



Canadian Nuclear
Safety Commission

Commission canadienne
de sûreté nucléaire

Summary Record of Proceedings and Decision

In the Matter of

Applicant Canadian Light Source Inc.

Subject Application to Renew its Particle Accelerator
Operating Licence

Public Hearing
Date May 2, 2012

RECORD OF PROCEEDINGS

Applicant: Canadian Light Source Inc., (CLSI)

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

Purpose: Application to renew the Class IB Particle Accelerator Operating
Licence

Application received: January 31, 2012

Date of public hearing: May 2, 2012

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

Members present: M. Binder, Chair R. J. Barriault
M. J. McDill A. Harvey
D.D. Tolgyesi R. Velshi

Secretary: M.A. Leblanc

Recording Secretary: S. Dimitrijevic

Senior General Counsel: J. Lavoie

CLSI Represented By	Document Number
<ul style="list-style-type: none">• J. Hormes, Executive Director• W. Davidson, Chair of Board of Directors• M. de Jong, Director of Accelerators• M. Benmerrouche, Manager, Health, Safety & Environment• Ahmad, Manager, Quality Assurance• T. Ellis, Director of Research• J. Cutler, Deputy Director & Director of Industrial Science• M. McKibben, Director Technical Services	CMD 12-H4.1 CMD 12-H4.1A
CNSC staff	Document Number
<ul style="list-style-type: none">• A. Régimbald• K. Murthy• J. Plante	CMD 12-H4 CMD 12-H4.A

Licence: Renewed

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INTRODUCTION

1. Canadian Light Source Incorporated (CLSI) has applied to the Canadian Nuclear Safety Commission¹ for the renewal of the Class IB particle accelerator operating licence for its Canadian Light Source (CLS) facility located on the campus of the University of Saskatchewan in Saskatoon, Saskatchewan. The current operating licence, PA1OL-02.04/2012, expires on May 31, 2012. CLSI has applied to renew its operating licence for a period of ten years.
2. The CLS facility is a national synchrotron radiation facility that consists of three major systems: a linear accelerator, a booster synchrotron and a storage ring with a circumference of about 170 m, which keeps electrons circulating at 2.9 GeV (gigaelectronvolts) for several hours. The facility produces synchrotron radiation that is used as a light source for experiments in diverse fields. CLSI operates the CLS facility as a separate, non-profit corporation, wholly owned by the University of Saskatchewan.
3. Synchrotron light sources produce electromagnetic radiation and a very small amount of radioactive material, mostly by the activation of components through interaction with the electron beam. The emission of any high-energy radiation stops instantaneously as soon as the electrons stop circulating in the ring (i.e., after turning off the accelerator systems).

Issue

4. In considering the application, the Commission was required to decide, pursuant to subsection 24(4) of the *Nuclear Safety and Control Act*² (NSCA):
 - a) if CLSI is qualified to carry on the activity that the licence would authorize; and
 - b) if, in carrying on that activity, CLSI 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.

Public Hearing

5. The Commission, in making its decision, considered information presented for a public hearing held on May 2, 2012, in Ottawa, Ontario. The public hearing was conducted in accordance with the *Canadian Nuclear Safety Commission Rules of Procedure*³. During the public hearing, the Commission considered written submissions and heard oral presentations from CNSC staff (CMD 12-H4, CMD 12-H4.A) and CLSI (CMD 12-H4.1). The Commission received no requests for intervention.

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

³ Statutory Orders and Regulations, S.O.R./2000-211.

DECISION

6. 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 CLSI is qualified to carry on the activities that the licence will authorize. The Commission is of the opinion that CLSI, in carrying on these activities, will 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. Therefore,

the Commission, pursuant to section 24 of the *Nuclear Safety and Control Act*, renews the Particle Accelerator Operating Licence issued to Canadian Light Source Incorporated for its Canadian Light Source facility located on the campus of the University of Saskatchewan in Saskatoon, Saskatchewan. The renewed licence, PA10L-02.00/2022, is valid from June 1, 2012 to May 31, 2022.

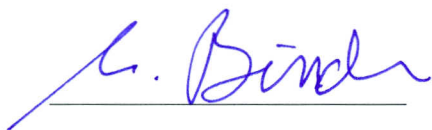
7. The Commission includes in the licence the conditions as recommended by CNSC staff and set out in the draft licence attached to CMD 12-H4. The Commission also accepts CNSC staff's recommendation regarding the delegation of authority in the Licence Conditions Handbook (LCH). The Commission notes that CNSC staff can bring any matter to the Commission as applicable. The Commission directs CNSC staff to inform the Commission on an annual basis of any changes made to the LCH.
8. With this decision, the Commission directs CNSC staff to provide annual industry reports on the performance of CLS, as part of the annual report on the safety performance of nuclear substances in Canada. CNSC staff shall present these reports at public proceedings of the Commission, in the fall of each year.

ISSUES AND COMMISSION FINDINGS

9. In making its licensing decision, the Commission considered a number of issues relating to CLSI's qualification to carry out the proposed activities and the adequacy of the proposed measures for protecting the environment, the health and safety of persons, national security and international obligations to which Canada has agreed.
10. The Commission determined that there was no requirement for an Environmental Assessment pursuant to subsection 5(1) of the *Canadian Environmental Assessment Act*⁴ (CEAA). The Commission is satisfied that all applicable requirements of the CEAA have been fulfilled.

⁴ S.C. 1992, c. 37.

11. The findings of the Commission will be presented in a *Record of Proceedings*, including *Reasons for Decision*, to be published at a later date.



Michael Binder
President,
Canadian Nuclear Safety Commission

MAY 29 2012

Date