



Canadian Nuclear
Safety Commission

Commission canadienne
de sûreté nucléaire

Record of Proceedings, Including Reasons for Decision

In the Matter of

Applicant Canadian Light Source Inc.

Subject Application by Canadian Light Source Inc. for an
Amendment to the Class IB Particle Accelerator
Operating Licence and a Revision of the
Financial Guarantee for its Facility in Saskatoon,
Saskatchewan

Hearing
Date December 21, 2010

RECORD OF PROCEEDINGS

Applicant: Canadian Light Source Inc.

Address/Location: 101 Perimeter Road
University of Saskatchewan
Saskatoon, SK, S7N 0X4

Purpose: Application by Canadian Light Source Inc. for an Amendment to the Class IB Particle Accelerator Operating Licence and a Revision of the Financial Guarantee for its Facility in Saskatoon, Saskatchewan

Application received: June 29, 2010

Date of hearing: December 21, 2010

Location: Canadian Nuclear Safety Commission (CNSC) 280 Slater St.,
Ottawa, Ontario

Members present: M. Binder, Chair

Secretary: M. Leblanc
Recording Secretary: D. Major

Licence: Amended

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Introduction

1. Canadian Light Source Inc. (CLS) has applied to the Canadian Nuclear Safety Commission¹ (CNSC) for an amendment to the Class IB Particle Accelerator Operating Licence to authorize the construction of the Brockhouse Building Addition at the CLS facility located on the University of Saskatchewan campus in Saskatoon, Saskatchewan. The current licence, PA1OL-02.02/2012, expires on May 31, 2012.
2. CLS is seeking the Commission's approval to include in Appendix A of its licence a revised version of the current CLS Safety Report to address the modification to the existing facility footprint.
3. CLS is also seeking the Commission's approval of a revised preliminary decommissioning plan and financial guarantee in accordance with its licence condition 10.1.
4. The CLS facility is a particle accelerator nuclear facility that is capable of operating at energies higher than 50 MeV and is classified as a Class IB nuclear facility under the *Class I Nuclear Facilities Regulations*².
5. There is no addition of new technology; the operation of the beamlines that will be housed in the new building addition will follow the procedure found in Appendix B of CLS's operating licence. These changes are therefore administrative in nature and would not change the existing physical works or the physical activities at the licensed facility.

Issue

6. In considering the application, the Commission was required to decide, pursuant to subsection 24(4) of the *Nuclear Safety and Control Act*³ (NSCA):
 - a) if CLS is qualified to carry on the activity that the amended licences would authorize; and
 - b) if, in carrying on that activity, CLS would make adequate provision for the protection of the environment, the health and safety of persons and the maintenance of national security and measures required to implement international obligations to which Canada has agreed.

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.O.R./2000-204

³ Statutes of Canada (S.C.) 1997, chapter (c.) 9.

Hearing

7. Pursuant to section 22 of the NSCA, the President of the Commission established a Panel of the Commission to review the application. In establishing the process, a standing panel on procedural matters determined that it was not necessary to hold a public hearing on these matters, and the hearing was conducted by a panel of one Commission Member, based on written submissions.
8. The Commission, in making its decision, considered information presented for a hearing held on December 21, 2010 in Ottawa, Ontario. During the hearing, the Commission considered written submissions from CNSC staff (CMD 10-H119) and CLS (CMD 10-H119.1).

Decision

9. Based on its consideration of the matter, as described in more detail in the following sections of this *Record of Proceedings*, the Commission concludes that CLS has met the conditions of subsection 24(4) of the NSCA. Therefore,

the Commission, pursuant to section 24 of the *Nuclear Safety and Control Act*, amends the Class 1B Particle Accelerator Operating Licence PA1OL-02.02/2012 issued to Canadian Light Source Inc. for the CLS facility located on the University of Saskatchewan campus in Saskatoon, Saskatchewan. The amended licence, PA1OL-02.03/2012, is valid until May 31, 2012.

10. The Commission includes in the licence the proposed changes as recommended by CNSC staff in CMD 10-H119.

Issues and Commission Findings

11. In making its licensing decision, the Commission considered a number of issues relating to CLS's qualification to carry out the proposed activities and the impact of the proposed changes on measures for protecting the environment, the health and safety of persons, national security, and international obligations to which Canada has agreed.
12. The purpose of the CLS request is to expand the CLS building with the Brockhouse Building Addition to house the Brockhouse beamlines. The proposed building addition falls within the existing exclusion zone and will meet the same building requirements as the existing building.

Safety Report Review

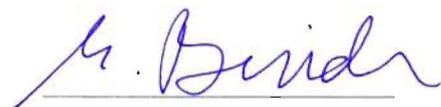
13. In support to their application, CLS submitted to CNSC staff a revised CLS Safety Report. CNSC staff reviewed CLS's licence amendment application and supporting documentation, and assessed the proposed project. CNSC staff found that the revised Safety Report adequately addresses the building expansion, which presents no safety issues relating to the operation of these new beamlines.
14. CNSC staff discussed the radiation protection aspects of the project. No radiological hazards are introduced as a result of the expansion of the building. CNSC staff has concluded from the review of the safety report that the proposed expansion and its operation will result in no impact in terms of radiation protection on the staff or the public.

Proposed Preliminary Decommissioning Plan and Financial Guarantee Assessment

15. CLS has submitted a revision to its preliminary decommissioning plan, cost estimate and financial guarantee to reflect an increase in the size of the facility, inflation, and updated labour costs. CLS submitted an Irrevocable Letter of Credit issued by the Royal Bank of Canada to support the revised financial guarantee. CNSC staff has found that the revised Preliminary Decommissioning Plan, cost estimate and financial guarantee are acceptable, and noted that, if approved by the Commission, the financial guarantee will remain in effect until April 30, 2014, unless there are changes to the facility.

Application of the *Canadian Environmental Assessment Act*

16. Before making a licensing decision, the Commission must be satisfied that all applicable requirements of the *Canadian Environmental Assessment Act*⁴ (CEAA) have been fulfilled.
17. CNSC staff reported that it had completed an Environmental Assessment (EA) determination. CNSC staff stated that there was no requirement for an EA pursuant to section 7 of the CEAA and schedule 1, part 1, section 8 of the *Exclusion list Regulations, 2007*⁵.
18. The Commission is satisfied that all applicable requirements of the CEAA have been fulfilled.



Michael Binder
President,
Canadian Nuclear Safety Commission

DEC 21 2010

Date

⁴ S.C. 1992, c. 37.

⁵ S.O.R./2007-108