as possible.

Program Analysis

One of the guiding principles of the CNSC is to adopt or adapt existing internationally recognized standards where possible and to limit the number of specific Canadian regulatory requirements or approaches to instances when they are warranted by Canadian circumstances and when they result over time in the greatest overall benefit to Canadians. As part of this Sub-activity, the CNSC is benchmarking the NSCA and its Regulatory

Framework against those of other federal regulators, such as the United States Nuclear Regulatory Commission, and against the guidance issued by the International Atomic Energy Agency in support of improving and maintaining a clear and pragmatic Canadian framework.

Lessons Learned

For the licensing of new nuclear power plants, the CNSC has developed a process-based approach of Assessment Plans and Staff Review Guides integrated with a Project Management framework to guide and support assessments of licence applications and Environmental Assessments (EAs). This leading edge regulatory practice ensures that appropriate and consistent reviews are performed for all applications. The CNSC has identified areas where improved guidance and direction early in the licensing process results in timeline efficiencies later in the process.

Program Sub activity: Licensing and Certification					
2008-09 Financial Resources (\$ thousands)			2008-09 Human Resources (FTEs)		
Planned Spending	Total Authorities	Actual Spending	Planned	Actual	Difference
34,458	42,279	41,460	286	218	68

Expected Results	Performance Indicators	Targets	Performance Status
Individuals and organizations that operate safely and conform to safeguards and non-proliferation requirements.	Number of licences issued as per service standards.	Per external service standards.	<p>Met</p> <p>For details on the CNSC's licensing activities, see the External Performance Standards table in Section III: Supplementary Information.</p> <p>In addition to the results provided in the External Performance Standards table, approximately 820 applications for export or import of nuclear and nuclear-related dual-use goods and technology were processed and assessed. Approximately 210 applications for export of risk-significant radioactive sources (RSRS) were processed and assessed. All bilateral Requests for Consents and prior notifications required pursuant to regulatory controls on exports and imports of RSRS were administered consistent with service standards and bilateral commitments.</p>

Performance Summary

In support of the expected result of individuals and organizations that operate safely and conform to safeguards and non-proliferation requirements, the CNSC assessed applications for, and issued and amended a number of licences and certificates pertaining to everything from uranium mines and mills, to transport licences, to import or export of nuclear material.

In 2008-09, CNSC issued new certifications to:

- 60 nuclear power plant personnel;
- 2 non-power reactor personnel;
- 170 Exposure Device Operators; and
- renewed 62 certifications for nuclear power plant personnel.

Additionally, pre-project vendor design reviews were provided:

- Phase I for the ACR-1000 design review was completed; and
- The CNSC began to review Westinghouse AP1000 and AREVA US-EPR designs.

In 2008, the CNSC identified ways to streamline and further improve its Environmental Assessment (EA) and licensing process for screening EAs. The CNSC posted a draft document titled *Process Improvement Initiatives for Screening Environmental Assessments at the CNSC* on its Web site for public review and comment. The feedback was considered before a revised draft was presented to the Commission which endorsed the improved process in August 2008. Additional information on EAs can be found on at nuclearsafety.gc.ca.

As well, the CNSC has been working with the Canadian Environmental Assessment Agency to coordinate the EA process for new major projects that may be assessed by a Joint Review Panel (JRP).

Benefits for Canadians

This Sub-activity benefits Canadians by ensuring that applicants for licenses and certificates fully meet the requirements of the NSCA and related legislation before they are permitted to engage in a given activity with a nuclear component. In this way, this Sub-activity is central to meeting the CNSC's mandate of protecting the health, safety, and security of Canadians and the environment, and in respecting Canada's international commitments to the peaceful use of nuclear energy.

Program Analysis

While the CNSC must maintain a strong, competent and independent ability to assess applications and make determinations about the qualifications of applicants and the quality of their programs, the organization is improving alignment to federal roles as a participant in the Government of Canada's [Major Projects Management Office \(MPMO\)](#). The CNSC fully supports the MPMO's objectives and goals of improving the federal regulatory system for major natural resource projects. The CNSC will continue to work with its MPMO partners to coordinate regulatory activities related to major nuclear projects, and examine administrative, regulatory and legislative options to advance the principles of the MPMO.

Lessons Learned

In response to the extended shutdown of the National Research Universal (NRU) reactor in December 2007, which resulted in concerns about the supply of radioactive isotopes used for medical diagnostics and treatment, the CNSC and AECL jointly commissioned an external review, by an independent review team from consultancy Talisman International, LLC, of the events leading up to the shutdown to learn lessons that would prevent a similar

occurrence in the future. The resulting [lessons learned report](#) outlined 15 summary and 66 detailed recommendations (41 applicable to the CNSC), which both the CNSC and AECL fully accepted. The CNSC immediately initiated corrective actions.

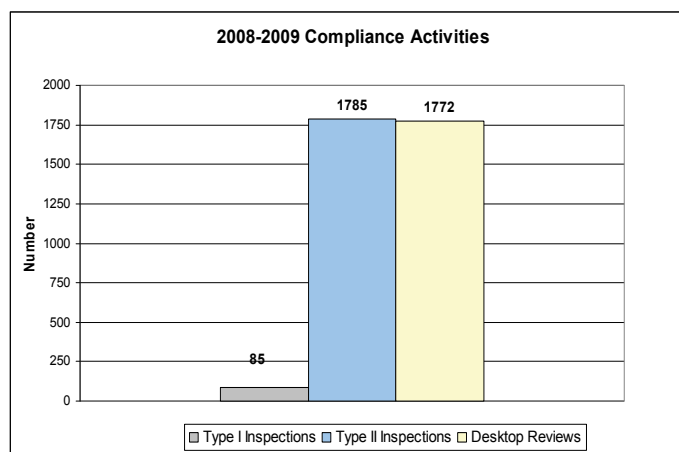
As of March 31, 2009, all NRU-specific actions had been closed, along with 28 broader action items. Other progress includes the signing of a new protocol for communication between the CNSC and AECL, a problem-resolution process, and the development and implementation of a system to track NRU regulatory commitments. The remaining action items (13) have been incorporated as part of the CNSC's Harmonized Plan for Improvement Initiatives. Work on the Harmonized Plan is progressing and focusing primarily on clarifying and strengthening the CNSC's broader licensing, inspection and enforcement processes.

Program Sub activity: Compliance					
2008-09 Financial Resources (\$ thousands)			2008-09 Human Resources (FTEs)		
Planned Spending	Total Authorities	Actual Spending	Planned	Actual	Difference
33,355	38,284	37,494	310	296	14

Expected Results	Performance Indicators	Targets	Performance Status
A high level of compliance with the regulatory framework.	Degree/level of reconciliation between Canada and other countries of nuclear inventories subject to bilateral NCAs.	Targets set on an annual work planning basis	Met All nuclear transfer notifications and reports required to be issued by CNSC as a result of pending nuclear export and import authorizations and associated bilateral compliance procedures pursuant to NCAs and corresponding Administrative Arrangements (AAs) have been made. All Annual Inventory Reports (AIRs) for 2008 required to be submitted by CNSC pursuant to requirements of bilateral NCAs and associated AAs have been issued; all AIRs received by CNSC to-date in current fiscal year have been reviewed, and issues requiring consultation with foreign counterparts identified for action by staff.
	Compliance inspections closed as per performance standards.	Per external performance standards.	Mostly met For details, see the External Performance Standards table in Section III: Supplementary Information.
	Adherence with Sealed Source Tracking requirements.	All on time, 100% match with Registry.	Met Sealed Sources are being tracked. As of the end of 2008-2009, there were 1,132 transactions, 2,038 sealed sources involved, 106 licences involved.
	Nuclear material 'ledger' reconciliations between CNSC and licensees.	Identical inventory records or reconciliation of nuclear material.	Met Reconciliation is complete.

Performance Summary

The CNSC was successful in confirming a high level of compliance with the regulatory framework this year. A significant number of compliance inspections were carried out, the CNSC made further progress in developing its Sealed Source Tracking System, and the CNSC fulfilled its responsibilities related to bilateral Nuclear Cooperation Agreements.



Benefits for Canadians

The benefit of this Sub-activity to Canadians is that the CNSC can assure them that licensees are operating in compliance with their licences and underlying legislation and bilateral Nuclear Cooperation Agreements (and thus that the health, safety, and security of Canadians and the environment are being protected, and that Canada is respecting its international commitments on the peaceful use of nuclear energy and non-proliferation).

National Sealed Source Registry

In January 2006, Canada became the first G8 country to develop a national registry of sealed sources and to implement a Web-based tracking system for high risk sealed sources. The National Sealed Source Registry (NSSR) was developed and is maintained by the CNSC and contains information on sealed sources under licence in Canada. The Sealed Source Tracking System (SSTS) is the module of the NSSR used to record the movement of Category 1 and 2 sources in Canada. This is a secure web-based portal available to registered licensees. An annual report on the information contained in the registry is published on the CNSC's public Web site. In 2008-09, there were over 21,000 sources in all categories registered in the NSSR and over 43,000 transactions to the registry.

Program Analysis

The number of reviews of mandatory licensee reports does not generally vary year to year. Over the past several years, a conscious decision has been made to shift limited resources on a risk-informed priority basis; whereby Type I inspections (more resource-intensive, complex program-based, on-site reviews) have been replaced with Type II inspections (point-in-time, program output-based reviews) where merited and justified by licensee performance.

In general, the high rates of industry compliance with the regulatory framework that the CNSC has observed can be directly and positively attributed to the CNSC's visible, focused, flexible and varied verification program.

Lessons Learned

The CNSC continually engages in discussions with international nuclear regulators to exchange lessons learned from their compliance programs and develop best practices. Compliance programs from other nuclear regulators (such as the United States Nuclear Regulatory Commission) are also regularly considered to gauge potential effectiveness. Nationally, the CNSC enters into arrangements with provincial authorities to effectively facilitate cooperation between regulators. A good example of this collaboration is the coordinated approach to the regulation of uranium mines and mills in Saskatchewan, whereby through a Memorandum of Understanding, federal and provincial authorities work together to minimize duplication while ensuring that all regulatory requirements are verified.

Program Sub activity: Cooperative Undertakings					
2008-09 Financial Resources (\$ thousands)			2008-09 Human Resources (FTEs)		
Planned Spending	Total Authorities	Actual Spending	Planned	Actual	Difference
16,655	18,304	17,899	98	120	(22)

Expected Results	Performance Indicators	Targets	Performance Status
CNSC cooperates and integrates its activities in national and international fora.	Number of international and domestic initiatives for strengthening the nuclear non-proliferation regime that are supported by CNSC technical and policy expertise.	Targets set on an annual work planning basis	<p>Met</p> <p>CNSC staff continued participation in the IAEA Standing Advisory Group on Safeguards Implementation as Chair of the Group, and in the current fiscal year there was one working group meeting and two plenary meetings. Bilateral Administrative Arrangements (AAs) for risk-significant radioactive sources (RSRS) have been signed between CNSC and counterparts in Mexico and Columbia; RSRS AAs with Brazil and Argentina anticipated to be signed Q1 of FY 2009-10; the CNSC negotiated a RSRS AA with Italy in March 2009 (currently undergoing final technical and legal review). The CNSC also provided further support as part of Canadian delegations in Nuclear Supplies Group meetings on controls of transfer of sensitive technology.</p> <p>The CNSC finalized preparations for a protocol on cooperation regarding new build with the French regulator (protocol subsequently signed in April 2009). The CNSC continues to work on new or renewed cooperation arrangements with a variety of foreign regulatory partners, and is expecting to sign new or updated arrangements with the United States Nuclear Regulatory Commission in June 2009.</p>

Performance Summary

The CNSC has continued to be active in cooperating and integrating its activities in national and international fora, and this year's performance indicates that the CNSC has continued to effectively establish and maintain collaborations with other organizations within Canada and abroad to regulate the use of nuclear energy and materials.

In 2008, the IAEA once again concluded that all nuclear material in Canada remained in peaceful activities.

Regulatory cooperation arrangements

The CNSC maintains nuclear regulatory cooperation arrangements with over a dozen foreign regulators, and strives to develop additional protocols to leverage regulatory experience and ensure best practices are available and used for the safety and security of Canadians. Some examples of such arrangements are:

- An arrangement with Argentina's Nuclear Regulatory Authority (ARN) for technical cooperation and exchange of information in nuclear regulatory matters.
- An arrangement with the Republic of Korea's Atomic Energy Bureau of the Ministry of Science and Technology was made with respect to technical regulatory matters involving CANDU nuclear power plants.

Memorandum of Understanding

- In 2008–09, the CNSC continued work on new or renewed bilateral arrangements with nuclear regulatory agencies in Finland, France, Romania and the USA to facilitate the exchange of regulatory information between the CNSC and foreign regulators.

Benefits for Canadians

This program benefits Canadians in that the CNSC works with other national and international organizations to ensure that nuclear energy and materials are regulated effectively, which ultimately helps to protect the health, safety, and security of Canadians and their environment. Through its cooperative undertakings, the CNSC also has regular access to best practices and lessons learned from other organizations, which in turn help the CNSC to maximize the delivery of its mandate. The CNSC is also able to share its own best practices and lessons learned with its partner organizations.

Program Analysis

As a result of the effective implementation of Canada's obligations, no nuclear or nuclear-related exports from Canada have been used for non-peaceful purposes and the IAEA has been able to conclude, on an annual basis, that all declared nuclear material in Canada is used for peaceful purposes and that there are no undeclared nuclear materials or activities in Canada. These assurances substantiate Government objectives to be a world leader in the nuclear non-proliferation field by making and complying with international commitments and by promoting the peaceful use of nuclear energy worldwide.

Lessons Learned

To further improve the development of domestic and international arrangements, the CNSC is strengthening the consultation process. The CNSC is also enhancing alignment with both the *Cabinet Directive on Streamlining Regulation* and the associated *Guidelines on International Regulatory Obligations and Cooperation*.

The CNSC participated in the IAEA International Generic Ageing Lessons Learned this year to address ageing management reviews and condition assessments for nuclear power plant structures, systems and components during licence renewal for life extension.

The CNSC also participates with foreign regulatory agencies and the nuclear industry in IMPACT, an international research project on external hazards to nuclear power plants managed by a research organization of Finland's government.

Safeguard Research

The Canadian Safeguards Support Program (CSSP), also managed and funded by the CNSC, helps the IAEA improve its safeguards regime, which assists domestic and international nuclear non-proliferation objectives. The CSSP provides services, products and advice, and oversees research in a range of specialized areas that help Canada and other countries fulfill their international commitments on the peaceful use of nuclear materials.

In 2008–09, examples of CSSP research areas included:

- Designing a device that uses laser-induced breakdown spectroscopy (LIBS) to identify nuclear materials in the field without the need for sending samples to a lab.
- Developing a Digital Cerenkov Viewing Device to help inspectors look for any evidence of spent fuel inventory tampering.
- Providing the IAEA with updated versions of software that allow the analysis of large amounts of data in new ways.
- Providing advice to the IAEA on emerging technology and advanced techniques for satellite imagery processing and analysis relevant for safeguards verification. Designing a new data acquisition module that will allow remote monitoring of transfers of irradiated fuel. This will avoid the need for the costly continuous presence of IAEA inspectors.

The CNSC Participated in International Fora to Develop, Share and Enhance Regulatory Practices

The CNSC works internationally with like-minded organizations to advance common goals. Through its involvement in international meetings, working groups and special projects, the CNSC develops, shares and updates its policies, regulatory framework and technical knowledge. During 2008–09, the CNSC participated in many key meetings and initiatives:

- IAEA activities—In 2008–09, the CNSC helped Canada play a leadership role in the IAEA’s scientific and technical activities. The organization’s participation allowed the CNSC to promote and influence the development of nuclear safety and security standards and share and gain valuable regulatory knowledge in all areas of its mandate, including seismic safety, human and organizational factors, the safety and security of radioactive sources, and safeguards.
- 52nd Regular Session of the IAEA General Conference—The CNSC provided support to the Department of Foreign Affairs and International Trade (DFAIT) to develop positions and statements that further Canada’s nuclear safety, security and safeguards interests.
- Nuclear Energy Agency Activities—The CNSC maintained active participation in the activities of the Organisation for Economic Co-operation and Development’s Nuclear Energy Agency, a global focal point for in-depth discussion on nuclear issues. In 2008–09, the Agency created the Working Group on the Regulation of New Reactors. The organization’s active participation allowed the CNSC to remain up to date on international developments and key issues in the construction of new nuclear reactors.
- Nuclear Suppliers Group—The CNSC provided technical support to the Canadian delegation to meetings of the Group, a multilateral body that establishes international guidelines on the export of nuclear and nuclear-related dual use goods and technology. (Dual use goods and technology are those that can be used for peaceful or non-peaceful purposes.)
- Preparatory Committee Meeting of the Nuclear Non-Proliferation Treaty—As part of the Canadian delegation, the CNSC provided technical support to the Canadian delegation for a meeting on matters of non-proliferation, safeguards and export control measures.
- G8 Nuclear Safety and Security Group (NSSG)—When Japan held the presidency in 2008, three G8 NSSG meetings were held in Tokyo and the CNSC participated in conjunction with DFAIT. After Italy assumed the G8 NSSG presidency in 2009, the first of three meetings was held in Rome; the CNSC and DFAIT attended all three. Canada will take on the G8 NSSG presidency in 2010, enabling the CNSC to further assume leadership in promoting the safe, secure and peaceful use of nuclear energy.
- The CNSC hosted visits from nuclear regulators from around the world, including Mongolia, the Netherlands, the Republic of Korea and South Africa. The visits were held to share best practices, improve the effectiveness of regulatory oversight and gain regulatory knowledge.
- Multinational Design Evaluation Programme—The Programme is a dynamic initiative in which regulators from various countries evaluating new reactor designs pool their knowledge and experience with a view to creating an internationally applicable set of codes, standards and safety goals for new nuclear power plants. Participation is an efficient way for the CNSC to gain valuable regulatory knowledge about nuclear power plant designs under consideration in Canada.

Contributing to international standards

The CNSC participates in international standards committees that directly affect nuclear and conventional health and safety.

The CNSC was solicited for comment on several Safety Requirement and Safety Guide documents under development at the IAEA. The IAEA requests feedback on these documents through the CNSC representative on the Safety Standard Committees, as well as through member states. Where necessary, CNSC staff provided comments and feedback on the Safety Requirements and Guides. For example, CNSC staff participated in numerous workshops and technical meetings related to the revision of the Basic Safety Standards. This process is ongoing but a significant amount of work was completed in 2008. The CNSC was also involved in several workshops related to the development of International Commission on Radiological Protection *Publication 103: Recommendations of the ICRP*,

Program Sub activity: Stakeholder Relations					
2008-09 Financial Resources (\$ thousands)			2008-09 Human Resources (FTEs)		
Planned Spending	Total Authorities	Actual Spending	Planned	Actual	Difference
7,376	8,106	9,427	63	80	(17)

Expected Results	Performance Indicators	Targets	Performance Status
Increased stakeholder understanding of the regulatory program.	Timeliness of responses to public enquiries.	100% (low complexity - same day, medium complexity - 5 business days, high complexity - 10 business days).	Mostly met 260 interveners attended CNSC public hearings this year. The CNSC responded to 125 media calls and approximately 1,250 public inquiry calls and emails. As a result of categorizing types of public inquiries, the CNSC was able to identify areas of its Web site where information was incomplete or lacking and, subsequently, to develop material that will assist the public.
	Increased stakeholder understanding of CNSC's regulatory mandate.	Increasing trend in survey results over a 3-year period, stable thereafter.	N/A Due to Government of Canada directive not to proceed with any polling activities.
	Increased stakeholder confidence in CNSC's ability to regulate.	Increasing trend in survey results over a 3 year period, stable thereafter.	N/A Due to Government of Canada directive not to proceed with any polling activities.

Performance Summary

The CNSC had success in reorganizing its Web site based on enquiries made by the public. The CNSC also continued its work in the area of Aboriginal consultation, and undertook a variety of outreach initiatives with communities, as well as academic, industrial, and international organizations.

The CNSC remains committed to helping licensees understand and comply with its regulatory regime. Throughout 2008-09, the CNSC convened two regional meetings with approximately 80 industrial radiography licensees to clarify regulatory requirements, respond to their concerns and present new regulatory initiatives. CNSC staff also conducted outreach with licensees in Victoria, Vancouver and Winnipeg, continuing a program of cross-country information presentations that were initiated in early 2007 and will continue in 2009-10.

The CNSC took steps to strengthen Aboriginal consultation. Since signing the Memorandum of Understanding for the *Cabinet Directive on Improving the Performance of the Regulatory System for Major Resource Projects* in August of 2007, the CNSC has been a full participant in the development of the Government of Canada's approach to Aboriginal

consultation for major resource projects. This approach, like all CNSC interactions with Aboriginal communities, is guided by the Interim Guidelines for Federal Officials to Fulfill the Legal Duty to Consult, issued in February 2008. The CNSC has been reviewing its policies and procedures as well as its regulatory regime and other guidance to proponents, to help the CNSC in meeting the legal obligations for Aboriginal consultation on CNSC-regulated projects.

Benefits for Canadians

This Sub-activity aims to ensure that the CNSC's non-licensee and non-governmental related organizations are informed on the activities, policies, programs and the role of the CNSC, and that they have an opportunity to ask questions and express their views. This Sub-activity also aims to provide objective scientific and technical information on the areas that the CNSC regulates, and to engage the CNSC's stakeholders to solicit their input on regulatory issues and enhance the quality of the CNSC's work and decisions. Licensees and government stakeholders (domestic and international) are also targeted to ensure they are appropriately informed about, and/or consulted on, the activities, policies, programs and the role of the CNSC.

Program Analysis

The CNSC has observed that there is significant interest in communities where major nuclear facilities exist or are planned (host communities), increasing the need for more stakeholder engagement. Canada is also home to aging nuclear facilities whose host communities have a significantly higher interest in nuclear safety and related issues, leading to the need for more frequent stakeholder engagement in these locales (e.g., Chalk River, Port Hope). These trends are expected to continue to generate increased levels of stakeholder engagement, outreach and supporting communications activities.

Ongoing improvements to the CNSC's external Web site to facilitate access to information and participation in public consultation are anticipated along with the increasing interest on the part of stakeholders.

Lessons Learned

The CNSC has identified that it needs to implement a more consistent and comprehensive approach to track and analyze all stakeholder engagement activities. Benchmark/baseline data on public perceptions of the CNSC, the regulation of the nuclear industry in Canada and the safety of nuclear power plants and other facilities is limited. Although plans to conduct such public opinion research were cancelled following the federal budget, ongoing polling of this nature would identify changes in public perceptions and provide insight into the effectiveness of communications and engagement activities.

With an increase of uranium mining and nuclear power plant new-build activity, and further awareness of the duty to consult precedents by Aboriginal groups, consultation demands have been increasing steadily. Requests for meetings by numerous Aboriginal organizations are increasing as has the number of interventions to the Commission regarding Aboriginal issues. These increasing consultations will require the CNSC to build capacity to address these pressures.

Section III: Supplementary Information

3.1 Financial Highlights

(\$ thousands)

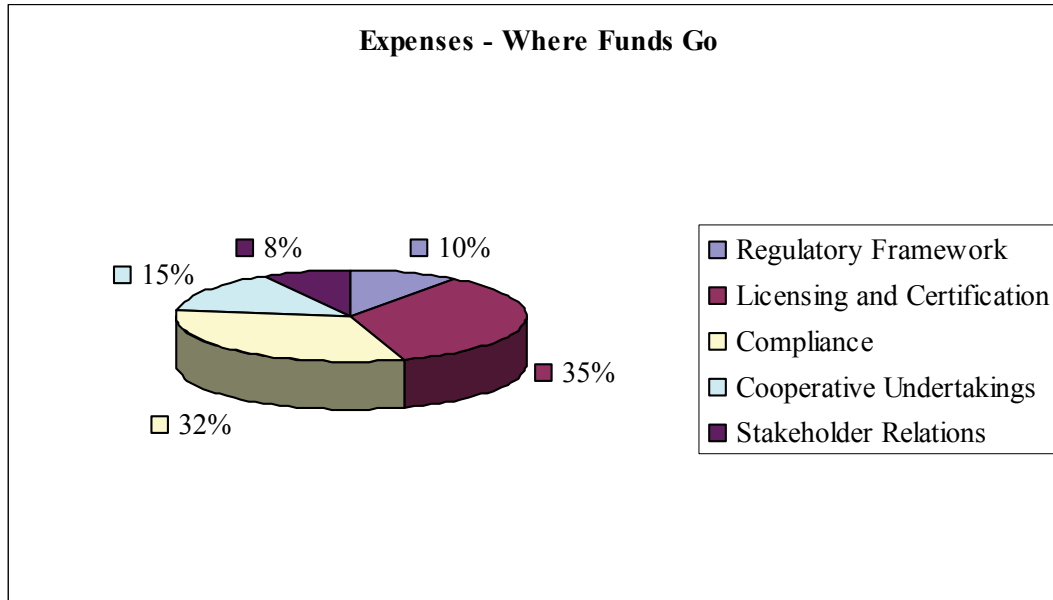
Condensed Statement of Financial Position			
(As at March 31) ³	% Change	2009	2008
ASSETS		39,086	30,465
Total Assets	28%	39,086	30,465
TOTAL		39,086	30,465
LIABILITIES		47,730	37,313
Total Liabilities	28%	47,730	37,313
EQUITY		(8,644)	(6,848)
Total Equity	26%	(8,644)	(6,848)
TOTAL	28%	39,086	30,465

(\$ thousands)

Condensed Statement of Operations			
(For the year ended March 31) ³	% Change	2009	2008
EXPENSES		131,959	113,438
Total Expenses	16%	131,959	113,438
REVENUES		87,015	72,576
Total Revenues	20%	87,015	72,576
NET COST OF OPERATIONS	10%	44,944	40,862

³ The CNSC's accounts are independently audited annually by the Office of the Auditor General. The financial statements, including Reports on Plans and Priorities, Departmental Performance Reports, and Annual Reports, can be found at the following CNSC Web site: <http://www.nuclearsafety.gc.ca/eng/readingroom/reports/index.cfm>

3.2 Financial Highlights Chart



The overall distribution of CNSC expenditures has remained largely constant since 2007-08 with the notable exception of the Licensing and Certification program activity which has grown from 23% of total expenditures in 2007-08 to 35% in 2008-09. Previously the second largest program activity at the CNSC, Licensing and Certification now represents the largest activity due primarily to the growth in regulatory licensing activities and pre-licensing design reviews of new nuclear power plants and uranium mines.

3.3 List of Supplementary Information Tables

The following tables can be found online on the CNSC's Web site (<http://www.nuclearsafety.gc.ca/eng/readingroom/reports/departmental/>):

- Sources of Respendable and Non-Respendable Revenue
- User Fees/External Fees
- Response to Parliamentary Committees and External Audits
- Internal Audits and Evaluations
- Regulatory Activity Plan

3.4 Other Items of Interest

External Performance Standards

Activity	Performance Standard	Target	Results 2005-06	Results 2006-07	Results 2007-08	Results 2008-09 ⁴
Compliance⁵						
<i>Verification: upon completion of the verification activity, the CNSC will:</i>						
Issue Type I Inspection Report ⁶	Within 60 business days	80%	50%	58%	69%	63%
Issue Type II Inspection Report	Within 40 business days	80%	86%	90.0%	85%	89%
Issue Desktop Review Report	Within 60 business days	90%	70%	79%	95%	88%
<i>Enforcement: upon an order being made, the CNSC will</i>						
Confirm, amend, revoke or replace the order (see Regulatory Guide – G-273)	Within 10 business days	100%	100%	100%	100%	100%
Licensing⁴ – for requests pertaining to an <u>existing</u> licence, the CNSC will						
Screen the request for completeness and issue notification that the licensing request is / is not complete	Within 20 business days	90%	100%	97%	56%	88%
Issue 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%	97%	98%	83%	99%
Issue a licensing decision when a public hearing is required (assuming an environmental assessment under the CEAA is not required) (see INFO-0715) ⁷	Within 160 business days	90%	100%	83%	100%	85%
Access to Information						
Respond to requests under the <i>Access to Information Act</i> (ATI) and <i>Privacy Act</i>	Within legislated time periods as stated in the acts	100%	94%	ATI – 82% Privacy – 100%	ATI – 61% Privacy – 100%	ATI – 74% Privacy – 83% ⁸

⁴ In FY 2008-09 the calculation method changed from averaging performance percentages across different Operations areas to performance based on total number of activities conducted by all Operations areas.

⁵ Compliance and licensing results are based on performance data available for fiscal year 2008-09.

⁶ Using the CNSC's risk-informed approach to regulation, initial priority was given to the completion of reports whose results were of greater significance.

⁷ The hearing process does not apply to licensing and certification activities that are related to nuclear substances, radiation devices, Class II facilities, prescribed equipment, transport and packaging.

⁸ Compared to 2007-08, the CNSC improved its performance with respect to ATI in 2008-09. With respect to Privacy, the CNSC had six requests, and was late with one of them, resulting in the 83% success rate.

Section III: Supplementary Information

Activity	Performance Standard	Target	Results 2005-06	Results 2006-07	Results 2007-08	Results 2008-09 ⁴
External Communication						
Place public hearings advertisements	Within deadlines stipulated in the regulations	100%	95%	100%	100%	100%
Response time to public inquiries	Same-day acknowledgement, with response time for completion of request depending upon complexity:	100%	100%	100%	100%	100%
	Low – same day	100%	100%	100%	100%	100%
	Medium – within 5 business days	100%	95%	95%	95%	95%
	High – within 10 business days	100%	80%	75%	80%	85%

Nuclear Power Industry Safety Performance Reports and Report Cards

The CNSC's Nuclear Power Industry Safety Performance Reports and Report Cards can be found on the [CNSC's Web site](#).