



Natural Resources
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Findings from the Five-Year Review of
**THE THIRD PARTY NUCLEAR
LIABILITY LIMIT UNDER THE
NUCLEAR LIABILITY AND
COMPENSATION ACT**

Canada 

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Background

The ***Nuclear Liability and Compensation Act*** (NLCA — the “Act”), managed by the ***Department of Natural Resources Canada*** (NRCan), establishes a compensation and liability regime in the unlikely event of a nuclear incident. The Act is an enabling legislative cornerstone of the nuclear industry in Canada. The Convention on Supplementary Compensation for Nuclear Damage (CSC), to which Canada is a Party, along with the regimes of the Paris Convention and the Vienna Convention, provide a similar legal framework for the nuclear industry globally.

While nuclear incidents are infrequent, it is important that should they occur, there is sufficient liability and financial coverage for the compensation of victims. It is therefore important that the nuclear third party liability coverage established within legislation provides for meaningful compensation, and that the liability limit values are current from an economic, practical, and legal perspective. In keeping with the international standard, Canada integrated a Five-Year Review (FYR) process into the NLCA to ensure that the value of the liability limits did not erode with time, and to also provide for periodic international benchmarking as the global nuclear liability landscape evolves.

Canada’s NLCA came into force on January 1, 2017, and provided for a phased increase in nuclear civil liability for the Operators of nuclear installations from C\$650 million to C\$1 billion. It is worth noting that the financial security requirements for the Operators of “Power Reactors” occurred in step with the phased liability limit increase, but a similar proportional increase did not occur for the financial security requirements for low-risk installations during this same period. The Act successfully transitioned to its final C\$1 billion liability limit in January of 2020.

In setting this limit, the following considerations were taken into account:

1. it is sufficient to deal with the consequences of a nuclear incident at a Canadian nuclear power plant involving controlled releases of radiation;
2. it is within the capacity of insurers to provide insurance at this level for reasonable costs; and
3. it is in line with the liability limits of other countries.

Section 26 of the NLCA mandates that the Minister review the liability limit at least once every five years. The Act further specifies that the Minister must consider the following when carrying out the review:

1. Changes in the Consumer Price Index, as published by Statistics Canada under the authority of the *Statistics Act*;
2. Financial security requirements under international agreements respecting nuclear liability; and,
3. Any other considerations that the Minister considers relevant.

In accordance with this mandate, NRCan undertook an analysis of the above criteria, and engaged with stakeholders and the public, beginning in early 2021. This report provides a summary of the Department’s analysis, as well as the inputs received from the key stakeholders. Interested parties included those instrumental to the operationalization of the Act — nuclear third party liability insurers and nuclear power plant operators, as well as members of civil society who may ultimately access the liability and compensation regime provided for under the Act.

Executive Summary

The NLCA establishes a compensation and liability regime in the unlikely event of a nuclear incident. Under the mandate of Natural Resources Canada (NRCAN - the Department), and enacted in 2017, the Act requires the operators of nuclear installations to hold up to C\$1 billion in financial security for civil damages resulting from a nuclear incident. Section 26 of the Act requires that the Minister of Natural Resources (the Minister) conduct a review of the liability limit every five years (“Five-Year Review” — FYR). This first FYR must be completed prior to January 1, 2022.

Subsection 26(2) of the Act sets out the scope of what the Minister must consider under the FYR as follows:

1. Changes in the Consumer Price Index (CPI), as published by Statistics Canada under the authority of the *Statistics Act*;
2. Financial security requirements under international agreements respecting nuclear liability; and,
3. Any other considerations that the Minister considers relevant.

The FYR was launched on February 16, 2021, with the publication of a discussion paper on the NRCAN NLCA website. The NRCAN engagement page and social media were subsequently employed to solicit input on the FYR. Members of the public were invited to provide views on the existing C\$1 billion liability limit, the factors they would like to be taken into consideration as part of the review, and identify any implications of an adjustment to the existing liability limit. The public comment period concluded on May 31, 2021, with 16 submissions received.

In addition to reviewing submissions from members of the public and stakeholders instrumental to the implementation of the NLCA, NRCAN engaged within the federal family, including with the Canadian Nuclear Safety Commission (CNSC) and the Office of the Superintendent of Financial Institutions (OSFI) to supplement the Department’s internal analysis.

This report summarizes the Department’s findings and the feedback received throughout the FYR.

Consumer Price Index.

Having regard to the CPI, the value of the liability limit under the NLCA can be considered to have been set at C\$1 billion when Bill C-22 received Royal Assent in 2015. Additional provisions under the Act enabled the phased increase to the liability limit, thereby easing the transition from C\$650 million in 2017, to C\$1 billion in 2020.

It is important to acknowledge that the legislation, and a significant increase to the liability limit up to C\$1.1 billion, was being discussed publicly as early as 2003 in a proposed amendment to the [Nuclear Liability Act, Bill C-415](#). Between the formalization of the C\$1 billion liability limit in 2015, and the end of 2020, inflation has varied between -0.37% and 2.4% annually, with an average value of 1.4%. With the \$1 billion dollar liability limit considered a reasonable value in 2015, and inflation factored in, an inflation adjusted liability limit would be ~C\$1.1 billion in 2021. This was also noted in a submission received as part of the public comment period, which suggested an increase to the liability limit of at least C\$112 million would be appropriate.

International Standards.

Internationally, there are a number of treaties governing nuclear third party liability. Particularly relevant to the discussion are the 2004 Protocol to Amend the Paris Convention on Third Party Liability in the Field of Nuclear Energy of 29 July 1960 (the Revised Paris Convention) and the 2004 Protocol to Amend the Convention Supplementary to the Paris Convention (Revised Brussels Supplementary Convention). Under Revised Paris Convention, the total nuclear third party liability in signatory countries will increase from €170 million (~C\$264 million) currently to €700 million (~C\$1.04 billion) in 2022. Under the combined Paris and Brussels regimes, there will be a €1.5 billion tiered funding structure available to compensate victims of a nuclear incident in these States. This comprises the operator's financial security of €700 million (~C\$1.04 billion), a public tier contributed to by the country of the operator of €500 million (~C\$802 million), and a final pooled tier of funds from countries that are signatories to the Conventions of €300 million (~C\$480 million). It is the value of the operator's financial security, €700 million (~C\$1.04 billion), that is most directly comparable to the liability limit value set out in the NLCA, which describes only the operator's nuclear third party liability financial security requirement.

In addition to the above conventions, the Convention on Supplementary Compensation for Nuclear Damage (CSC), to which Canada is a signatory, presents important considerations. Notably, should the domestic liability limit exceed the \$600 million SDR (C\$1.07 billion 26/07/2021) threshold of the CSC, the entirety of the supplementary funds provided to Canada from other CSC parties, as a requirement of the CSC in the event of a nuclear incident, could be reserved in its entirety for domestic compensation. This would increase the overall compensation pool available to Canadians

Other Considerations.

The NLCA provides, under subsection 26(2)(c), for the Minister to consider other considerations that may be relevant to the FYR. The list below provides reflects important considerations raised over the course the review.



Availability of domestic nuclear liability insurance and other financial security capacity.



Financial security requirements for low risk installations and Small Modular Reactors (SMRs).



Uninsurable risks for which the Government provides indemnification.

This report summarizes the Department's findings and the feedback received throughout the FYR.

Summary of Findings

- Having completed the first FYR, Canada continues to have a strong liability regime that maintains high standards for Canadians.
- An inflation considered value would bring the nuclear third party liability limit to C\$1.1 billion.
- Internationally the liability limit is increasing with the entry into force of the Amended Paris Convention (2004) in January 2022. This amendment will require that operators in signatory States hold over ~C\$1.04 billion in financial security.
- Any increase to the liability limit should be phased in gradually to ensure appropriate insurance market capacity can be provided.
- A number of considerations outside the scope of the FYR were identified during the public comment period and through internal analysis. The most notable of these was a suggested review of the financial security requirements for low risk installations to determine if they remain appropriate, along with the existing indemnity fee structure used to calculate the Government's fees charged for indemnification.