

Record of Proceedings, Including Reasons for Decision

In the Matter of

Applicant Zircatec Precision Industries Inc.

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

Hearing Date September 13, 2007

RECORD OF PROCEEDINGS

Applicant: Zircatec Precision Industries Inc.

Address/Location: 200 Dorset Street East, Port Hope, ON L1A 3V4

Purpose: Financial Guarantee for the future decommissioning of the Class IB Nuclear Fuel 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

Applicant Represented By	Document Number
<ul style="list-style-type: none">• T. Gitzel, Chief Operating Officer• A. Pant, General Manager• A. Oliver, Vice President, Fuel Services• M. Longinov, Manager, Occupational Health & Radiation Safety	CMD 07-H139.1
CNSC staff	Document Number
<ul style="list-style-type: none">• B. Howden• B. Barker	CMD 07-H139
Intervenors	Document Number
<ul style="list-style-type: none">• Municipality of Port Hope	CMD 07-H139.2

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

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Introduction

1. Zircatec Precision Industries Inc. (Zircatec) has requested that the Canadian Nuclear Safety Commission¹ (CNSC) accept the proposed amendment to the value of the financial guarantee it has submitted for the future decommissioning of the Class IB Nuclear Fuel Facility located in Port Hope, Ontario. The proposed amendment to the financial guarantee was submitted pursuant to Condition 1.3 in licence FFOL-3641.0/2012. The financial instrument proposed by Zircatec is an irrevocable letter of credit valued at \$17.995 million (M) Canadian (CDN) and issued by a Canadian financial institution.
2. Subsection 24(5) of the *Nuclear Safety and Control Act*² (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-206³ 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 Zircatec 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 \$17.995M CDN constitutes an acceptable financial guarantee for the future decommissioning of Zircatec's Class IB Nuclear Fuel Facility located in Port Hope, Ontario pursuant to Condition 1.3 of licence FFOL-3641.0/2012.

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 written submissions from CNSC staff (CMD 07-H139) and Zircatec (CMD 07-H139.1). Zircatec 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-H139.2).

¹ 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.

² S.C. 1997, c. 9.

³ 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 Zircotec Precision Industries Inc.'s irrevocable letter of credit for \$17.995M CDN as the financial guarantee provided for the future decommissioning of the Class IB Nuclear Fuel 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 Zircotec is licensed to produce uranium dioxide (UO₂) as pellets contained in all types of fuel bundles for CANDU and research reactors. CNSC staff noted that the facility manufactures three types of fuel bundles: ones using natural uranium, ones using depleted uranium and ones using slightly enriched uranium (SEU).
10. CNSC staff stated that most of the licensed activities are carried out in a building that was constructed in the late 1950s and has expanded several times since then. CNSC staff further stated that the building is constructed of steel, brick and masonry.

Preliminary Decommissioning Plan and Financial Guarantee Proposal

11. In 2001, the value of the financial guarantee for Zircotec's Port Hope Fuel Facility was determined to be \$3.26M 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.

12. The PDP and financial guarantee were discussed at the public hearing for the licence renewal application for the Port Hope Fuel Facility in 2006⁴. 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.
13. Following the hearing, Zircatec submitted an updated PDP and financial guarantee proposal for the Port Hope Fuel 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-219⁵. CNSC staff stated that, following further review and clarification, the proposed cost estimate increased to \$17.995M CDN.
14. CNSC staff noted that there has been a significant change in the cost estimate since 2001, with the increase from \$3.26M CDN to \$17.995M 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.
15. CNSC staff stated that the approach taken by Zircatec in the PDP is that the building would be decommissioned, released from the CNSC regulatory control through the issuance of decommissioning and abandonment licences, and sold for industrial use at a later date. CNSC staff stated that it is assumed that the decommissioning process would occur over a four year period.
16. 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 Zircatec'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.
17. CNSC staff stated that, as a first step, the decommissioning plan anticipates activities related to safe state of closure to remove inventories of nuclear and hazardous substances. CNSC staff stated that, following the safe state of closure, the PDP anticipates an environmental assessment (EA) and licensing process to result in the granting of a facility decommissioning licence by the CNSC.

⁴ Refer to the Record of Proceedings on *Application to Renew the Class IB Nuclear Fuel Facility Operating Licence for the Nuclear Fuel Bundle Fabricating Facility located in Port Hope, Ontario*, hearing dates October 4 and November 30, 2006.

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

18. CNSC staff outlined the work envelopes required for the decommissioning of the facility. 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.
19. CNSC staff stated that an irrevocable letter of credit was proposed to be the financial guarantee instrument. Zircatec 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.
20. The Commission asked how much of the estimated \$17.995M is related to the additional SEU production line. Zircatec stated that it has estimated approximately \$0.75M.
21. 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.
22. 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.
23. The Commission asked Zircatec if it will be holding any formal or informal discussions with the Municipality of Port Hope concerning the questions it included in its intervention. Zircatec responded that it is of the opinion that it has good communications with the Municipality on most issues. Zircatec noted that it has followed up with more discussion on the issue of the PDP and cost estimate. Zircatec noted that the end-state objectives that it has chosen are similar to those for the Port Hope Area Initiative project for the clean-up of historic waste in Port Hope.
24. The Commission notes that in regard to the comments from the Municipality of Port Hope, it is beneficial for both Zircatec 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.

Conclusion

25. The Commission has considered the information and submission of the CNSC staff as presented in the material available for reference on the record.
26. The Commission is satisfied that the amended value of the financial guarantee proposed by Zircatec is acceptable.
27. The Commission therefore accepts the proposed irrevocable letter of credit for \$17.995M CDN as the financial guarantee provided by Zircatec Precision Industries Inc. for the future decommissioning of the Class IB Nuclear Fuel Facility located in Port Hope, Ontario.
28. 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 Zircatec's Port Hope Fuel Facility in approximately October 2009.

Linda J. Keen,
President
Canadian Nuclear Safety Commission

Date of release of Decision: October 25, 2007