



Canadian Nuclear
Safety Commission

Commission canadienne
de sûreté nucléaire

Record of Proceedings, Including Reasons for Decision

In the Matter of

Applicant Atomic Energy of Canada Limited

Subject Application to Amend the Chalk River
Laboratories Nuclear Research and Test
Establishment Operating Licence

Hearing
Date October 30, 2009

RECORD OF PROCEEDINGS

Applicant: Atomic Energy of Canada Limited

Address/Location: Chalk River Laboratories, Chalk River, Ontario, K0J 1J0

Purpose: Application to Amend the Chalk River Laboratories Nuclear Research and Test Establishment Operating Licence

Application received: May 13, 2009 and July 20, 2009

Date of hearing: October 30, 2009

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

Members present: M. Binder, Chair

Secretary: K. McGee

Recording Secretary: S. Dimitrijevic

Licence: Amended

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Introduction

1. Atomic Energy of Canada Limited (AECL) has applied to the Canadian Nuclear Safety Commission¹ (CNSC) for amendments to the Nuclear Research and Test Establishment Operating Licence, NRTEOL-01.04/2011, for its Chalk River Laboratories (CRL) located in Chalk River, Ontario. AECL proposed to delete or update some of the current licence conditions.
2. Several conditions were introduced in the renewed CRL operating licence in 2006, requiring AECL to perform particular tasks by specified dates. Some of those conditions have served their purpose and are no longer needed, while for others, AECL has requested that they be updated.
3. In addition to AECL's numerous licence amendment requests, CNSC staff has proposed two new licence conditions and two new Appendices.

Issue

3. 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 OPG is qualified to carry on the activities that the amended licences would authorize; and
 - b) if in carrying on these activities, AECL 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.

Hearing

4. Pursuant to section 22 of the NSCA, the President of the Commission established a Panel of the Commission (hereafter referred to as the Commission) to hear this matter. In establishing the process, a standing panel on procedural matters determined that it was not necessary to hold a public hearing on the matter, and the hearing was conducted by a panel of one commission member, based on written submissions.
5. The Commission, in making its decision, considered information presented for a hearing held on October 30, 2009 in Ottawa, Ontario. During the hearing, the Commission considered written submissions from CNSC staff (CMD 09-H115) and AECL (CMD 09-H115.1 and CMD 09-H115.2).

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.

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 AECL 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 Nuclear Research and Test Establishment Operating Licence, NRTEOL-01.04/2011, issued to the Atomic Energy of Canada Limited for its Chalk River Laboratories located in Chalk River, Ontario. The amended licence, NRTEOL-01.05/2011, remains valid until October 31, 2011, unless suspended, amended, revoked or replaced.

7. The Commission includes in the licence the conditions as recommended by CNSC staff in CMD 09-H115.

Issues and Commission Findings

8. CNSC staff reported that it had received two submissions from AECL requesting a licence amendment to delete or update some of the current licence conditions. CNSC staff summarized the required changes to the licence conditions and provided a detailed explanation in CMD 09-H115.
9. For the licence conditions or documents that are no longer needed, CNSC staff proposed to replace the existing text with the phrase “[This condition has been deleted]” or “[“This condition has been deleted”]” instead of deleting the applicable numbering. This change would preserve the numbering system and ensure consistent reference to the appropriate licence condition numbers throughout the remaining licence period.
10. In its submission, CNSC staff enumerated licence conditions and appendices that need to be updated to remove transitional provisions and/or outdated references.
11. AECL has requested to move to newer versions of pressure boundary standards referenced in licence condition 6.1. CNSC staff proposed a new condition 6.6 to allow for a transition period for the work currently underway before the new versions of the pressure boundary codes take effect.
12. CNSC staff also proposed a new condition 10.10 to manage the release limits for hazardous non-radiological substances, introduced in Appendix H to the licence. Currently, there are no release limits for hazardous non-radioactive substances from CRL in the operating licence. However, AECL has incorporated numerical control values for key hazardous substances into its environmental protection program. AECL reports environmental performance against these values to CNSC in annual compliance reports.

13. CNSC staff agreed with AECL's proposal to replace the 2000 version of the NRU Reactor facility authorization, in Appendix B to the licence, with the newer revision of June 25, 2009. The revised facility authorization reflects the current facility configuration and is based on the most recent safety analysis report for the NRU Reactor. It also includes the limiting conditions for safe operation for the NRU upgrades.
14. CNSC staff reported that it had reviewed the revised version of the CRL site security report and found it acceptable. CNSC staff proposes to replace the 2006 version of the CRL site security report in Appendix A to the licence with the newer revision of June 2009.
15. CNSC staff proposed to the Commission to include the derived release limits (DRL) and action levels for the Chalk River Laboratories, referred to in conditions 7.3, 7.16, and 10.1 of the licence, in a new Appendix G to the licence. The intention of this measure is to establish a release limit so that compliance with it will give assurance that the public dose limit of 1mSV/y (millisievert per year) will not be exceeded.

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*³ (CEAA) have been fulfilled.
17. CNSC staff reported that it had completed an Environmental Assessment (EA) determination. CNSC staff stated that the proposed amendment is administrative in nature and does not amount to a 'project' under the CEAA; therefore, there was no requirement for an EA pursuant to subsection 5(1) of the CEAA.
18. The Commission is satisfied that all applicable requirements of the CEAA have been fulfilled.

Conclusion

19. The Commission considered submissions received from AECL and CNSC staff, as presented in the material on the record, and concluded that the proposed licence amendments are administrative in nature and would not change the activities that the licensee is authorized to carry on.

The Commission also carefully considered the impact of the proposed amendments and is of the view that they will provide greater clarity and will strengthen and update the licence conditions set out in the CRL licence, and will further improve the safety of the facility, the protection of the environment and the health of the employees and public.

³ S.C. 1992, c. 37.

20. The Commission further concluded that the licensee is qualified to carry on the activities that the proposed amended licence will authorize and, in carrying on those activities, the licensee 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.



Michael Binder
President,
Canadian Nuclear Safety Commission

OCT 30 2009

Date