

# Record of Proceedings, Including Reasons for Decision

In the Matter of

Applicant Cameco Corporation

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Subject Financial Guarantee for the Future  
Decommissioning of the Class IB Nuclear  
Conversion Facility Located in Port Hope,  
Ontario

Hearing Date September 13, 2007

**RECORD OF PROCEEDINGS**

Applicant: Cameco Corporation

Address/Location: 1 Eldorado Place, Port Hope, Ontario L1A 3A1

Purpose: Financial Guarantee for the future decommissioning of the Class IB Nuclear Conversion Facility located in Port Hope, Ontario

Application received: N/A

Date of hearing: September 13, 2007

Location: Canadian Nuclear Safety Commission (CNSC) Public Hearing Room, 280 Slater St., 14th. Floor, Ottawa, Ontario

Members present: L.J. Keen, Chair  
A.R. Graham  
M. J. McDill

Secretary: M. A. Leblanc  
Recording Secretary: M. Young  
Acting General Counsel: S. Maislin Dickson

<b>Applicant Represented By</b>	<b>Document Number</b>
<ul style="list-style-type: none"><li>• T. Gitzel, Chief Operating Officer</li><li>• A. Thorne, General Manager of the plant</li><li>• A. Oliver, Vice President, Fuel Services</li><li>• T. Smith, Environmental Specialist</li></ul>	
<b>CNSC staff</b>	<b>Document Number</b>
<ul style="list-style-type: none"><li>• B. Howden</li><li>• B. Barker</li></ul>	CMD 07-H140
<b>Intervenors</b>	<b>Document Number</b>
<ul style="list-style-type: none"><li>• Municipality of Port Hope</li></ul>	CMD 07-H140.2

**Licence Condition:** Requirements met  
**Date of release of Decision:** October 25, 2007

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## **Introduction**

1. Cameco Corporation (Cameco) has requested that the Canadian Nuclear Safety Commission<sup>1</sup> (CNSC) accept the proposed amendment to the value of the financial guarantee it has submitted for the future decommissioning of the Class IB Nuclear Conversion Facility located in Port Hope, Ontario. The proposed amendment to the financial guarantee was submitted pursuant to Condition 1.3 in licence FFOL-3631.0/2012 (the Licence). The financial instrument proposed by Cameco is an irrevocable letter of credit valued at \$96 million (M) Canadian (CDN) and issued by a Canadian financial institution.
2. Subsection 24(5) of the *Nuclear Safety and Control Act*<sup>2</sup> (NSCA) gives the Commission the authority to require that a licensee provide a financial guarantee in a form that is acceptable to the Commission. CNSC Regulatory Guide G-206<sup>3</sup> provides guidance on the attributes of an acceptable financial guarantee in terms of liquidity, certainty of value, adequacy of value and continuity.
3. The Commission required in the Licence that Cameco establish and maintain an acceptable financial guarantee for the future decommissioning of its facility.

## Issues

4. In considering the application, the Commission was required to decide:
  - a) if the irrevocable letter of credit for \$96M CDN constitutes an acceptable financial guarantee for the future decommissioning of Cameco's Class IB Nuclear Conversion Facility located in Port Hope, Ontario, pursuant to Condition 1.3 of licence FFOL-3631.0/2012.

## Hearing

5. Pursuant to section 22 of the NSCA, the President of the Commission established a Panel of the Commission to review the proposed financial guarantee.
6. The Panel of the Commission (hereafter referred to as the Commission), in making its decision, considered information presented for a public hearing held on September 13, 2007 in Ottawa, Ontario. During the hearing, the Commission considered a written submission from CNSC staff (CMD 07-H140). Cameco was present at the hearing to answer questions from the Commission. The Commission also considered a written submission from one intervenor, the Municipality of Port Hope (CMD 07-H140.2).

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<sup>1</sup> The *Canadian Nuclear Safety Commission* is referred to as the "CNSC" when referring to the organization and its staff in general, and as the "Commission" when referring to the tribunal component.

<sup>2</sup> S.C. 1997, c. 9.

<sup>3</sup> CNSC Regulatory Guide G-206, *Financial Guarantees for the Decommissioning of Licensed Activities*, June 2000.

## Decision

7. Based on its consideration of the matter, as described in more detail in the following sections of this *Record of Proceedings*,

the Commission, pursuant to subsection 24(5) of the *Nuclear Safety and Control Act*, accepts Cameco Corporation's irrevocable letter of credit for \$96M CDN as the financial guarantee for the future decommissioning of the Class IB Nuclear Conversion Facility located in Port Hope, Ontario.

## Issues and Commission Findings

8. In making its decision, the Commission considered issues related to the acceptability of the financial guarantee.

### *Facility Description*

9. CNSC staff stated that the facility primarily converts uranium trioxide powder produced by Cameco's Blind River facility to uranium dioxide (UO<sub>2</sub>), which is used to manufacture CANDU reactor fuel and uranium hexafluoride (UF<sub>6</sub>), which is exported for further processing into fuel for light water reactors. CNSC staff noted that the facility includes recycling and decontamination capabilities and a stand-by plant for UO<sub>2</sub> production.
10. CNSC staff stated that the facility comprises two sites. CNSC staff noted that the following plants and buildings are located on Site 1: UF<sub>6</sub> plant; UO<sub>2</sub> plant; metals plant; North UO<sub>2</sub>/waste recovery plant; East UF<sub>6</sub> plant (non-operational); office buildings and warehouses; powerhouse; and analytical, research and development laboratories. CNSC staff further noted that the other area of Site 1 is the Centre Pier Property, which has buildings used for storage of contaminated solid waste materials, and an outside temporary storage facility for contaminated soils excavated from municipal water treatment plant located on Site 1. CNSC staff also stated that Site 2 consists of two buildings in which contaminated solid waste materials are stored.
11. CNSC staff noted that the decommissioning planning for the facility is complicated by several issues, including historically contaminated soils that existed prior to the acquisition of the facility by Cameco; the existence of two waste management facilities owned by Cameco in Port Hope and Port Granby and operated under separate CNSC licences; and the agreement of the federal government to accept up to 150,000 cubic metres (m<sup>3</sup>) of pre-Cameco existing wastes at the location of the yet-to-be-licensed Port Hope Area Initiative (PHAI) – Port Hope project. CNSC staff further noted that Cameco is planning its Vision 2010 project, a major plant site remediation project that would consist of removal of all of the older or redundant buildings on the plant site.

12. CNSC staff stated that, for the purpose of this application, the two existing waste management facilities were excluded from the preliminary decommissioning plan (PDP) assessment as they are under separate CNSC licences. CNSC staff further stated that it is assumed in the PDP that the 150,000 m<sup>3</sup> of pre-Cameco facility waste could be transferred from Cameco's facility to the PHAI - Port Hope project, with the only costs coming from transportation. CNSC staff noted that Cameco is expected to review the accuracy of these assumptions prior to the expiry of its current licence in 2012.

*Preliminary Decommissioning Plan and Financial Guarantee Proposal*

13. In 2001, the value of the financial guarantee for Cameco's Port Hope Conversion Facility was determined to be \$33.8M CDN, based upon a PDP that was accepted by the CNSC. The financial guarantee was secured by an irrevocable letter of credit and accepted by the Commission.
14. The PDP and financial guarantee were discussed at the public hearing for the licence renewal application for the Port Hope Conversion Facility in 2006<sup>4</sup>. At that time, CNSC staff stated that the PDP required further revision in order to be considered acceptable and form an adequate basis for a revised financial guarantee. CNSC staff noted that the final PDP and financial guarantee would be forwarded to the Commission for its consideration and acceptance at a later date.
15. Following the hearing, Cameco submitted an updated PDP and financial guarantee proposal for the Port Hope Conversion Facility in 2007. CNSC staff stated that it conducted two separate reviews of this proposal to compare it to CNSC Regulatory Guide G-206 and CNSC Regulatory Guide G-219<sup>5</sup>. CNSC staff stated that, following further review and clarification, the proposed cost estimate increased to \$96M CDN.
16. CNSC staff noted that there has been a significant change in the cost estimate since 2001, with the increase from \$33.8M CDN to \$96M CDN. CNSC staff stated that this increase is attributed to a number of factors, including increased labour costs, increased transportation costs, increased demolition costs and other associated costs.
17. CNSC staff stated that the PDP includes safe state of closure costing, near-term Vision 2010 project decommissioning, and future long-term decommissioning of the site in conjunction with the decommissioning of Cameco's Blind River facility.

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<sup>4</sup> Refer to the Record of Proceedings on *Application to Renew the Class IB Nuclear Fuel Facility Operating Licence for the Conversion Facility Located in Port Hope, Ontario*, hearing dates October 4, 2006 and November 28 and 29, 2006.

<sup>5</sup> CNSC Regulatory Guide G-219, *Decommissioning Planning for Licensed Activities*, June 2000.

18. CNSC staff stated that it is anticipated that the PDP and cost estimate will remain valid over the term of the existing licence, and they would be revised for consideration during Cameco's future licence renewal hearing in 2011, unless facility changes invalidate assumptions made in the PDP. CNSC staff noted that in that case, the PDP and cost estimate would have to be revised and the new estimate would be submitted to the Commission for acceptance during the current licence period.
19. CNSC staff outlined the types of work required for the decommissioning of the facility, including plant shutdown, demolition, contamination clean-up, disposal of clean recyclable material, disposal of contaminated rubble, disposal of contaminated soil, disposal of contaminated drums of waste, disposal at a public landfill, and landscaping and improvements. CNSC staff also outlined the main features of the PDP and financial guarantee cost estimate, including a 'Grade B' contingency for uncertainty, which ranges from 15% to 20%, as defined in CNSC Regulatory Guide G-206, and various assumptions. CNSC staff also included a summary table of cost estimates for each decommissioning activity.
20. CNSC staff stated that an irrevocable letter of credit was proposed to be the financial guarantee instrument. Cameco stated that should the proposal be accepted by the Commission, it will provide the instructions to update the irrevocable letter of credit within fifteen business days of being notified of the acceptance of the value of the financial guarantee.
21. The Commission, noting that Cameco has had a recent significant development regarding soil contamination at its UF<sub>6</sub> plant, asked Cameco whether the \$96M CDN estimate will require further revision prior to the expiry of Cameco's licence in 2012. Cameco stated that while it is possible that the contingency factor will be sufficient to address the development, it will revise the cost estimate if required.
22. The Commission sought confirmation from CNSC staff that the cost estimate is adequate to meet all of the requirements for decommissioning through 2012. CNSC staff responded that it is of the opinion that the figures are accurate and adequate.
23. The Commission, noting comments from the Municipality of Port Hope, sought further clarification on the definition of safe state of closure. CNSC staff responded that while there is currently no formal definition of safe state of closure, the intention of a safe state of closure is to reduce the inventories of hazardous materials and nuclear substances from a facility such that the facility can be put into a state of care and maintenance for a number of years with very little hazard potential. CNSC staff explained that a safe state of closure is an interim activity that results in a stable facility, and allows for the preparation of a detailed decommissioning plan and the onset of the process that would lead to a decommissioning license.

24. The Commission asked Cameco if it will be holding any formal or informal discussions with the Municipality of Port Hope concerning the questions it raised in its intervention. Cameco responded that it is of the opinion that it has good communications with the Municipality on most issues. Cameco noted that it has followed up with the Municipality with more discussion on the issue of the PDP and cost estimate. Cameco noted that the end-state objectives that it has chosen are similar to those for the PHAI project for the clean-up of historic waste in Port Hope.
25. The Commission notes that in regard to the comments from the Municipality of Port Hope, it is beneficial for both Cameco and CNSC staff to provide the requested information to the Municipality. Concerning the issue of community consultation, the Commission notes that the Commission hearing process can also serve to fulfill that role.
26. In addition, the Commission notes that there are plans to upgrade the facility through the Vision 2010 project and the PHAI project. The Commission is of the opinion that these upgrades may affect the value of the cost estimate, and as such, a revised cost estimate should be brought to the Commission as appropriate.

#### **Conclusion**

27. The Commission has considered the information and submission of the CNSC staff as presented in the material available for reference on the record.
28. The Commission is satisfied that the amended value of the financial guarantee proposed by Cameco is acceptable.
29. The Commission therefore accepts the proposed irrevocable letter of credit for \$96M CDN as the financial guarantee provided by Cameco Corporation for the future decommissioning of the Class IB Nuclear Conversion Facility located in Port Hope, Ontario.
30. The Commission notes that any future developments concerning the PDP and cost estimate should be brought before the Commission in the mid-term status report for the Cameco Port Hope Conversion Facility, in approximately October 2009. The Commission further notes that in the event that the soil contamination at the UF<sub>6</sub> plant leads to a revised PDP and cost estimate prior to the mid-term, they should be provided to the Commission as soon as they are available.

Linda J. Keen,  
President  
Canadian Nuclear Safety Commission

Date of release of Decision: October 25, 2007