BILL C-14 THE NUCLEAR CONTROL AND ADMINISTRATION ACT - ISSUES AND IMPLICATIONS

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In tabling Bill C-14 in November, 1977 the Government of Canada reaffirmed its intent to ensure that appropriate enabling legislation would continue to be available in Canada governing the health, safety, security, environmental, promotional and commercial aspects of nuclear energy. Although the existing Atomic Energy Control Act has served Canada very well during the three decades that have elapsed since it was enacted in 1946, a testimony to the foresight of Parliament at a time when the military uses of nuclear energy dominated the thinking of world leaders, the developments of the last year or two have revealed the need for clarification of the Government's objectives and for strengthening the legislative basis upon which its programs for the achievement of these objectives is based. In 1946 and continuing to this day, a dedication to the effective control of nuclear energy for peaceful uses only is the over-riding objective to be achieved.

Canada was one of the first nations to make a clear distinction between the regulatory and promotional aspects of its nuclear energy program and this distinction is further enhanced by the division of Bill C-14 into two basic parts which deal individually and exclusively with these aspects. Incorporated into both parts of the Bill are provisions which recognize the importance of the growing public awareness of nuclear energy, the potential which the peaceful applications of nuclear energy offer in such diverse fields as medicine, agriculture, and industry as well as electric power generation and the fundamental requirement to ensure that all facets of the public interest are protected. This paper will outline the major issues considered in drafting the Bill and some of the implications which it presents.
1. Introduction

The Atomic Energy Control Act was passed in 1946. Its principal purposes were to provide for the "control and supervision" of the domestic development, application and use of nuclear energy and to enable Canada to participate effectively in programs directed towards the achievement of measures of international control over nuclear energy. At that time the primary concern of the Canadian government in the nuclear field both domestically and internationally derived from a recognition of the importance to world peace of strategic and security aspects. Although designed to provide for domestic control by regulation of the nuclear fuel cycle and to permit the conduct of a number of commercial and promotional activities by Crown corporations established pursuant to its provisions, the Act clearly emphasized strategic and security matters.

As a result of a number of developments which occurred over the late 1960's and early 1970's it became apparent that a major revision of the Atomic Energy Control Act was required in order to enable the Board to deal effectively with the growing complexities of the nuclear field. In 1976, a special advisory group was established by the government consisting of senior public servants involved generally in all aspects of governmental regulation to review the mandate, jurisdiction, resources and organizational structure of the Atomic Energy Control Board and to submit recommendations regarding any necessary changes in the Atomic Energy Control Act. These recommendations were approved, in principle, by the government and a number of steps have since been taken to implement them. The subsequent tabling in the House of Commons of Bill C-14 on November 24, 1977 was a direct result of these recommendations.

Under the provisions of Bill C-14, the existing regulatory powers of the Atomic Energy Control Board related to the health, safety and security aspects of nuclear energy and prescribed substances are to be vested in a new "Nuclear Control Board". To clarify the Board's regulatory and compliance responsibilities and to ensure a clear and comprehensive assignment of
responsibilities, these powers will be expanded to include environmental aspects. Perhaps the most important observation to be made in this respect is the government's stated intention to establish a single regulatory agency having total responsibility for all health, safety, security and environmental aspects of the nuclear field at the federal level.

The Nuclear Control Board is to be more independent and removed from any involvement in promotional and commercial aspects of the nuclear industry. To achieve this independence and objectivity, the Bill has been drafted on the following basis:

1. the revised Act is divided into three parts of which two are important in this context: Part I dealing with control of the health, safety, security and environmental aspects of nuclear energy; and Part II dealing with commercial and promotional aspects of the development and use of nuclear energy;

2. different Ministers are assigned responsibility for Part I and Part II;

3. the Nuclear Control Board established under Part I ceases to be a departmental corporation pursuant to the provisions of the Financial Administration Act and is to be reconstituted as a regulatory commission in a manner similar to that of the Canadian Transport Commission and the Canadian Radio-Television and Telecommunications Commission but retaining the Atomic Energy Control Board's status as a separate employer; and

4. the scope of the directive power over the Nuclear Control Board (reference section 7 of the Atomic Energy Control Act) is limited to policy directives of the Governor-in-Council that are made public.
2. Historical Background

Because of the circumstances which existed during the months in which the Atomic Energy Control Act of 1946 was drafted and considered by Parliament, the initial emphasis of the Board as mentioned earlier was directed towards the security and strategic aspects of nuclear energy. For this reason and because of the fact that the peaceful application of nuclear energy did not develop on a large scale until well into the 1950's, the staff of the Board was restricted to a very small number. The activities of the Board in the security and strategic areas of the nuclear field were pursued on a consultative basis with other organs of the federal government. An indication of this approach was the fact that until the early 1960's the total staff of the Board numbered only 12.

Although to-day the radiological safety aspect of nuclear energy is seen to be one of the two most important, the other being the measures taken to prevent the proliferation of nuclear weapons (i.e. the original security and strategic aspects), very little effort was directed towards the former. Since health and safety matters were traditionally the concern and responsibility of the provinces and bearing in mind the provisions of the British North America Act, the Board urged provincial authorities through the Dominion Council of Health (composed of Deputy Ministers of the federal and provincial health departments) to issue radiological safety regulations pursuant to provincial legislation. For various reasons, no province was prepared to take such action and, as an alternative, the Board proposed to the provinces that it amend the Atomic Energy Control Regulations to include provisions applicable to radiological protection. Implicit in this proposal was an understanding that the relevant sections of the Regulations would be based on the advice of the Dominion Council of Health, taking into account the recommendations of the International Commission on Radiological Protection (ICRP) and would of necessity, in view of the very small size of the Board staff, involve the direct participation of the provinces in their implementation.
A drafting committee was appointed to prepare the necessary recommendations on radiological protection regulations and after their approval by the provinces they were submitted to the Board and subsequently incorporated into its 1960's Regulations (SOR/60-119). The amended Regulations stipulated requirements for protective procedures, instruments and equipment as well as the maximum permissible doses of ionizing radiation that were to be applied in the case of both occupational workers and members of the general public. Federal and some provincial health departments nominated members of their staff to serve as inspectors in the application of the Regulations. The Ontario Department of Labour nominated some of its Factory Inspectors to supervise the use of radioactive materials in industrial concerns while the Ontario Department of Mines in 1961 nominated some of its Mines Inspectors to supervise the radiological safety aspects of uranium mining operations as well as the conventional safety aspects of these operations. The foregoing individuals were appointed as inspectors for the Board pursuant to the Atomic Energy Control Regulations.

The 1960 Regulations were revised after extensive consultation with federal and provincial departments and re-issued in 1974 so as to provide more extensive and explicit coverage. At this time it became apparent that although the Board had entered into these cooperative arrangements with federal and provincial agencies the Board itself was nevertheless being held accountable for any difficulties that arose. Thus there was no doubt that the Board was the responsible agency in the eyes of the public even though its direct regulatory involvement in ensuring compliance with radiological safety requirements was on an extremely small scale and clearly in an enabling capacity to provide for appropriate protection via provincial and other federal agencies.

In setting about its task of reviewing the mandate, jurisdictional authority, resources and organizational arrangements of the Atomic Energy Control Board the federal advisory group referred to earlier was aware of a number of developments that had occurred during the mid 1970's all of which were directly pertinent...
to the role of the Board. These developments included:

1. the detonation of a nuclear device by the Government of India in 1974. This event prompted the Canadian government to review its bilateral and multilateral arrangements in the nuclear field and in particular the experience that had been gained in the implementation of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). The following year, the Review Conference provided for in the NPT was held in Geneva and in its participation in that conference, the Canadian government outlined a number of measures which it felt were necessary to ensure a strengthening of the international safeguards arrangements that had been developed previously.

2. a broad review of federal funding of basic research. Since its inception, the Board had awarded grants to universities in support of basic research, chiefly in nuclear physics. By 1975-76 the Board was awarding grants totalling some eight and one half million dollars, of which five and one half was for the TRIUMF project. As a result of the review of its arrangements for funding basic research, the government decided that responsibility for funding atomic energy research in the universities should be transferred from the Board to the National Research Council. This transfer took place on April 1st, 1976.

3. the activities of the Royal Commission on the Health and Safety of Workers in Mines in Ontario chaired by Dr. James Ham (the Ham Commission) had prompted the Board to prepare a submission which outlined a number of steps which it proposed to take to correct some of the situations which had developed in the uranium mining industry. These included:
i) the establishment of more rigorous health-safety standards for uranium mines workers insofar as exposure to ionizing radiation is concerned;

ii) clarification of federal/provincial arrangements vis-a-vis the licensing of uranium mines.

iii) the provision of assistance in the training of uranium mine inspectors (federal, provincial and union personnel);

iv) the establishment of a medical/radiological safety co-ordinating group to evaluate and to audit uranium miner health;

v) the implementation of a research and development program for improved techniques and equipment for determining and controlling mine air quality;

vi) the initiation of research and development programs to ensure that appropriate mine air standards were being applied.

4. the February, 1975, discovery that photographic film being processed by a small company in Toronto was badly fogged as a result of residual radium contamination in a building in which radium luminous dial and radium processing operations had been carried on some 30 years before. At the same time, notwithstanding the fact that the Atomic Energy Control Act does not bind the Crown, agreement was reached with the Presidents of Eldorado Nuclear Limited and Atomic Energy of Canada Limited under which the Board initiated a number of steps leading to the licensing of the facilities operated by these two Crown agencies. In July of 1975, it was
recognized that some of the pre-war and post-war operations of Eldorado Nuclear Limited had been carried out with less rigorous control of radioactive waste material (albeit material of a very low specific activity) than that required by current standards. As a result, a Federal-Provincial Task Force on Radioactivity was established under the chairmanship of the President of the Board, to review not only operations in the nuclear field but also operations in the non-nuclear field in which small concentrations of radioactive material are involved. The Federal-Provincial Task Force identified some 50 locations in Canada where radioactivity in excess of naturally occurring levels had been found or was suspected. These locations included uranium mine and mill tailings disposal areas, waste dumps associated with various metallurgical operations and public, residential and commercial areas where radioactive fill and salvaged building materials had been used for a number of years. The most widely known example of these locations is Port Hope, Ontario, where radioactive refinery waste and contaminated building materials had been identified in a number of widely dispersed sites throughout the Town. Other sites where radioactive material had been abandoned (e.g. by non-nuclear metallurgical processing operations in which the slags resulting from the treatment of ores and waste products contained small quantities of radioactive material) were also found to have been left exposed and close to habitation. On the basis of the investigations carried out under the auspices of the Federal-Provincial Task Force, a remedial action program was initiated by the federal government with the cooperation of the provinces. In 1976-77 this program involved expenditures of approximately $3,000,000.00 and in 1977-78
some $5,000,000.00. Similar funding has been approved for fiscal year 78/79 and has been forecasted for 79/80. It should be noted that agreements have been entered into by the provinces of Ontario and Saskatchewan in respect to the remedial action programs at Elliot Lake, Ontario, and Uranium City, Saskatchewan. In brief, the effect of these agreements is to establish a cost-sharing formula whereby the provincial governments contribute one-half of the remedial cost for privately-owned premises.

5. domestic and international developments in the uranium industry. By the early 1970's uranium was in over supply. Many mines were operating below capacity and aggressive action by buyers around the world had driven the price of uranium down to approximately $4.00 per pound except in the United States which was protected from the external market by what was equivalent to an embargo against the use of imported uranium. The situation began to change in 1973 when the OPEC oil embargo was imposed. Attention was then focused on the insecurity of oil supplies and many countries took steps to accelerate their nuclear programs. By the first months of 1974, Canadian producers were caught up in a rush of enquiries with respect to the availability of supplies and during these few months they negotiated export sales totalling some 45,000 tons of uranium, ten times the then current annual production. Suddenly consumers found that earlier held stock piles in the hands of industry and government were no longer available since they had either been purchased by customers abroad or consigned to domestic needs. As a result of these developments concern arose regarding the availability of both adequate supplies of uranium and production capacity to meet domestic needs. The initial federal move to
protect domestic customers was announced on January 23, 1974, by the Minister of Energy, Mines and Resources at a First Ministers' Conference on Energy in Ottawa. Guidelines were enunciated which sought on the one hand to ensure adequate domestic reserves and production capacity for the consuming industry in Canada over the long term, while on the other providing an opportunity to Canadian producers to participate in the growing export market. These policy guidelines were set out in more specific detail in the Uranium Export Policy Statement made by the Minister of Energy, Mines and Resources on September 5, 1974.

Notwithstanding the above mentioned factors and the view that a major revision of the Atomic Energy Control Act was required, it was recognized that the Act had been drafted with remarkable foresight and that it had proved to be extremely effective in the more than three decades in which it had been in effect. In particular it was noted that the following provisions of the Act should be retained in any new Bill presented to Parliament:

1. the declaration that such works and undertakings are for the general advantage of Canada;

2. the authority of the federal government to make regulations for the development, control, supervision and licensing of the entire field of nuclear energy and the substances required for its effective and efficient development;

3. the authority of the federal government to regulate the import and export of nuclear material, equipment, technology and information;
4. the authority of the Federal Government to regulate the transportation of nuclear materials;

5. the authority of the federal government to develop, exploit and control the commercial and promotional aspects of nuclear energy and to incorporate companies to those ends.

Having identified the above provisions of the Atomic Energy Control Act which should be retained, a number of provisions were recognized as being insufficiently explicit in the Act or not provided for at all. These included:

1. a clear separation of the regulatory responsibility for health, safety, security, and environmental matters from the commercial and promotional aspects of the nuclear industry;

2. a more comprehensive definition of the breadth and depth of regulatory authority in the four areas which are the primary concern of the Atomic Energy Control Board, i.e. health, safety, security and environmental matters;

3. a more explicit definition of authority over commercial and promotional matters;

4. a clarification and amplification of the mandate of Crown corporations created pursuant to the Act;

5. a clarification of the interface between federal and provincial authorities;

6. the application of the legislation to Crown corporations engaged in the nuclear field;
7. authority to enter premises suspected of being contaminated by radioactivity, whether licensed or not;

8. authority to order the closure and clean-up of the premises contaminated by radioactive material, and if necessary to arrange for such clean-up and to recover the costs at a later date;

9. authority for requiring the disclosure of information essential to a broad public understanding of all aspects of nuclear energy;

10. authority permitting the involvement of the public through the mechanism of hearings in questions of public concern with respects to health, safety, security or environmental matters; and

11. provision for greater penalties for non-compliance with licensing requirements, terrorist activities or the illegal possession of certain nuclear materials.

3. Commentary on Specific Provisions of Bill C - 14

PART I

The objects of the Board within its area of jurisdiction are set out in the Bill as follows:

(1) to regulate, control and supervise the development, production, possession and use of nuclear energy, prescribed substances, prescribed equipment and prescribed technology in order to

i) ensure the preservation of the health and safety of persons and to protect the environment from the hazards associated with the production, possession and use of prescribed substances;

ii) maintain national security;

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iii) ensure that nuclear energy and prescribed substances will be used only for peaceful purposes; and

iv) ensure compliance with measures of international control undertaken by Canada; and

(2) to act as a source of information for the public on health, safety and environmental matters related to nuclear energy.

SECTION 2 The term "nuclear facility" is redefined in the new Bill to include the definition now found in the Atomic Energy Control Regulations and expanded to include more explicitly uranium and thorium mines and mills. The definition will also refer to plants for the separation of deuterium (as well as its "production"), and the aspects of processing, handling, storage, and disposal of radioactive waste.

A "prescribed substance" is defined as uranium, thorium, all elements of atomic number greater than 92, deuterium, their respective derivatives and compounds, radioactive nuclides, and any substances that are designated by regulations made under Part I as being capable of releasing nuclear energy or as being requisite for the production, use or application of nuclear energy.

SECTION 21 The health, safety, security and environmental aspects of nuclear energy, the materials required for its use, and the possession and use of radioactive isotopes are to be regulated by a single control agency, the Nuclear Control Board.

The work of the Atomic Energy Control Board over the years had been made difficult by the absence in the statute of clear-cut responsibilities over which the Board was to exercise its control and supervisory role. This became more awkward as the role of the Board changed with the expansion of nuclear activities from a strategic materials control organization to a regulatory body having responsibilities for the health, safety and physical security of nuclear energy activities coupled with the traditional responsibilities of other federal and provincial government departments
in the field of occupational health and safety, environment and security.

Although the Board will have primacy in the regulation-making and administration of regulations pertaining to the health, safety, security and environmental aspects of the nuclear fuel cycle including prescribed substances and nuclear facilities, the Act will recognize the mandates of other federal departments. Departments such as Health and Welfare, Environment, and Labour will exercise their prescribed roles and responsibilities, conduct basic research and develop standards which will, after inter-departmental consultations, be incorporated into regulations under the Nuclear Control and Administration Act. The responsibility for enforcement of these regulations and for ensuring compliance will be that of the Nuclear Control Board.

For example, it is contemplated that Health and Welfare Canada will conduct basic research and develop standards as they relate to human health and that Environment Canada will develop standards or control requirements for the release to the environment of radioactive and non-radioactive toxic materials and waste heat which may be produced from any Board-licensed activity.

SECTION 22 AND 23 The Board is to have statutory authority to license all persons, including federal and provincial Crown corporations, agencies and departments, that are engaged in nuclear activities, or that process and use prescribed substances. This is to ensure that federal or provincial government departments and agencies engaged in nuclear activities will be regulated by the Nuclear Control Board from the standpoint of health, safety, security, and environmental impacts to the same degree as a private person engaged in similar activity. The declaration of nuclear facilities as "works and undertakings for the general advantage of Canada" is carried over from the existing Act.

Section 9, (c) of the existing Act is extended to include mining, milling, storage and disposal of prescribed substances. The Bill will provide statutory authority to regulate uranium and thorium explo-
ration and mining processes insofar as these matters may concern health, safety and environmental aspects beginning at the first stage at which significant adverse effects on people or the environment become possible.

SECTION 24 The new Bill clearly authorizes the Board to establish regional offices anywhere in Canada and to develop laboratory facilities, regional or centralized, in support of its regulatory duties.

SECTION 26 The Bill will permit the Board to establish research programs to obtain independent scientific, technical, and other information and advice that it considers necessary for the discharge of its responsibilities.

SECTION 27 The Bill provides for a significant public contact role to be undertaken by the Board, the objective being to have it develop a communications function capable of providing a source of reliable, independent, public information on health, safety and environmental concerns respecting nuclear energy activities.

SECTION 31 The Bill provides authority for the Board to license the construction and operation of nuclear powered ships in Canada and the visits of foreign nuclear powered ships to Canada.

SECTION 32 The Board would be enabled to hold public hearings on any matter falling within its jurisdiction, in order to carry out its objectives. Furthermore, to reflect public and political attitudes, the Bill will make it mandatory for the Board to hold public hearings in connection with the issue of a licence to construct a major nuclear facility such as a uranium mine, mill or processing plant, a nuclear reactor of power greater than 1 megawatt thermal, a spent reactor fuel reprocessing plant, a radioactive waste management facility, a uranium enrichment plant, or a heavy water plant.

SECTION 35 Such information as trade secrets; commercial privileged or confidential internal memoranda and correspondence; information relating to individual persons, personnel files; information relating to safeguards practices or physical security measures of...
licensees; and information from various governments or other sources received as "confidential", will be exempted from disclosure in accordance with the current government policy outlined in Cabinet Directives 45 and 46. As in the case of all regulations to be issued under the Bill, the regulation covering information to be exempt from disclosure will be published in the Canada Gazette at least 60 days prior to coming into effect. This will enable all interested persons to have an opportunity to review and to comment upon the proposed regulation.

SECTION 36 The Bill requires the Nuclear Control Board to make available for inspection by the public all documents in the possession of the Board that are not exempted from disclosure by the regulations. The Bill also permits an applicant for a licence to request the Board not to disclose any information that he submits to the Board, and will give power to the Board to grant such request on being satisfied that disclosure of the information to which the request relates is not required in the public interest, or would unduly impair the competitive position of the person making the request.

SECTION 37, 38 AND 39 The Board would have the authority to appoint inspectors for ensuring compliance with conditions of licences and permits issued by the Board. It will provide inspectors with broad powers to enter premises, examine records and samples, close, and order the clean-up of radioactively contaminated premises.

Such statutory authority will facilitate cooperative attempts to deal with residential radioactive contamination problems such as have occurred in Port Hope, Elliot Lake and other communities.

The Board would be permitted to examine and certify operators of facilities, and to train and certify inspectors for all areas where radiation may cause a health and safety problem.

The Bill would permit the Board to enter into agreement with any person or with any department or agency of the federal government, or the government
of any province to provide inspection and compliance services. Such an agreement may cover the designation, training, certification and employment of inspectors, and the matter of financial assistance or participation in costs and expenses will be evaluated in each case as required.

SECTION 50 The Bill contains provisions imposing a strict liability on persons who knowingly have in their possession any prescribed substance that causes radioactive contamination; costs of clean-up will be assigned on the "polluter pays" principle.

SECTION 51 - 55 The Bill provides for the creation of a Radioactive Decontamination Fund, to be established in the Consolidated Revenue Fund, and to be administered by the Board. The Board will have power to make regulations prescribing which licencees pay into the fund and the amounts to be paid. The Board anticipates detailed discussions with industry and the provinces before setting out the fee schedule. If responsibility for contamination cannot be assigned, then the Radioactive Decontamination Fund will be used to cover costs and expenses.

SECTION 56 The Bill provides authority for the Board to make regulations for a system of perpetual care of abandoned or obsolete nuclear facilities and waste disposal sites. At present the Board is not authorized to deal with unlicensed facilities or abandoned operations such as exist in the uranium mining industry where bankruptcies or ore depletions have caused mining firms to close down or cease to exist as a corporate entity. It is expected that regulations in this area will be made only after extensive discussions with other authorities.

The Bill permits the Board to make regulations enabling it to invoke, or adopt, or incorporate by reference, general or specific laws of a province that it deems necessary or appropriate. It will also empower the Board to incorporate conditions in the licences that it issues under the Bill, requiring compliance with relevant provincial laws.
SECTION 58 Except as the Board may otherwise order, Part IV of the Canada Labour Code will apply to occupational health and safety of workers in the operation of any nuclear facility, while radiation hazards in such facilities will be regulated by the Board.

PART II

The provisions of this section of the Act are, in general, a continuation of the existing responsibilities of the Minister of Energy, Mines and Resources for the commercial and promotional aspects of the development of nuclear energy.

In addition, where necessary, some new clauses have been included in the Bill so as to clarify some of the provisions and resolve some of the problems that have been encountered by those charged with administering the Act in the past.

SECTIONS 61 AND 62 As a result of separation of the regulatory authority from the commercial and promotional aspects, the following provisions appear in Part II of the Bill:

a) provision authorizing the Minister to regulate and engage in commercial and promotional activities, and

b) provisions giving the Minister authority to issue and/or revoke licences in respect of commercial and promotional matters and to prescribe terms and conditions that may be attached to such licences.

SECTION 62 AND 63 Among the provisions of the Atomic Energy Control Act which in substance will remain unchanged, are the following clauses:

(A) Section 10 (1), which describes the commercial and promotional powers of the Minister. As a consequence the Minister may, subject to the regulations:

1) undertake or initiate research on nuclear energy and prescribed substances and related technology;
2) utilize and assist others in the utilization of nuclear energy and prescribed substances;

3) undertake activities relating to
   i) production and marketing of prescribed substances,
   ii) the design, manufacture and marketing of equipment for the utilization of radioactive nuclides and radiation for medical, industrial and agricultural purposes,
   iii) the design, engineering, construction, operation and marketing of nuclear facilities, and
   iv) the design, engineering, construction, operation and marketing of facilities for the production, refining, processing, application and use of prescribed substances.

4) cooperate and maintain contact with agencies in other countries, international agencies or with any department or agency of the Government of Canada or of any province on matters related to the production, use, application and control of, and the conduct of research with respect to nuclear energy and prescribed substances;

5) explore for prescribed substances;

6) acquire or cause to be acquired by purchase, lease or expropriation or by any other means, prescribed substances, nuclear facilities or any deposit or any right or interest in any such deposit or prescribed substances;

8) acquire or cause to be acquired by purchase, lease or by any other means any patent rights relating to nuclear energy and prescribed substances; and
9) permit the use of, or sell or otherwise dispose of

i) any discovery or invention,

ii) any improvements in any process, apparatus or machine, or

iii) any patent rights relating to nuclear energy, nuclear facilities or prescribed substances and collect royalties and fees thereon or any payments therefor.

SECTION 64 AND 65 In order to clarify its intent or to resolve problems that have been encountered by those responsible for the administration of the Act, the following provisions will appear for the first time in the Bill:

a) clarification of the authority and procedures contained in the current Act to expropriate land,

b) clarification of the status and powers of the corporations that have been created under section 10(2) of the current Act, or that may be established pursuant to the Bill when it is enacted, and

c) clarification through regulations of the authority of a corporation created pursuant to the old or new Act to enter into contracts.

SECTION 65

(B) Section 10 (2), also essentially unchanged in the new Bill will give the Minister the authority to establish corporations to exercise or perform the powers set out in section 19 (1) of the old Act, so that with the approval of the Governor-in-Council the Minister may:

1) procure the incorporation of corporations under the Kałdâness Corporations Act,
2) assume the direction and control of bodies corporate whose shares are owned by Her Majesty in right of Canada,

3) procure the incorporation in Canada of holding corporations, and

4) authorize a corporation to incorporate or otherwise establish subsidiary corporations.

SECTION 67

(C) Section 9 which gives the Governor-in-Council the authority to make regulations will also be continued, hence regulations may be made under the new Bill:

1) to encourage and facilitate research and investigations with respect to nuclear energy and prescribed substances;

2) respecting the development, production, use and application of nuclear energy and the exploration for, extraction, mining, milling, production, importation, exportation, refining, processing, possession, ownership, use, sale, lease, loan or other disposition of prescribed substances;

3) prescribing classes of contracts entered into by corporations for which approval by the Governor-in-Council is required;

4) respecting information relating to nuclear energy and prescribed substances;

5) prescribing classes of persons who are exempt from the application of subsection 66 (1);

6) prescribing the procedure to be followed for the issuance, amendment, renewal, suspension or revocation of a licence and the terms and conditions that may be attached to such a licence; and
7) generally for carrying out the purposes and provisions of Part II.

PART III

Among other revisions to the Act which are not included in but which will apply to both Parts I and II, the penalty section has been revised to provide for more flexibility with respect to penalties, and for higher maximum penalties which are more in keeping with the gravity of some of the offences covered by the Bill.

SECTION 68 Upon summary conviction, persons guilty of contravening regulations of the Act will be liable to a fine of $1,000 - $10,000 and/or imprisonment of up to two years. This is an increase from fines less than $5,000 and/or two years detention provided for under the old Act. Conviction on indictment penalties have been increased from a fine of less than $10,000 and/or imprisonment of up to five years to the proposed penalty of a fine of $1,000 - $250,000 and/or detention of up to five years.

The penalty for summary convictions contravening Sections 10 (eligibility or conflict of interest), 43 (withholding information from Board inspectors) and 44 (obstruction of Board inspectors) has been proposed as a fine of up to $5,000 and/or six months imprisonment.

Illegal possession of fissionable substances will become an indictable offence and convicted persons will be liable to imprisonment for up to 10 years.

The remainder of Part III of the Bill deals with consequential amendments to other existing legislation and sections facilitating the transition from the old Act to the one proposed and repeal of the old Act.

The Nuclear Control and Administration Act will come into force on a day to be fixed by proclamation.
4. Conclusion

It is evident from discussions held with representatives of federal and provincial agencies, with individual members of the public, with industry and special interest group spokesmen, and from continuing media coverage, that the many and varied issues which prompted the drafting of Bill C-14 will evoke further debate on the provisions of the Bill when it is subjected to in-depth review by the Parliamentary Committee on National Resources and Public Works. As outlined earlier in this paper, the issues of interest are both national and international in character. Many of the implications of the Bill are clearly of major significance particularly in view of the rapid growth and increasing complexity of the nuclear industry during the last decade. The basic objective of the Bill to provide the necessary legislative and regulatory authority required to deal with current and anticipated future issues is perhaps the single most important point to be recognized. This implies substantially greater responsibilities than those provided for in the Atomic Energy Control Act, and in the context of overall restraint on government expenditures, the importance of increased coordination of regulatory activities by related federal and provincial authorities in order to achieve effective control at minimum additional cost.

The existing regulatory process has evolved over the past two decades in response to changing circumstances. This has resulted in a number of improvements over early cooperative arrangements with other departments and agencies at the federal and provincial level. However, further improvements are not only possible but essential in the interest of avoiding duplication of effort commensurate with due recognition of the roles and responsibilities of other authorities.

A brief tabulation of some of the major issues of primary interest and their attendant implications includes the following:

1. the need for a credible source of information on the health, safety and environmental aspects of nuclear energy. The existing Atomic Energy
Control Regulations prohibit the disclosure of information obtained by the Board in the conduct of its operations without the prior consent of the owner of such information. Obviously, this prohibition is seen to be contrary to the public's "right to know". However, it is equally obvious that certain types of information should not be disclosed if it can be shown to be detrimental to the public interest in the broadest sense. Similarly, the release of proprietary information which would prejudice the competitive position of Canadian industry vis-à-vis foreign competitors would constitute a disservice to the Canadian public;

2. the acknowledged requirement for increased public involvement in the regulatory process. Perhaps the most contentious subject in this respect is that of who should be considered as bona fide representatives of the public. The experience of other nuclear regulatory agencies throughout the world has shown that public hearings are not the panacea that some would claim. All too often issues are raised again and again without due consideration of the impact upon the totality of the public interest. It is evident that a clear understanding of the procedures to be followed in resolving generic and site-specific or facility-specific issues will be required. For example, the question of the need for additional nuclear-electric generating capacity should be settled prior to the commitment of funds and the issuance of a construction licence and not raised again and again at the subsequent licensing milestones of the regulatory process as has been the case in the United States and other countries;

3. the requirement for further coordination of related regulatory activities at the federal and provincial level. The findings of the Ham Commission, the Bayda Commission and the Porter Commission will provide substantive input into the anticipated development of cooperative agreements between the Nuclear Control Board and other
federal and provincial agencies. The guiding principle on which such agreements should be based will be that of serving the public interest in the broadest interpretation of the term;

4. the recognized need for authority, on an "as required" basis, to assume responsibility for any remedial action that may be necessary in situations in which private or public premises have been radioactively contaminated as a result of abandonment of radioactive materials. This implies the possibility of additional expenditures, however cost recovery on the basis of the "polluter pays" principle will be the order of the day; and

5. the requirement for a more comprehensive and regionalized compliance program. The widespread use of radioisotopes in industry, agriculture, medicine and research dictates the need for timely and effective inspection and monitoring of the facilities in which these radioisotopes are utilized, to ensure compliance with approved standards and procedures.

The enactment of Bill C-14 will have a significant impact on the regulatory process, the nuclear industry and the general public. It will result in increased openness and greater visibility of the regulatory agency and should enable the further development of public confidence in the effectiveness of regulatory programs. There can be no doubt as to the magnitude of the task to be accomplished. However, the benefits to be achieved will provide ample incentive to meet the challenge.