# **Atomic Energy Control Board**

1998-99 Estimates

**A Report on Plans and Priorities** 

Approved

Ralph Goodale Minister of Natural Resources

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#### **Section I: The President's Message**

#### A. President's Message

The Atomic Energy Control Board (AECB) is pleased to present to Parliament its 1998-99 Report on Plans and Priorities. The AECB sees this report as an opportunity to serve Canadians better by informing them of the key plans and strategies that the AECB will use to ensure that the use of nuclear energy does not pose unreasonable risks to health, safety, the environment and national security.

Leading the AECB's plans and strategies will be the new *Nuclear Safety and Control Act* which received Royal Assent on March 20, 1997. The new Act and associated regulations are expected to come into force in late 1998. This new Act strengthens Canada's commitment to nuclear safety and underscores the importance of the federal regulatory role. It corrects weaknesses in the current 50-year old *Atomic Energy Control Act*, establishes a strong legal basis for current operations and creates a new Canadian Nuclear Safety Commission with powers that match its national and international responsibilities. Over the coming year, the AECB will be adjusting its regulations and operations to ensure the effective implementation of this legislative change.

Concurrent with this legislative strategy, the AECB is improving its regulatory processes and strengthening Canada's non-proliferation and safeguards systems. The AECB will also be improving its leadership and management to provide a more effective and efficient organization with increased emphasis on performance and accountability at all levels. The AECB is taking steps to become a more flexible, responsive agency with improved interactions with our regulatory partners and more proactive communications with its stakeholders.

I am confident that the key plans and strategies in this report provide the right direction to ensure Canadians that regulated nuclear activities are conducted safely.

Agnes J. Bishop, M.D.

#### B. Management Representation Statement

# MANAGEMENT REPRESENTATION/DÉCLARATION DE LA DIRECTION Report on Plans and Priorities 1998-99/Un rapport sur les plans et les priorités 1998-1999

I submit, for tabling in Parliament, the 1998-99 Report on Plans and Priorities (RPP) for the Atomic Energy Control Board (AECB).

To the best of my knowledge the information:

- Accurately portrays the AECB mandate, plans, c priorities, strategies and expected key results of the organization.
- Is consistent with the disclosure principles contained in the Guidelines for Preparing a Report on Plans and Priorities dated December 1, 1997.
- Is comprehensive and accurate.
- Is based on sound underlying departmental information and management systems.
- I am satisfied with the quality assurance processes and procedures used for the RPP's production.

The Planning and Reporting Accountability Structure (PRAS) on which this document is based la structure de planification, de rapport et de has been approved by Treasury Board Ministers and is the basis for accountability for the results achieved with the resources and authorities provided.

Je soumets, en vue de son dépôt au Parlement, le Rapport sur les plans et les priorités de 1998 1999 de la Commission de contrôle de l'énergie atomique (CCEA).

ma connaissance les renseignements :

- Décrivent fid. lement les mandat, plans, priorités, stratégies et résultats clés escomptés de l'organisation.
- Sont conformes aux principes de divulgation de l'information énoncés dans les Lignes directrices pour la préparation du Rapport sur les plans et les priorités daté du 1er décembre 1997.
- Sont complets et exacts.
- Sont fondés sur de bons syst.mes d'information et de gestion sous-jacents.
- Je suis satisfait des méthodes et procédures d'assurance de la qualité qui ont été utilisées pour produire le RPP.

Les ministres du Conseil du Trésor ont approuvé responsabilisation (SPRR) sur laquelle s'appuie ce document et qui sert de fondement E la reddition de comptes sur les résultats obtenus au moyen des resources et des pouvoirs fournis.

Name/Nom: _	 		
Date:	 	<del></del>	

#### **Section II: AECB Overview**

#### A. Mandate

The Atomic Energy Control Board was established in 1946 by the *Atomic Energy Control Act*. It is a departmental corporation, named in Schedule II of the *Financial Administration Act*. The AECB reports to Parliament through a designated Minister, currently the Minister of Natural Resources Canada.

The mandate of the AECB is to ensure that the use of nuclear energy in Canada does not pose an unreasonable risk to health, safety, the environment and national security. This mandate extends to the control of the import and export of nuclear materials and other prescribed substances, equipment and technology, and being host of Canada's participation in international activities related to the Treaty on the Non-Proliferation of Nuclear Weapons.

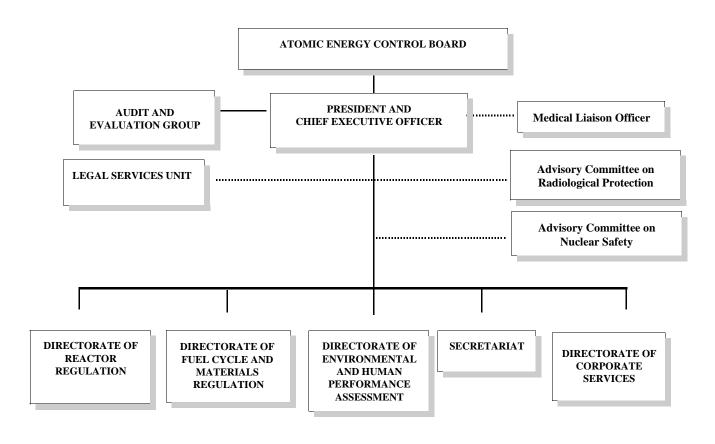
The AECB achieves its mandate through regulations that invoke a comprehensive licensing system which covers nuclear facilities, nuclear materials and other prescribed substances and equipment, including the certification of domestic and foreign transport package designs. This licensing system, which operates on a cost recovery basis, is administered so that the concerns and responsibilities of federal and provincial government departments in such areas as health, environment, transport, and labour are taken into account.

The AECB also contributes to international agencies and, through co-operation agreements, assists other countries in improving their regulatory controls over nuclear materials and facilities.

#### B. Objective

The AECB's objective is to provide Canadians with the assurance that the use of nuclear energy does not pose unreasonable risks to health, safety, security or the environment, and to support Canada's participation in international measures to prevent the proliferation of nuclear weapons.

Figure 1 Organization Chart



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Note: signifies an advisory role

#### C. Organizational Structure and Responsibilities

The AECB is constituted as a corporate body with five members, one of whom is President and chief executive officer appointed by the Governor in Council. Through the President, the Board receives advice from two independent committees — the Advisory Committee on Radiological Protection and the Advisory Committee on Nuclear Safety — composed of technical experts from outside the AECB; a Legal Services Unit, composed of legal experts provided from the Department of Justice; and a medical liaison officer, who represents senior medical officers nominated by the provinces and other federal departments and agencies.

AECB officers and employees implement the policies of the Board and make recommendations to the Board on regulatory matters. Staff is organized into five directorates described below and shown in Figure 1. In 1998-99, about 430 employees will work on the AECB's Program.

The Directorate of Reactor Regulation is responsible for the regulation of nuclear power reactors including the development of safety standards and licence conditions; the assessment of licence applications and reactor operations; the making of licensing recommendations to the Board; and compliance activities.

The Directorate of Fuel Cycle and Materials Regulation is responsible for the regulation of uranium mining and its processing into fuel; research facilities and particle accelerators; radioisotope production and use; decommissioning; radioactive waste; and the transport of radioactive materials.

The Directorate of Environmental and Human Performance Assessment is responsible for the assessment of licensees' performance in the areas of radiation and environment protection, quality assurance, training and human factors. Other responsibilities include technical training for AECB staff and foreign staff under cooperation agreements; AECB obligations under the Canadian Environmental Assessment Act; significant events analysis; accident investigation; research programs; and the development of standards.

The Secretariat is responsible for the administrative support of the Board of the AECB and its advisory groups; external relations, corporate documents and public communications; corporate planning and coordination services including implementation of the *Nuclear Safety and Control Act*; non-proliferation, safeguards and security activities; interaction with Department of Justice legal counsel at the AECB; AECB responsibilities under the *Nuclear Liability Act*, the *Access to Information Act* and *the Privacy Act*; and corporate audit & evaluation.

**The Directorate of Corporate Services** is responsible for supplying services to the AECB to enable it to manage its human, information, financial and physical resources. The Directorate is also responsible for administering the AECB's security and conflict of interest programs.

# D. Financial Spending Plan

(\$ millions)	Forecast Spending 1997-98*	Planned Spending 1998-99	Planned Spending 1999-00	Planned Spending 2000-01
<b>Gross Program Spending:</b>				
AECB	42.2	43.5	43.6	43.4
Less: Revenue Credited to the Consolidated Revenue Fund	35.6	34.9	35.5	34.3
Net Program Spending	6.6	8.6	8.1	9.1
Plus: Cost of Services Provided by other Departments	5.1	5.0	5.1	5.3
Net Cost of the AECB	11.7	13.6	13.2	14.4

<sup>\*</sup>Reflects best forecast of total planned spending to the end of the fiscal year.

# Section III: Plans, Priorities and Strategies

# A. Summary of Key Plans, Priorities and Strategies

Detailed information on AECB Key Plans and Strategies is provided in Figure 2.

Figure 2 Key Plans, Priorities and Strategies

Atomic Energy Control Board					
(PLAN) to provide Canadians with:	(STRATEGIES) to be demonstrated by:				
An improved legislative and regulatory framework	Bringing up-to-date legislation into force.				
	Developing and promulgating effective regulatory requirements that result in the greatest net benefit to Canadian society.				
	Training AECB staff on the new legislation and regulations.				
	Educating licensees to a full awareness of the AECB requirements.				
	Co-operating with federal and provincial jurisdictions, including other regulatory bodies, to reduce the regulatory burden on taxpayers and licensees.				
	Developing contractual arrangements to implement AECB regulatory functions effectively				

(PLAN) to provide Canadians with:	(STRATEGIES) to be demonstrated by:
An enhanced regulatory process	Verifying independently that licensees are fulfilling their regulatory responsibilities.
	Efficiently handling licensing issues based on their safety significance.
	Improving the reporting of licensees' performance.
	C Developing clearer licence conditions with measurable expectations.
	C Developing requirements for human factors engineering (e.g. relating to the human/machine interface), systematic management processes and training programs.
	Improving investigative capabilities for nuclea safety accidents and events.

(PLANS) to provide Canadians with:	(STRATEGIES) to be demonstrated by:
Advancement of Canadian policy respecting the non-proliferation of nuclear weapons and fulfilm of Canada's Safeguards obligations.	strengthening the safeguards system through the implementation of a new Protocol additional to the Canada-International Atomic Energy Agency (IAEA) Safeguards Agreement and the provision of assistance to the IAEA through the Standing Advisory Group on Safeguards Implementation and the Canadian Safeguards Support Program.  Supporting peaceful nuclear trade and cooperation through the administration of Canada's nuclear cooperation agreements and participation in the Nuclear Suppliers Group and the Zangger Committee.
A more effective and efficient organization	Implementing recommendations arising from a major study of ways to improve the institution's regulatory and management practices.  Supporting corporate priority-setting and resource allocation with an effective activity-based planning and budgeting system.  Improving the management accountability systems within the AECB.  Introducing a multi-disciplinary, team-based project management approach.  Taking a proactive approach to two-way communications with the public, the media and AECB stakeholders.  Reforming the AECB human resources framework.

#### B. External Factors Influencing the AECB

#### Issues that may make significant changes to the AECB Program in the future:

- New activities under the Canadian Environmental Assessment Act (CEAA);
- The impact of the Year 2000 computer problem;
- Demand for radioisotopes and accelerators in therapeutic, diagnostic and industrial uses;
- Volume of transportation of radioactive materials;
- Review of disposal concepts for irradiated nuclear fuel;
- Decommissioning of nuclear facilities including mines and reactors;
- Siting of a low level radioactive waste management facility;
- Expansion of waste management sites;
- Requirements for financial assurances for decommissioning of nuclear facilities;
- The implementation of Ontario Hydro's Nuclear Asset Optimization Program (NAOP);
- Privatization of electrical supply and distribution systems;
- Major plant revamps due to faster than expected equipment degradation;
- Environmental concerns with the green house effect caused by coal-fired power plants that may result in pressure to shutdown fewer reactors than previously planned;
- Development of new reactor designs by the Canadian industry (e.g., Maple "X");
- New uranium mines;
- Recycle of plutonium recovered from nuclear weapons dismantling programs in CANDU reactors;
- Security problems arising from the clandestine export of nuclear materials, for example from the former Soviet Union;

#### Issues that may make significant changes to AECB Program in the future (continued):

- Extended safeguards activities in Canada resulting from the implementation of the strengthened safeguards system;
- Demand from foreign regulators for assistance and training from the AECB;
- Changes in resources in federal and provincial agencies actively supporting AECB's efforts in regulating nuclear facilities and materials;
- Lack of additional financial resources, thereby preventing the AECB from fulfilling its mandate;
- Increased demand on AECB staff for public consultation, public hearing panels and participation in workshops;
- Future government commitments with international agencies.

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#### C. Expected Results

#### Expected results are reflected for each major plan

#### (PLAN) to provide Canadians with:

#### An improved legislative and regulatory framework

- c The Nuclear Safety Control Act and pursuant regulations are in force.
- c AECB licensing and compliance operations are aligned with the new Act and regulations.
- c AECB staff are trained on the new Act and regulations.
- Guidance for licensees (documents, information programs) is available on the Internet and distributed directly.
- c New cooperation agreements with federal and provincial jurisdictions are in place.

#### An enhanced regulatory process

- c A more reliable measure of compliance.
- *c* Licence conditions more amenable to objective determination of compliance.
- a An enhanced understanding of root causes of deviations from normal operation.
- *α* Application of the regulatory requirements that is not only consistent but is seen to be consistent.

# Advancement of Canadian policy respecting the non-proliferation of nuclear weapons and fulfilment of Canada's Safeguards obligations

- *c* Integration of traditional and Protocol safeguards activities.
- c Application of remote monitoring strategies.
- Administration of import and export controls, nuclear cooperation agreements and participation in multilateral non-proliferation fora.
- Participation in the international security regime and the review process of IAEA security standards.

#### A more effective and efficient organization

- <sup>c</sup> Major human resources changes in staff development, management accountability, work processes, career and job assignment policies and staff compensation.
- c An AECB strategic plan.
- An effective activity-based planning and budgeting system.
- Increased public confidence in the AECB.

- More effective communication with the public, the media and AECB stakeholders.
- c Corporate criteria for priority setting.

# **Section IV: Supplementary Information**

Table 1: Spending Authorities

#### **Personnel Information**

Table 2: Details of FTE Requirements

#### **Additional Financial Information**

Table 3: AECB Summary of Standard Objects of Expenditure Table 4: Program Resources for AECB for the Estimates Year

Table 5: Details of Transfer Payments

Table 6: Details of Revenue to the Consolidated Revenue Fund (CRF)

#### **Other Information**

Table 7: Listing of Statutes and Regulations

Table 8: References

Contacts for Further Information

Table 1: Spending Authorities - AECB Summary Part II of the Estimates

**Financial Requirements by Authority (\$ millions)** 

Vote	(millions of dollars)	1998-99 Main Estimates	1997-98 Main Estimates
25	Program expenditures	38.4	38.1
(S) (S)	Statutory: Contributions to employee benefit plans Spending of proceeds from the disposal of Crown Assets	5.1	4.1
	Total AECB	43.5	42.2

**Table 2:** *Details of FTE Requirements* 

(\$ dollars)	Forecast 1997-98	Planned 1998-99	Planned 1999-00	Planned 2000-01
Order in Council Appointment	1	1	1	1
Executive	28	28	28	28
Scientific, Technical and Professional	297	302	302	302
Administrative Support	83	99	99	99
Total	409	430	430	430

Note: Full-time equivalent (FTE) is a measure of human resource consumption based on average levels of employment. FTE factors out the length of time that an employee works during each week by calculating the rate of assigned hours of work over scheduled hours of work. FTEs are not subject to Treasury Board control but are disclosed in support of personnel expenditure requirements specified in the Estimates.

# **Additional Financial Information**

Table 3: AECB Summary of Standard Objects of Expenditure

(\$ millions)	Planned Spending 1997-98	Planned Spending 1998-99	Planned Spending 1999-00	Planned Spending 2000-01
Personnel	1997-98	1990-99	1999-00	2000-01
1 ersonner				
Salaries and wages	26.0	26.5	26.5	26.5
Contributions to employee benefit plans	4.1	5.1	5.1	5.1
_	30.1	31.6	31.6	31.6
Goods and Services				
Transportation & Communications	3.1	3.1	3.1	3.1
Information	0.3	0.3	0.3	0.3
Professional & special services	5.9	<b>5.7</b>	5.7	5.7
Rentals	0.3	0.3	0.3	0.3
Purchased repair & maintenance	0.3	0.3	0.3	0.3
Utilities, materials and supplies	0.6	0.5	0.6	0.4
Other subsidies and payments				
Minor Capital	1.0	1.0	1.0	1.0
	11.5	11.2	11.3	11.1
Total operating	41.6	42.8	42.9	42.7
Transfer payments	0.6	0.7	0.7	0.7
Gross budgetary expenditures	42.2	43.5	43.6	43.4
Less: Revenue Credited to the Vote				
Net budgetary expenditures	42.2	43.5	43.6	43.4

Table 4: Program Resources for AECB for the Estimates Year

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(\$ millions)	FTE	Operating <sup>1</sup>	Grants & Contributions	Total Gross Voted	Less: Revenue Credited to the Vote	Total Net Planned Spending
AECB	430	42.8	0.7	43.5		43.5
Total	430	42.8	0.7	43.5		43.5

<sup>&</sup>lt;sup>1</sup> Operating includes contributions to employee benefit plans.

Table 5: Details of Transfer Payments (\$ millions)<sup>1</sup>

(\$ dollars)	Forecast Spending 1997-98	Planned Spending 1998-99	Planned Spending1 999-00	Planned Spending2 000-01
Grants				
Contributions				
Contributions to the Cost-Free Manpower Assistance Program and to procure related goods and services required to execute the Canadian Support Program for the International Atomic Energy Agency	0.5	0.7	0.7	0.7
Other (note 1)	0.1			
<b>Total Transfer Payments</b>	0.6	0.7	0.7	0.7

Note 1: Transfer Payments (amounts are less than \$100,000)

#### Listing of Grants

grants to support non-profit organizations that are furthering the development of nuclear safety standards

#### Listing of Contributions

- Contribution to participate in the second International Piping Integrity Research Group (IPIRG-2)
- C contribution to the International Biospheric Validation Study (BIOMOVS)
- C contribution to the Swedish Radiation Protection Institute in support of the International Symposium on Ionizing Radiation: Protection of the Natural Environment
- Contribution to the International Agency for Research on Cancer in support of the International Collaborative Study of Cancer Risk among Nuclear Industry Workers
- C contribution to the Swedish Nuclear Power Inspectorate in support of the DECOVALEX II Project
- C contribution to the Swedish Radiation Protection Institute (SSI)
- C contribution to the University of Illinois at Urbana-Champaign in support of the Information System of Occupational Exposure (ISOE)

Table 6: Details of Revenue to the Consolidated Revenue Fund (CRF)

AECB (\$ millions)	Forecast 1997-98	Planned Revenue 1998-99	Planned Revenue 1999-00	Planned Revenue 2000-01
Atomic Energy Control Board				
User Fee Revenues	34.0	33.3	33.9	32.7
Foreign Training Revenues	1.6	1.6	1.6	1.6
Total Credited to the CRF	35.6	34.9	35.5	34.3

# **Other Information**

#### Table 7: Listing of Statutes and Regulations

With respect to the Atomic Energy Control Board, the Minister has responsibility to Parliament for the following Acts and regulations made pursuant thereto:

Atomic Energy Control Act, R.S.C., 1985, Chapter A-16 Nuclear Liability Act, R.S.C., 1985, Chapter N-28

#### **Table 8: References**

Atomic Energy Control Board, 1995-96 Part III of the Estimates

Atomic Energy Control Board, 1996-97 Part III of the Estimates

Atomic Energy Control Board, 1997-98 Part III of the Estimates

Atomic Energy Control Board, 1996-97 Annual Report

Atomic Energy Control Board, 1996-97 Business Plan

Atomic Energy Control Board, 1997-98 Business Plan

Atomic Energy Control Board, Performance Report for the period ending March 31, 1997

#### **Contacts for Further Information**

More information about the AECB and its Program is available, free of charge, from:

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