Minutes of Agenda item 5 of the Canadian Nuclear Safety Commission (CNSC) Meeting held Thursday, September 13, 2007 beginning at 8:35 a.m. in the Public Hearing Room, CNSC Offices, 280 Slater Street, Ottawa, Ontario.

Present:

L.J. Keen, Chair

A. Graham

C.R. Barnes

M.J. McDill

M. Leblanc, Commission Secretary

S. Maislin Dickson, Acting General Counsel

P. Bourassa, Recording Secretary

CNSC staff advisers were: I. Grant, J. Clarke, T. Viglasky, D. Newland, B. Ecroyd, P. Webster, G. Lamarre and J. Cameron.

Other contributors were (in alphabetical order):

• AREVA: S. Hamilton

• Atomic Energy of Canada Limited: D. Torgerson

• Bruce Power: R. Nixon

• Greenpeace Canada: S-P. Stensil

• Hydro-Québec: N. Sawyer

New Brunswick Power Nuclear: G. Thomas
Ontario Power Generation Inc.: P. McNeil

Regulatory Documents Review

- 1. With reference to CMD 07-M33, CNSC staff presented a new regulatory document framework and provided contextual information on five new regulatory documents for the Commission's consideration. Key elements to the improvement initiative are the enhancement of existing activities that set mandatory requirements through regulations and licence conditions and the adoption of a single classification nomenclature for regulatory documents (RD) to replace the previous types of regulatory documents referred to as Regulatory Policies (P), Standards (S), Guides (G) and Notices (N).
- 2. The Commission, noting the current Government of Canada initiatives in streamlining and improving regulatory approaches, commends the CNSC staff for its efforts to increase the

- effectiveness, transparency and efficiency of the CNSC regulatory process.
- 3. The Commission welcomes this increased focus on regulatory policy matters, including approving regulatory document framework plans and draft regulatory documents for public consultation and publication. The Commission agrees with the principal objective of the regulatory documents to provide clarity and guidance on regulatory requirements set out in the *Nuclear Safety and Control Act* (NSCA), the regulations made under the NSCA and the licences administered by the CNSC.
- 4. The Commission accepts the proposed definition and nomenclature for a regulatory document. However, to provide added clarity, the Commission requests that the third paragraph of the proposed definition be changed to:
 - "Each regulatory document aims at disseminating objective regulatory information to *stakeholders*, *including licensees*, *applicants*, *public interest groups and the public...*"

DECISION

- 5. The Commission accepts the proposed approach for the transition phase from the current program. This will allow the continued use of existing RDs, as Policies, Standards and Guides, and the development of transitory RDs some of which will contain legal requirements when referenced in a licence or any other legally enforced instrument, where appropriate.
- 6. The Commission encourages the CNSC staff initiatives to streamline the regulatory document development process, such as conducting parallel internal and external reviews of draft RDs. Regarding external reviews, the Commission supports the use of methods to inform, consult and engage with stakeholders, for example licensees, public and non-governmental organizations, to provide clarity on the new approach to the regulatory framework and to seek comments and improvements on specific proposed RDs. The Commission notes the interest of the industry members and Greenpeace on this matter, as expressed at the meeting.
- 7. Commission also suggests that the CNSC staff consider the stakeholders' comments to extend the public consultation period in order to ensure a meaningful review. The Commission thus suggests that longer consultation periods could be considered for certain RDs, on a case-by-case basis. The Commission notes, however, that balance needs to be struck between the importance of engagement with stakeholders and the importance of an efficient process.

- 8. With respect to the disposition reports prepared by CNSC staff, the Commission suggests that CNSC staff considers providing more detailed responses to comments provided during the public consultation, especially in instances where no changes to the RDs are made.
- 9. Considering the importance of commitments to national and international standards, the Commission notes that CNSC staff should take account of these relevant standards, where appropriate, when reviewing the comments provided on draft RDs. In this regard, the Commission suggests that a preamble be added to each draft RD to explain how the document aligns with national and international standards.
- 10. The Commission suggests that the rationale for including certain expectations or, for example, using specific reference numbers in an RD be documented for future reference.
- 11. The Commission suggests that CNSC staff consider including process maps in certain RDs to facilitate the understanding of a broader, overall view of its relevant regulatory process.
- 12. The Commission proceeded to review the five RDs presented for its consideration, while taking due note of the disposition of comments, where applicable, and the comments provided by those members of industry and non-governmental organization present at the meeting. In this respect, the Commission expresses its appreciation for the comments provided.
- 13. With reference to CMD 07-M33.A, CNSC staff presented RD-310, *Safety Analysis for Nuclear Power Plants*, for the Commission's consideration and approval for publication and implementation.
- 14. The Commission notes that the CNSC observations made in the disposition report should be consistent for all comments received, specifically with respect to proposed changes to the definition of safety analysis and the deletion of the words "engineering and science".
- 15. The Commission approves RD-310 for publication and implementation with the following suggestion: section 5.5, item 4 should be written in such a way that it is clear that the code uncertainty refers to computer code.

DECISION

16. With reference to CMD 07-M33.A, CNSC staff presented RD-346, *Site Evaluation for New Nuclear Power Plants* for the

Commission's consideration to approve the RD to proceed to public consultation.

17. The Commission accepts that draft RD-346 be released for public consultation. In light of the comments received by stakeholders regarding the period of consultation, the Commission requests that, for this RD, the period be extended to 90 days, during which CNSC staff will hold an information session with licensees and other key stakeholders, such as non-governmental organizations.

DECISION

- 18. With this decision, the Commission makes the following suggestions to be addressed by CNSC staff before the RD is presented to the Commission for publication.
- 19. As a general comment, the Commission suggest that a preamble be added to the draft RD to provide information regarding the requirement for determinations on environmental assessments for sites, pursuant to the *Canadian Environmental Assessment Act*.
- 20. The Commission also suggests that the document make note of the potential for future refurbishment or life extension of a nuclear power plant.
- 21. The Commission also makes several suggestions on specific sections of the draft RD, as follows:

Section 5.0: note where there is an appropriate transition to on-site radiological waste management. There should also be consideration of the effects of thermal pollution on surrounding bodies of water, of the municipality's existing and future long-term plans and of the proximity to existing or potential airports. Criteria should also be established to consider the synergy of multiple events and multiple effects of several different activities on a same site.

Section 6.0: include consideration of archaeological data. The baseline data should also refer to "sufficient sample size and duration to conduct hypothesis testing". Finally, data to be considered could include information gathered from the oral history of aboriginal people, not only instrumentally-recorded data.

Section 7.0: consider ice storms as a form of precipitation.

Section 8.0: elaborate on transportation issues, including evacuation routes in the event of a nuclear accident and the impact of transportation accidents such as derailment.

Section 9.0: make further consideration on the impact of acts of

terrorism, to be included in a protected document as necessary.

Section 10.0: elaborate on decommissioning activities.

- 22. With reference to CMD 07-M33.A, CNSC staff presented RD-337, *Design of New Nuclear Power Plants* for the Commission's consideration to approve the RD to proceed to public consultation.
- 23. The Commission accepts that draft RD-337 be released for public consultation. In light of the comments received by stakeholders regarding the period of consultation, the Commission requests that, for this RD, the period be extended to 90 days, during which time CNSC staff will hold an information session with licensees and other key stakeholders, such as non-governmental organizations.

DECISION

- 24. With this decision, the Commission makes the following suggestions to be addressed by CNSC staff before the RD is presented to the Commission for publication.
- 25. In general, the Commission suggest that specific terms be used and, where possible, be qualified to limit any possible interpretation. For example the type of "code" could be qualified as to whether it is a referring to a building or computer code and testing qualified as to whether it is referring to numerical or physical testing.
- 26. Security information should be revisited with the intent to provide the level of detail that can be made available in a public document with further information to be addressed in a protected document. The Commission also suggests that the document expand on the security design for the main control room.
- 27. Other matters such as decommissioning and guaranteed shutdown state are examples of issues that could be further expanded.
- 28. The strength of the containment structure under "natural and human-induced events" should address the issue of the strength of the containment relative to potential terrorist threats.
- 29. Added clarity would also be useful with respect to the frequency of events and the quantitative application of the safety goals.
- 30. With reference to CMD 07-M33.B, CNSC staff presented RD-204, *Certification of Persons Working at Nuclear Power Plants* for the Commission's consideration to approve it for publication and implementation.

31. The Commission approves RD-204 for publication and implementation, with the suggestions made in the following paragraphs.

DECISION

- 32. Considering that the responsibility for direct examination of shift personnel is being passed over from CNSC to the licensees, the Commission is of the view that documented directions are needed on the CNSC oversight role and the powers that remain with CNSC. A preamble to the document could thus be included to reflect this and to explain the rationale for passing on this responsibility, including making reference to any similar specific international practice.
- 33. The document could also expand on the concept of quality and fairness of the examination process.
- 34. The Commission also makes several detailed suggestions on specific sections of the RD, as follows:

Section 12.0: add zero tolerance for serious drug addiction (e.g. control room operators).

Section 14.2: clarify whether minimum performance includes issues of extended sick leave where individuals, through no fault of their own, could not maintain minimum performance requirements.

Section 15.0: add a 5th functional device such as a "security breach warning system".

Section 17.2: add a reference to health records, with the appropriate level of confidentiality.

Part III: omit the reference to CANDU reactors and change to generic and technology-neutral.

Glossary: review the definition of recognized university to ensure consistency with Canadian requirements and practices.

35. With this decision, the Commission requests that CNSC staff report to the Commission, after a reasonable period following implementation of this RD, on the effectiveness of the program and the performance of the licensees in carrying it out. The Commission expects that the report will include feedback from the affected workers.

ACTION

- 36. With reference to CMD 07-M33.C, CNSC staff presented RD-360, *Life Extension of Nuclear Power Plants* for the Commission's consideration to approve it for publication and implementation.
- 37. The Commission approves RD-360 for publication and implementation, with the suggestions made in the following paragraphs.

DECISION

- 38. A preamble should be added to define the scope of the document and position it in the suite of documents that covers all aspects of the full-life cycle of nuclear power plants.
- 39. The Commission also suggests that CNSC staff reviews the document so that quality control and quality management are considered sufficiently early in the process. This is to ensure that not only technical systems are reviewed for acceptability but management systems are as well before a return to service is approved.

Chair	Recording Secretar
	Secretary

APPENDIX A

CMD DATE File No

07-M33 2007-08-28 (1.03.04)

Introduction for an improved regulatory document framework starting with Regulatory Documents RD-310, RD-346, RD-337, RD-204, RD-360

07-M33.A 2007-08-28 (1.03.04)

Regulatory Documents: RD-310, Safety Analysis for Nuclear Power Plants (Decision Item); RD-346, Site Evaluation for New Nuclear Power Plants (Information Item); RD – 337, Design of New Nuclear Power Plants (Information Item)

07-M33.B 2007-07-27 (1-8-8-204)

Regulatory Document RD-204, Certification of Persons Working at Nuclear Power Plants (Decision Item)

07-M33.C 2007-08-27 (1.03.04)

Regulatory Document RD-360, Life Extension of Nuclear Power Plants (Decision Item)