

REGDOC-2.9.1, *Environmental Policy, Assessments and Protection Measures* – Impact Statement

Introduction

Under the *Nuclear Safety and Control Act* (NSCA), the Canadian Nuclear Safety Commission (CNSC) has the authority to regulate the development, production and use of nuclear energy and the production, possession and use of nuclear substances, prescribed equipment and prescribed information in Canada. The regulations under the NSCA set out obligations of licensees, as well as information requirements for all types of licence applications. The NSCA further provides authority for licences issued by the CNSC to contain any term or condition necessary for the purposes of the Act.

The CNSC's regulatory documents provide greater detail and clarity to licensees and applicants on how to meet the requirements set out in the NSCA. The benefits of having a comprehensive suite of regulatory documents in place to address all areas of CNSC responsibility include:

- clearly documented CNSC regulatory expectations
- greater regulatory certainty for licensees
- greater consistency in the information applicants and licensees provide to the CNSC
- transparency for the Canadian public and international community about the standards and expectations the Canadian nuclear industry must meet

In keeping with its commitment to stakeholder engagement, the CNSC consults with stakeholders prior to and during the development of a regulatory document. The CNSC considers the impacts of its proposals on all stakeholders and welcomes feedback on potential impacts throughout the consultation process.

Background

The CNSC regulates the use of nuclear energy and materials to protect health, safety, security and the environment and to implement Canada's international commitments on the peaceful use of nuclear energy; and to disseminate objective scientific, technical and regulatory information to the public. Environmental protection for nuclear facilities and activities is done in accordance with the NSCA and the regulations made under it.

Under the NSCA, one of the CNSC's key responsibilities is protection of the environment. To meet this responsibility, the CNSC has always required the environmental effects of all nuclear facilities or activities to be considered and evaluated when licensing decisions are made. Environmental assessments (EAs), environmental risk assessments (ERAs) and environmental impact statements (EIS) have always been an essential part of the information used by CNSC staff and the Commission to fully evaluate the environmental effects and determine whether adequate provisions will be made to protect the environment.

This regulatory document applies to all applicants and licensees for all nuclear facilities or activities. Applicants and licensees have always been required to provide information on the anticipated and actual environmental impact of their nuclear facility or activity. In addition to the NSCA and the regulations made under it, the *Canadian Environmental Assessment Act, 2012* (CEAA 2012) recognizes

CNSC's ability to ensure rigorous environmental assessment and protection by making the Commission a decision maker under CEAA 2012.

Objectives

REGDOC-2.9.1, *Environmental Policy, Assessments and Protection Measures* clarifies how the CNSC undertakes an EA under the NSCA for all licence applications and, for designated projects, under CEAA 2012. This regulatory document describes:

- the CNSC's policy and principles for environmental protection
- for all nuclear facilities or activities, the scope of an EA and the roles and responsibilities associated with an EA
- the CNSC's requirements and guidance to applicants and licensees for developing environmental protection measures, including an ERA, for both new and existing facilities

In performing an EA (under the NSCA or under CEAA 2012), the CNSC's staff use the information provided by the applicant or licensee's ERA or EIS.

The objectives of this regulatory document are to clarify the existing environmental policy, assessments and protection measures, to ensure a clear public record on matters of environmental protection and to provide guidance on the following requirements:

- all licence applications are subject to an EA, either under the NSCA or under CEAA 2012, commensurate with the scale and complexity of the environmental risks associated with the nuclear facility or activity
- every applicant or licensee has an ERA, commensurate with the scale and complexity of the environmental risks associated with the nuclear facility or activity; the ERA is subject to regular updates (at least every five years, and whenever significant change occurs in either the nuclear facility or activity, or in the science on which the ERA is based)

In addition, REGDOC-2.9.1 is meant to formalize the roles and responsibilities of the Commission, of CNSC staff and of the applicant or licensee in preparing an EA and evaluating the environmental effects of a facility or activity. This regulatory document is also meant to provide clarity on the integration of public participation and Aboriginal engagement in an EA under the NSCA or an EA under CEAA 2012.

Applicants and licensees should refer to REGDOC-2.9.1 when preparing a licence application, when developing an ERA, and when developing or revising their environmental protection measures. Applicants and licensees should also refer to this document for information about the process for an EA under the NSCA or (for designated projects) an EA under CEAA 2012.

CNSC staff will use REGDOC-2.9.1 to assess licence applications for proposed new nuclear facilities or activities, licence applications for existing facilities (renewals and amendments), new ERAs and updates to existing ERAs.

Regulatory approach

This regulatory document provides information to applicants and licensees on protecting the environment, including:

- identification of nuclear facility or activity interactions with the environment and the public
- identification and mitigation of potential environmental effects associated with these interactions

- design and implementation of effluent and emission release measures and of environmental monitoring measures to confirm or test predictions and actual effects
- periodic assessments of environmental protection measures and the licensee's performance

Applicants and licensees are encouraged to consult, early in the process, with CNSC staff. CNSC staff can provide facility or activity-specific guidance to assist with ERAs, environmental protection measures and the EA process (either under the NSCA or under CEAA 2012).

Guidance contained in this document exists to inform the applicant, to elaborate further on requirements or to provide direction to licensees and applicants on how to meet requirements. It also provides more information about how CNSC staff evaluate specific problems or data during their review of licence applications. Licensees are expected to review and consider guidance; should they choose not to follow it, they should explain how their chosen alternate approach meets regulatory requirements.

The requirements and guidance in this document are consistent with modern national and international practices addressing issues and elements that control and enhance nuclear safety. In particular, they establish a modern, risk-informed approach to environmental protection.

The content of this regulatory document is based on CSA standards that were developed by industry and, generally, have already been implemented.

A graded approach, commensurate with risk and with the particular characteristics of a nuclear facility or activity, may be defined and used when applying the requirements and guidance contained in this regulatory document. This regulatory document formalizes the requirements and clarifies the application of a graded approach on a case-by-case basis. Flexibility is provided to allow licensees and applicants to propose measures to protect the environment appropriate to their circumstances. The CNSC will review all applications to ensure the environmental protection measures meet the requirements. In the case of Class 1 nuclear facilities, this regulatory document guides the implementation of the respective CSA standards.

When published, REGDOC-2.9.1 will supersede two regulatory documents previously published by the CNSC:

- P223, *Protection of the Environment*
- REGDOC-2.9.1, *Environmental Protection Policies, Programs and Procedures* (which, when published, replaced S-296, *Environmental Protection Policies, Programs and Procedures at Class I Nuclear Facilities and Uranium Mines and Mills* and G-296, *Developing Environmental Protection Policies, Programs and Procedures at Class I Nuclear Facilities and Uranium Mines and Mills*)

The CNSC cooperates with other jurisdictions and federal departments to protect the environment. Where appropriate, the CNSC may enter into formal arrangements to increase the effectiveness of environmental protection. For example, the CNSC holds memoranda of understanding (MOUs) with Fisheries and Oceans Canada and Environment Canada.

Potential impacts on licensees

An EA under the NSCA is based on information that the applicant or licensee is already required to submit to the CNSC through the established licensing process; this information is generally submitted as part of the applicant or licensee's licence application. As a result, the CNSC does not expect that

significant additional information will be required from applicants or licensees, nor that significant additional cost will be incurred by the applicants or licensees.

All applicants and licensees are expected to complete an ERA or EIS for their facility or activity. It is important to note that a graded approach may be applied. For example, for facilities or activities with no environmental interactions, the licensee's ERA is considered to be complete with the characterization and demonstration of no interaction.

External reviews of the applicant or licensee's EA-related submissions may be appropriate on a case-by-case basis, taking into account the scale and complexity of the environmental risks associated with the facility or activity. The applicant or licensee has the opportunity to provide responses to questions or concerns raised during the external review. The CNSC does not expect that significant additional cost will be incurred by the applicant or licensee.

Some projects ("designated projects" as defined in section 2 of CEAA 2012 and projects proposed on federal lands as defined in section 66 of CEAA 2012) are assessed in accordance with CEAA 2012 (that is, with an EA under CEAA 2012). These assessments are driven by the requirements of CEAA 2012, and the applicant or licensee may be required to provide information to meet those requirements under CEAA 2012.

Implementation

REGDOC-2.9.1, *Environmental Policy, Assessments and Protection Measures* is intended to form part of the licensing basis for a regulated nuclear facility or activity within the scope of the document. It is intended for inclusion either as part of the conditions and safety and control measures in a licence, or as part of the safety and control measures to be described in a licence application and the documents needed to support that application.

Because many licensees are already meeting the requirements of this regulatory document through their existing licensing basis, a transition period before this regulatory document becomes effective is not warranted. However, in any cases where an applicant or licensee is not yet meeting these requirements, CNSC staff expect to consult with them and provide guidance and information as needed. It is expected that the time to conduct an EA under the NSCA or under CEAA 2012 will provide the applicant or licensee with sufficient time to fully implement any requirements that they have not yet addressed.

For each licensee, the implementation strategy for this regulatory document will follow discussions and consultations between CNSC staff and the licensee. Current licensees will be expected to prepare implementation plans and conduct gap analyses. New applicants will be expected to address the requirements in their application.

Feedback requested

The CNSC welcomes comments and additional information on the potential impacts of this regulatory document.

Comments or feedback may be submitted to the CNSC no later than March 29, 2016, in one of the following ways:

Email: consultation@cnsccsn.gc.ca

Fax: 613-995-5086

Mail: Canadian Nuclear Safety Commission
280 Slater Street, P.O. Box 1046, Station B
Ottawa, ON K1P 5S9

All comments received will become part of the public record.

How this information will be used by the CNSC

In fulfilling its mandate as a federal regulator, the CNSC must give consideration to values and principles that are difficult to quantify in a dollar value, such as the need to clearly document its regulatory expectations for all Canadians. It must also give consideration to fulfilling its responsibility under the NSCA to disseminate objective scientific and regulatory information. For these reasons, the CNSC does not intend to conduct a strict quantitative assessment of the costs and benefits associated with the implementation of this regulatory document. However, careful consideration will be given to any information provided by stakeholders on the impacts of this regulatory document or on alternative approaches that may be used to meet its safety objective.

If providing cost estimates, stakeholders are encouraged to be transparent and to ensure benefits and costs are clearly attributed. Assumptions made when calculating costs should be clearly stated, and enough detail should be provided to allow an independent observer to understand how the cost estimate was derived.