



Canadian Nuclear
Safety Commission

Commission canadienne
de sûreté nucléaire

Record of Proceedings, Including Reasons for Decision

In the Matter of

Proponent Atomic Energy of Canada Limited

Subject Proposed Environmental Assessment Scoping
Information Document for the National
Research Universal Reactor (NRU) Long-Term
Management Project at Chalk River
Laboratories

Hearing Date July 8, 2009

RECORD OF PROCEEDINGS

Proponent: Atomic Energy of Canada Limited

Address/Location: Chalk River Laboratories, Chalk River, Ontario, K0J 1J10

Purpose: Proposed Environmental Assessment Scoping Information Document for the National Research Universal Reactor (NRU) Long-Term Management Project at Chalk River Laboratories

Date of hearing: July 8, 2009

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

Members present: M. Binder, Chair

Secretary: K. McGee
Recording Secretary: P. Reinhardt

Table of Contents

Introduction	1
Decision	3
Issues and Commission Findings	3
Type of Environmental Assessment Required	3
<i>Screening vs. Comprehensive Study</i>	3
Consultations on the Proposed Scoping Information document	4
<i>Public Consultation</i>	4
<i>Government Consultation</i>	4
<i>Conclusion on the Scoping Information Document</i>	5
Environmental Assessment Studies and EA Screening Report	5
Scope of the Project	6
Scope of the Assessment (scope of the factors)	6
<i>Conclusion on the Scope of the Assessment</i>	7
EA Structure and Approach	7
Public Concern on the Project	7
Conclusion	7

Introduction

1. Atomic Energy of Canada Limited (AECL) has notified, on March 27, 2009, the Canadian Nuclear Safety Commission¹ (CNSC) of its intention to undertake a variety of projects surrounding the long-term management of the National Research Universal Reactor (NRU) at Chalk River Laboratories, Ontario. A revised project description was submitted to the CNSC on June 29, 2009.
2. AECL is presently conducting, in addition to current assessment and repairs of the NRU Reactor, an Integrated Safety Review (ISR) of the NRU to support the licence renewal and continued operation of the reactor to 2021. The proposed project may include, if required, refurbishment, upgrading or replacement of any major components to ensure the NRU operation until that date.
3. AECL's proposal includes modifications to existing facilities and installation of new supporting infrastructure:
 - NRU Reactor Building Rod Bay encapsulation;
 - Replacement of Moly Production Facility (MPF) Ventilation System;
 - Connection of MPF to the Active Drain System;
 - Light Water Detritiation Facility(LWDF);
 - Fissile Waste Storage System (FWSS);
 - Waste management infrastructure for large items generated by future refurbishment, upgrading or replacement of components recommended by the ISR; and
 - NRU Reactor Operations to 2021.
4. Before the Commission is able to make licensing decisions in respect of the proposed project, pursuant to the *Nuclear Safety and Control Act*² (NSCA), it must make a decision on an environmental assessment (EA) of the proposal in accordance with the requirements of the *Canadian Environmental Assessment Act*³ (CEAA). The Commission is the sole Responsible Authority for the EA⁴.

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 S.C. 1992, c.37.

⁴ Responsible Authority in relation to an EA is determined in accordance with subsection 11(1) of the CEAA.

5. As a responsible authority under the CEAA, the Commission must first determine the *scope of the project* and the *scope of the assessment for the project*. To assist the Commission in this regard, CNSC staff prepared a draft Environmental Assessment Scoping Information Document (EASID) (formerly called EA Guidelines) in consultation with other government departments. The draft EASID [*Proposed Scoping Information for the Proposal by Atomic Energy of Canada Limited for the National Research Universal Reactor Long-Term Management Project at Chalk River Laboratories, Ontario*] contains draft statements of scope for the approval of the Commission. The draft EASID also contains recommendations and instructions for the approach to be used in completing the EA, including the conduct of public and stakeholder consultations. The draft EASID is presented in CNSC staff document CMD 09-H117.

Issues

6. In considering the EA Guidelines, the Commission was required to decide, pursuant to subsections 15(1) and 16(3) of the CEAA respectively:
 - a) the *scope of the project* for which the EA is to be conducted; and
 - b) the *scope of the factors* to be taken into consideration in the conduct of the EA.
7. The Commission also considered whether it would, at this time, recommend to the federal Minister of the Environment, pursuant to section 25 of the CEAA, to refer the project to a mediator or a review panel.
8. The Commission considered whether it would, pursuant to subsection 17(1) of the CEAA, delegate the conduct of technical support studies to AECL and the writing of the technical Report to CNSC staff or the proponent.
9. Furthermore, the Commission undertook to decide whether or not it will consider the completed EA Screening Report (Screening Report) in a public hearing or in a closed session.

Public Hearing

10. Pursuant to section 22 of the NSCA, the President of the Commission established a Panel of the Commission to hear this matter.
11. In making its decision, the Commission considered information presented for a hearing held on July 8, 2009 in Ottawa, Ontario. The hearing was conducted in accordance with the Commission's process for determining matters under the CEAA. During the hearing, the Commission received written submissions from CNSC staff (CMD 09-H117) and AECL (CMD 09-H117.1).

Decision

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

the Canadian Nuclear Safety Commission, pursuant to sections 15 and 16 of the CEAA, approves the Proposed Environmental Assessment Scoping Information Document [*Proposed Scoping Information for the Proposal by Atomic Energy of Canada Limited for the National Research Universal Reactor Long-Term Management Project at Chalk River Laboratories, Ontario*].

13. The Commission decides that it will not, at this time, refer the project to the federal Minister of the Environment for his referral to a mediator or review panel. The Commission notes that it may make such a referral at any time during the course of the EA process if warranted.
14. The Commission decides that it will delegate the conduct of technical support studies and the preparation of the Environmental Impact Statement report to the proponent, AECL.
15. Finally, the Commission decides that it will consider the completed EA Screening Report in the context of a closed session of the Commission, unless circumstances or findings warrant the matter being considered at a public hearing of the Commission.

Issues and Commission Findings

Type of Environmental Assessment Required

Screening vs. Comprehensive Study

16. The proposed project is not of a type identified in section 19 of the *Comprehensive Study List Regulations*⁵. Therefore, pursuant to subsection 18(1) of the CEAA, the CNSC is required to ensure that a screening EA of the project is performed and a Screening Report prepared before a licensing decision to allow the project to proceed in whole or in part can be made by the Commission under the NSCA.
17. Based on information included in CNSC staff's submission, there is no, at this point in time, potential significant environmental effects or public concern associated with the project that would warrant having the project referred to a mediator or a review panel. The Commission concludes that, pursuant to the CEAA, a screening EA of the project is satisfactory.

⁵ S.O.R./94-638.

Consultations on the Proposed Scoping Information document

18. As part of its review of the adequacy of the EASID and, in particular, to assess the level of public concern about the project, the Commission took into account the views of the public and other stakeholders. In this regard, the Commission considered whether the consultations carried out thus far by CNSC staff and the proponent provided the public and other stakeholders with adequate opportunity to become informed and express their views about the EA.

Public Consultation

19. CNSC staff reported that a public registry was established for this environmental assessment, as required by section 55 of the CEAA, and identified in the Canadian Environmental Assessment Registry (CEAR) with the following number: 09-01-46668. Based on the public participation criteria and rationale provided in Appendix A of the Scoping Information Document, AECL's proposal was determined to require a 'Low level' of public participation. Public participation will be conducted by CNSC using the following activities:

- Posting the notice of commencement of the EA on both Web sites, CNSC and the CEAR within two weeks of a determination;
- Posting of a notice of the availability of the Scoping Information Document, for information only; and
- Posting of the availability of the Draft Screening Report and allowance of a 20-day review and public comment period, anticipated for June 2010.

Government Consultation

20. CNSC staff reported that, in accordance with the CEAA *Regulations Respecting the Coordination by Federal Authorities of Environmental Assessment Procedures and Requirements*⁶, CNSC staff started to consult on the draft Scoping Information Document, and will continue to consult during the course of the EA, with the relevant Federal Authorities: Health Canada, Fisheries and Oceans Canada, Natural Resources Canada and Environment Canada. A federal review of the Scoping Information Document went on from June 15 until June 30, 2009 and all comments received were addressed accordingly.

⁶ S.O.R./97-181.

21. CNSC staff stated that the Ontario Ministry of the Environment (OMOE) and the Ontario Ministry of Natural Resources were also consulted and confirmed that the Ontario *Environmental Assessment Act*⁷ did not apply to the proposed project.
22. CNSC staff reported that it will engage with any interested Aboriginal group to share information and address concerns in relation to AECL proposed project. The following Aboriginal groups and entities were identified and provided project specific information: Algonquins of Pikwàkanagàn, Ottawa Regional Métis Council and Algonquin Consultation Office. No special interest for the project was raised.

Conclusion on the Scoping Information Document

23. The Commission is satisfied of the adequacy of the consultation during the preparation of the draft Scoping Information Document.

Environmental Assessment Studies and EA Screening Report

24. The Commission determines the process to be followed for the EA Screening Report, including if the EA studies would be delegated to AECL and if the Screening Report would be reviewed in the context of a public hearing or a closed session of the Commission.
25. CNSC staff recommended that, pursuant to Subsection 17(1) of the CEAA, the technical studies required by CEAA be delegated to AECL. AECL will be provided with the scoping information document to carry out the environmental assessment studies and will have to submit later to CNSC staff a detailed Environmental Impact Statement report. The report will undergo CNSC staff and other Federal Authorities review before CNSC staff prepares a draft Screening Report and submits it for public consultation for a period of 20 days in approximately June 2010. After the consultation, a final EA Report will be prepared by CNSC staff and will be submitted to the Commission for consideration.
26. CNSC staff recommended that the final EA Screening Report be considered by the Commission in a closed session of the Commission based on the low level of public concern as assessed since the posting of the commencement of the EA for this project. This recommendation is based on the EA track report and on the nature of the NRU Reactor Long-term Management Project for which proposed activities to be conducted are within the well-characterized existing site, and therefore, having limited environmental interactions that are already identified. CNSC staff noted that, if during the current EA, it became aware of changes to the above rationale, it will notify the Commission.

⁷ R.S.O. 1990, c.E18.

27. Based on CNSC staff's recommendation, the Commission decides to delegate the EA Screening studies to AECL. The Commission also decides that the EA Screening Report for this project be reviewed in the context of a closed session, unless circumstances or findings warrant the matter being considered at a public hearing of the Commission.

Scope of the Project

28. The scope of the project is outlined in section 2.1 of the Scoping Information Document. The physical works for this proposal are the NRU Reactor Building, the Molybdenum Production Facility, the waste management infrastructure, the proposed Light Water Detriation Facility (LWDF) and the proposed Fissile Waste Storage System (FWSS).
29. CNSC staff noted that preliminary decommissioning plans for the FWSS, the LWDF and all other structures will be included in the assessment and that the existing plan for AECL's NRU Reactor Building will further be revised to include proposed modifications to the facility to ensure that it is adequate and updated if necessary.
30. CNSC staff included in the draft Scoping Information Document a list of associated operations and activities that are within the scope of the proposed project, including site preparation and construction activities for the NRU Reactor Building, the Molybdenum Production Facility, the Light Water Detriation Facility (LWDF) and the Fissile Waste Storage System (FWSS). These activities also include operation of the FWSS and the LWDF.
31. CNSC staff concurred with AECL's project description and with the types of effect generated by the project.
32. Based on the information received, the Commission accepts CNSC staff's recommendations concerning the *scope of the project* and approves the definition of the project scope as set out in Section 2.1 of the draft EA Scoping Information Document.

Scope of the Assessment (scope of the factors)

33. The mandatory factors in subsection 16(1) of the CEAA are: the environmental effects of the project, including the environmental effects of malfunctions or accidents that may occur in connection with the project and any cumulative environmental effects that are likely to result from the project in combination with other projects or activities that have been or will be carried out; the significance of these effects; the comments from the public that are received in accordance with the CEAA and its regulations; and measures that are technically and economically feasible and that would mitigate any significant adverse environmental effects of the project.

34. As allowed by paragraph 16(1)(e) of the CEAA, CNSC staff recommended that the CNSC also requires consideration of the purpose of the project as well as the need for a preliminary design and implementation plan for a follow-up program with respect to the project.

Conclusion on the Scope of the Assessment

35. Based on the above information reported by CNSC staff, the Commission concludes that the *scope of the assessment*, as described in section 3.0 of the draft Scoping Information Document, is appropriate for the purpose of the environmental assessment of the proposed project.

EA Structure and Approach

36. CNSC staff included in the Scoping Information Document an extensive structure for the Screening Report. CNSC staff also stated that the Screening Report will present a conclusion as to whether the project is likely to cause significant adverse environmental effects, taking into account the appropriate mitigation measures. CNSC staff will make recommendations to the Commission related to the project when the EA report will be available, consistent with section 20 of the CEAA.
37. Based on the CNSC staff recommendation, the Commission is satisfied with the structure, approach, and other instructions for conducting the EA, as described in the Scoping Information Document attached to CMD 09-H117.

Public Concern on the Project

38. No specific concerns from the public were raised by the proposed project since its commencement was advertized on CNSC and CEAA Web sites on April 16, 2009.

Conclusion

39. The Commission has considered the submissions of CNSC staff as presented for reference on the record for the hearing.
40. The Commission, pursuant to sections 15 and 16 of the CEAA, approves the *Proposed Scoping Information Document for the Proposal by Atomic Energy of Canada Limited for the National Research Universal Reactor Long-Term Management Project at Chalk River Laboratories, Ontario* presented in CMD 09-H117.
41. The Commission also concludes that, at this time, it will not refer the project to the federal Minister of the Environment for referral to a mediator or review panel in accordance with the provisions of the CEAA.

42. The Commission decides that, pursuant to subsection 17(1) of the CEAA, the conduct of technical support studies will be delegated to AECL.
43. Furthermore, the Commission decides that the completed EA Screening Report will not be considered by the Commission for approval at a public hearing but in a closed session, unless circumstances or findings warrant the matter being considered at a public hearing of the Commission.



Michael Binder
President,
Canadian Nuclear Safety Commission

JUL 16 2009

Date