



Canadian Nuclear Safety Commission



We will never  
compromise  
**safety.**



Canadian Nuclear  
Safety Commission

Commission canadienne  
de sûreté nucléaire

Canada

# Making fair, independent licensing decisions.

## The CNSC is Canada's nuclear regulator

The Canadian Nuclear Safety Commission (CNSC) oversees the use of nuclear energy and materials to protect the health, safety and security of Canadians and the environment and to implement Canada's international commitments on the peaceful use of nuclear energy.

Since 1946, the CNSC and its predecessor, the Atomic Energy Control Board, have regulated Canada's nuclear sector, continuously strengthening Canada's laws, regulations and licensing requirements, and enforcing compliance by licensees.

Canada's nuclear sector has an excellent safety record, and its nuclear facilities are among the safest and most secure in the world — due in large part to the CNSC's strong, effective regulation. Today, the CNSC continues to help ensure that Canada remains a world leader in nuclear safety.

The CNSC works with other Government of Canada organizations that play important roles to ensure that nuclear energy and materials are used safely and securely in Canada and around the world, including Foreign Affairs and International Trade Canada, Health Canada, Environment Canada and Transport Canada. The CNSC also works with many other domestic and international organizations and regulators to fulfill its mandate.



### Did you know?

**International peer reviews have consistently found that Canada's nuclear regulator does an effective job.**





## The Commission Tribunal

The Commission Tribunal is a central part of the CNSC's operations. It acts as an independent body that:

- makes informed, transparent decisions on the licensing of major nuclear facilities and nuclear-related activities
- establishes legally binding regulations and sets regulatory policy
- is supported by a staff organization made up of experts such as environmental and radiation protection specialists, nuclear physicists and engineers
- delegates about 2,500 low-risk licensing decisions annually to designated officers qualified to make decisions on its behalf



### Did you know?

The CNSC works with other domestic and international organizations to always be prepared for potential nuclear emergencies.

### Committed to open public communication

The Tribunal conducts as much business as possible in public hearings and – where feasible – in communities most affected by the matter at hand. All public hearings are broadcast live on the Internet and archived on the CNSC Web site for three months. Transcripts of public hearings and meetings are available online.

After a hearing, the Tribunal makes a decision, only granting a licence to an applicant that demonstrates it is qualified.



# Keeping Canada's nuclear facilities safe.

## Safe Canadian nuclear facilities and activities

Since 1946, Canadians have benefited from a safe nuclear industry, due in large part to the CNSC's diligent regulatory oversight. Safety continues to be the CNSC's number-one priority.

### Safe uranium mining

Canada's uranium mining industry has an excellent safety track record. Most operating Canadian uranium mines and mills are in Saskatchewan, where the CNSC has a regional office with full-time experts who inspect and monitor licensee operations.

### Safe nuclear power

Canada has four nuclear fuel processing facilities, as well as 20 operating power reactors situated in five nuclear power plants. The CNSC has full-time inspectors onsite at every Canadian nuclear power plant to ensure safety and compliance.

### Safe nuclear medicine

The CNSC regulates nuclear materials used in medicine; for example, it ensures that radioisotopes for diagnosing and treating cancer and other diseases are produced and handled safely and securely.

### Safe environment

Protecting the environment is an important part of the CNSC's work. The CNSC requires licensees to evaluate the potential impact of their proposed activities and to reduce or avoid any adverse environmental effects.

### Safe nuclear research and industrial uses

The CNSC regulates nuclear materials used in research and industry, such as low-power reactors at universities and nuclear gauges for oil and gas exploration.

### Safe waste management

The CNSC strictly regulates radioactive waste, which is stored in specially designed facilities engineered for safety.



### Did you know?

Uranium mining is the only mining industry in Canada that is federally licensed and regulated.



## Communicating with the public and stakeholders

The CNSC engages in ongoing public dialogue about its regulatory role.

### Disseminating information

The CNSC communicates its activities and provides information to the public about the effects of nuclear materials and facilities on the environment, and on people's health and safety. On an ongoing basis, it informs the public about the development, production, possession, transport and use of nuclear substances. This is accomplished through public meetings, reports, the Internet and presentations.

### Community outreach

CNSC experts regularly visit communities across Canada, where they make presentations, hold open houses, hear opinions, and answer questions from people who may be concerned about nuclear facilities in their communities. The CNSC also offers funding through its Participant Funding Program to give the public, Aboriginal groups and other stakeholders the opportunity to participate in its regulatory process.

### Public information programs

The CNSC requires licensees of major nuclear facilities to develop and implement public information programs, to keep the public informed about their nuclear activities and any potential related impact on public health and the environment.

## International activities

### Participation in international fora

CNSC subject-matter experts also share expertise and participate in many international committees, groups, meetings and research projects committed to ensuring a safe, secure and peaceful nuclear sector, both now and in the future.

### International commitments

The CNSC ensures that Canadians and Canadian companies comply with Canada's international obligations on the peaceful use of nuclear materials and technology. It also implements Canada's international commitments related to nuclear non-proliferation, safeguards and security.



### Did you know?

The CNSC's experts visit Canadian communities to answer questions about the safety of local nuclear facilities.

# Protecting Canadians and the environment.



## Regulating for safety

The CNSC manages its licensing and compliance activities based on risk. Its staff assess the chance of any potential nuclear-related event happening, and its resulting consequences, and instruct licensees to put specific measures in place to reduce or avoid those risks.

The CNSC requires licensees to implement designs and operate facilities with multiple safety layers. That way, if one safety system or program fails, others will keep the facility and workers safe, limit potential emissions and allow time to correct the problem.

### The CNSC licensing process

A CNSC licence is needed to undertake a nuclear activity or project, with separate licence authorizations required at each stage of a major nuclear facility's life. A CNSC licence is also needed to possess, use, transfer and store nuclear substances.

The CNSC evaluates licence applications to ensure that safety measures are technically and scientifically sound, that all requirements are met, and that the appropriate safety systems are in place to protect people and the environment.

The licensing process offers significant opportunities for public participation. Commission Tribunal hearings and meetings are open to the public and are Webcast live. The CNSC and potential licensees also engage proactively with Aboriginal groups who may be affected by a potential project.



### Did you know?

CNSC experts review and analyze licensees' environmental performance to make sure the environment is protected.



## Stringent compliance and enforcement

The CNSC monitors licensee performance against 14 separate safety and control areas. The Commission Tribunal requires periodic updates on the safety of nuclear facilities and reviews reports of events and incidents.

### Inspections

The CNSC conducts two different types of licensee inspections:

- Type I inspections, which are thorough, resource-intensive, complex on-site reviews that assess and verify key areas of compliance. These are usually conducted by a CNSC inspection team and are systematic, planned, and documented.
- Type II inspections, which may be planned or reactive, announced or unannounced, and are conducted by one CNSC inspector or a team. They verify the results of licensee processes and include routine inspections or rounds to check equipment, systems, records and products.



### Did you know?

The CNSC publishes an annual report card on Canadian nuclear power plant safety performance.

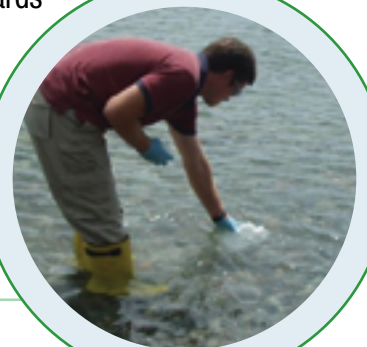
### Regular reviews of licensee reports

The CNSC annually reviews hundreds of licensee reports on many subjects, such as environmental performance and maintenance of aging reactors. Licensees must also notify the CNSC within prescribed deadlines of any significant events or situations that vary from normal operations. These events are reported to the Commission Tribunal and may be followed by detailed compliance assessments, corrective actions and/or enforcement actions.

### CNSC verification at its state-of-the-art laboratory

The CNSC's state-of-the-art laboratory currently offers calibration and analytical services. These allow the CNSC to better support and verify licensees' radiation, environmental and safeguards programs and emergency preparedness procedures.

The CNSC carefully reviews non-compliance and takes action to ensure any situation is quickly corrected. Measures range from a request to the licensee for corrective action, up to and including revocation of a licence or a recommendation for criminal prosecution.



We will never  
compromise  
safety.

[nuclearsafety.gc.ca](http://nuclearsafety.gc.ca)

For more information about the Canadian nuclear sector, visit the CNSC's Web site. Subscribe at [nuclearsafety.gc.ca/subscribe](http://nuclearsafety.gc.ca/subscribe) to receive email notifications about:

- Commission Tribunal hearing documents, meeting notices, agendas and decisions
- news releases, information updates, notices of regulatory action and publication announcements
- notices of CNSC consultations and upcoming events

Visit [nuclearsafety.gc.ca](http://nuclearsafety.gc.ca) to search for, download and order CNSC publications.

### Contact the CNSC

**Phone:** 1-800-668-5284 (*in Canada*) or  
613-995-5894 (*within the National Capital Region or outside Canada*)

**Fax:** 613-995-5086

**Email:** [info@cnsccsn.gc.ca](mailto:info@cnsccsn.gc.ca)

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



Canadian Nuclear Safety Commission