

Change register: REGDOC-2.10.1, Nuclear Emergency Preparedness and Response (version 3)

A regulatory document provides an overview of how the CNSC puts its legislation and regulations into practice. Regulatory documents can contain both requirements (what a licensee **must** do) and guidance (what a licensee **may** do) for operating a nuclear facility or device safely in Canada.

Information contained in regulatory documents can be used by:

- organizations as they are applying for a licence to the Commission
 - current licensees seeking clarity on expectations and requirements of CNSC inspectors
 - Indigenous groups and the public seeking detailed information on the CNSC's expectations
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REGDOC 2.10.1, *Nuclear Emergency Preparedness and Response*, version 2 was last updated in February 2016. Changes reflected in this version included:

- requirements and guidance for emergency preparedness programs
- requirements and guidance for offsite activities at applicable facilities (including requirements for pre-distributing iodide thyroid blocking agents such as KI pills and for providing additional emergency preparedness information)
- discussion of the phases of emergency management: preparedness, response and transition to recovery

REGDOC 2.10.1, *Nuclear Emergency Preparedness and Response*, version 3 is based on version 2. In the preparation of version 3, close attention was paid to emerging issues and factors that might impact preparedness and response, along with work conducted in the development of Canadian Standard Association (CSA) standards. These topics included:

- small modular reactors
- lessons learned from:
 - COVID-19
 - exercises and simulations
 - findings from inspections
 - the Point Lepreau 2022 incident

The document was also reviewed and updated with respect to novel technologies, impacts of the proposal on licensed communities, impacts on other regulatory documents, licence application guides and implementation strategies.

Major changes

1. Application of the document to all Class I facilities, regardless of thermal output capacity and technology
2. Strengthened planning requirements for emergency preparedness programs

3. Restructuring of emergency preparedness programs to include: planning basis (i.e., the assumptions that guide the plan); emergency response plan(s) and procedures; recovery plan(s); training and qualification; readiness; public preparedness; and program management
4. Specification of additional requirements for licensees that need emergency planning zones based on the facility's planning basis
5. Reflection of lessons learned from emergencies, such as the COVID pandemic, as well as exercises, drills and inspections
6. Addition of a requirement for all Class I facilities to supply specific plant-specific data to the CNSC Emergency Operations Centre for accident assessment and prognosis

Other changes

Updates related to lessons learned from COVID-19

1. Requirement to ensure backup communications/redundancies in networks
2. Requirement for all licensees to identify and implement provisions so that emergency response facilities, equipment and materials continue to work effectively in the event of another COVID-like pandemic; e.g., requirement for schedules to test equipment, replace batteries and verify inventory

Updates related to lessons learned from exercises and simulations

1. Strengthened requirements for exercise scenarios; i.e., criteria for an exercise scenario to have an offsite release, in order to provide a role for offsite authorities
2. Clarification that the determination of emergency planning zones is the responsibility of the province
3. Separation of the 5-year period to test all requirements in REGDOC-2.10.1 from the 3-year period to do a full-scale emergency exercise
4. Clarification that licensees have 40 business days (as opposed to calendar days) to submit necessary reports to the CNSC

Changes related to lessons learned from inspections

1. Clarification of the technical basis for different sets of requirements above/below 10 MW
2. Clarification of the scope and complexity of emergency preparedness drills/exercises for smaller (non-NPP) licensees
3. Alignment with terminology in CSA N1600

Changes related to lessons learned from Point Lepreau activation 2022

1. Addition of a requirement for the CNSC and licensees to assess communications and data feeds (i.e., the stream of data to users) on a regular basis (once a month)