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### CANADA'S NEW NUCLEAR CIVIL LIABILITY REGIME: KEY FEATURES AND IMPLEMENTATION

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#### Abstract

In previous International Nuclear Law Association Congresses, presentations were made on proposals to strengthen Canada's nuclear liability regime, and financial security criteria to be used by the Government of Canada to determine the adequacy and eligibility of insurance and other financial security mechanisms to cover operator liability under Canada's proposed new regime. [1]

Since those Congresses, Canada's nuclear liability regime has been revamped with the coming into force of the *Nuclear Liability and Compensation Act* on January 1, 2017, and Canada's ratification of the Convention on Supplementary Compensation for Nuclear Damage on June 6, 2017.

This paper will present an update on the key features and implementation of Canada's new legislation, including the special provisions for alternative financial security mechanisms to cover operator liability pursuant to the requirements of nuclear civil liability legislation and the criteria used by the Government to evaluate and oversee these mechanisms.

## **Strengthening Canada's Nuclear Liability Regime**

### ***Canada's new domestic nuclear civil liability legislation***

Canada's new domestic nuclear civil liability legislation, the *Nuclear Liability and Compensation Act (NLCA)*, entered into force on January 1, 2017. It replaced the previous *Nuclear Liability Act* with stronger legislation to better deal with liability and compensation for a nuclear incident within Canada.

The NLCA also permitted Canada to implement the International Atomic Energy Agency's (IAEA) Convention on Supplementary Compensation for Nuclear Damage (CSC), which Canada ratified on June 6, 2017.

Under the NLCA, the operator of a nuclear installation is absolutely and exclusively liable for damages within Canada or its exclusive economic zone, or within a CSC Contracting State and its exclusive economic zone, caused by ionizing radiation emitted from the operator's nuclear installation; or from nuclear material being transported to or from the operator's nuclear installation.

The liability of the operator for nuclear damage also extends to incidents caused by natural disasters, including those of an exceptional nature. The NLCA does not apply to a nuclear incident resulting from acts of war or insurrection, other than terrorist activity as defined in the Criminal Code. There are very limited exceptions to the operator's liability and right of recourse: the operator is not liable for damage suffered by a person who caused nuclear incident intentionally, and the operator has no right of recourse against any person other than an individual who intentionally caused the nuclear incident.

The liability limit for nuclear power plant operators was increased from Cdn\$75 million (€50 million) under the previous legislation to Cdn\$1 billion (€660 million). This amount is phased in progressively from Cdn\$650 million (€429 million) in 2017, to Cdn\$750 million (€495 million) in 2018, Cdn\$850 million (€560 million) in 2019, and finally to Cdn\$1 billion in 2020.

The \$1 billion amount was deemed to be sufficient to deal with consequences of controlled releases of radiation, to be within the capacity of insurers to provide insurance at reasonable costs, to counterbalance the imposition of absolute liability on the operator, and to bring Canada more in line with liability limits in other leading countries.

The Minister of Natural Resources must review the limit regularly and it could be increased by regulation.

Lower liability amounts for operators of low-risk installations (such as research reactors) are established in regulations to the NLCA.

Operators must cover their liability with insurance from an insurer approved by the Minister. Subject to the Minister's approval, operators may cover up to 50% of liability with other forms of financial security, such as self-insurance.

The Government may indemnify operators for certain risks through an agreement with the operators. These risks could include risks that insurers are unable to cover, such as bodily injury between 10 years and 30 years after a nuclear incident; and the difference between liability limits for low-risk installations prescribed in regulations and the \$1 billion amount.

The NLCA contains a broadened definition of compensable damages, which includes environmental damages, preventive measures, and certain forms of economic loss.

The limitation period for making claims for bodily injury and loss of life extended in the new legislation to 30 years. A 10-year limitation period will apply to claims for other forms of damage.

The NLCA provides for a dual system for the compensation of claims. Initially, claims will be addressed by the courts, but the Government may establish a special quasi-judicial tribunal to replace the courts in the event of a serious incident. The establishment of a tribunal would better address a large number of claims, and would be more efficient and equitable than courts.

In the unlikely event of a nuclear incident for which the Government has established a tribunal to deal with claims, the Minister must table a report in Parliament and, taking into consideration the public interest and the estimated cost of the damage, Parliament would determine the need for additional funds for compensation if the cost exceeds the operator's liability limit.

The NLCA responds to the 2012 recommendations made by the IAEA's International Expert Group on Nuclear Liability (INLEX), as required by the IAEA Action Plan on Nuclear Safety. Specifically:

- The compensation provided by the NLCA is higher than the minimum amounts required in the CSC.
- The compensation amount and the financial security amounts in the NLCA will be regularly reviewed. Canada's Parliament will determine the approach where damages exceed the operator's financial security.
- The limitation period for bodily injury and loss of life is extended to 30 years.
- Compensation will be available in the case of an incident resulting from grave natural disasters.
- Claims will be addressed by a single forum – promptly and equitably.

### ***Canadian membership in the CSC***

As previously mentioned, the entry-into-force of the NLCA also permitted Canada to implement the provisions of the CSC, which Canada ratified on June 6, 2017, and which entered into force for Canada on September 4, 2017. Membership in the CSC addresses liability and compensation for damage within member countries arising from trans-boundary and transportation nuclear accidents.

Canada chose to join the CSC because it provides legal certainty on jurisdiction in the case of a nuclear incident in Canada or another CSC-member country. It clarifies and removes the liability exposure of Canadian nuclear suppliers and contractors who wish to conduct

business in other CSC-member countries. The CSC also makes available an additional assured and meaningful amount of compensation to claimants in Canada. It is the only nuclear civil liability convention ratified by the United States. Furthermore, it responds to IAEA Action Plan on Nuclear Safety, including its objective that “Member States work towards establishing a global nuclear liability regime that addresses the concerns of all States that might be affected by a nuclear accident with a view to providing appropriate compensation for nuclear damage”.

To join the CSC, a country’s national law must implement either the Paris Convention or the Vienna Convention, or must comply with the provisions of the Annex to the CSC. Canada is not a member of either the Paris Convention or the Vienna Convention, and therefore joined the CSC as an Annex State. To meet its obligations under the CSC, Canada provided the Depository of the CSC with a copy of its national law which complies with the provisions of the CSC and CSC Annex

### **Special provisions for alternative financial security mechanisms to cover operator liability**

As previously mentioned, the NLCA stipulates that operators must cover their liability with insurance from an insurer approved by the Minister. Subject to the Minister’s approval, operators may cover up to 50% of liability with other forms of financial security, such as self-insurance.

Currently, the nuclear insurers approved by the Minister have sufficient insurance capacity to meet the operator’s \$1 billion liability limits under the NLCA. However, in the consultation process associated with the development of the legislation, operators indicated that they wanted the option to cover their liability with alternative forms of financial security to lessen the financial burden of premium costs associated with the insurance to cover the higher limit.

To respond to this concern, the NLCA contains a provision that allows an operator to enter into an agreement with the Minister that authorizes the operator to cover up to half of its liability – or other percentage fixed by regulation – with forms of financial security other than insurance.

In making the choice to allow operators of nuclear installations to use alternative forms of financial security, the Government of Canada must instill confidence that the use of these alternative forms does not increase the risk of compensation funds being unavailable when needed. Claimants for nuclear damage must have access to compensation funds as ‘secure’ as insurance provided by the nuclear insurance pools. It is important that the Government evaluate the use of an alternative form of financial security on the basis of a predictable, stable level of risk exposure. Thus, the Government must apply rigorous financial assessment criteria before permitting any particular form of alternative financial security to be used by operators. Furthermore, the Government must exercise ongoing monitoring of the financial security instrument to ensure fulfillment of the criteria over the long term.

Thus, the alternative forms of financial security are subject to rigorous terms and conditions set by the Minister, and to the ongoing supervision of the Minister. As a result, Natural Resources Canada (NRCan) developed evaluation, acceptance and financial test criteria

to administer the alternative financial security agreements. These criteria, as in the case for insurance, were developed to ensure confidence that compensation funds would be readily available and that the Government would not be exposed to unpredictable levels of risk exposure.

The criteria were elaborated in a paper presented at the 2009 Nuclear Inter Jura Congress so will only be outlined here. The following evaluation criteria assess the quality of a particular type of financial security instrument:

- Liquidity of the financial security instrument;
- Certainty that assured funds will be available;
- Adequacy of the value of funds assured;
- Continuity (over time);
- Cost of financial security instruments to operators;
- Availability of financial security instruments to operators; and
- Implementing agency administrative burden.

Based on these evaluation criteria, it was considered that acceptable forms of alternative financial security could include a letter of credit, a corporate guarantee with financial test, a corporate indemnity with financial test, self-insurance, and a provincial government guarantee. Acceptance criteria would be used to determine if a particular financial instrument met all the terms and conditions required by NRCan to ensure the prompt and efficient disbursement of compensation funds from the instrument.

Prior to the entry-into-force of the NLCA, some operators applied to make use of self-insurance to cover a portion of their liability. Generally, approval of the operator's use of self-insurance is based on the operator meeting the requirements of a financial test which assesses their financial soundness. The operator's use of self-insurance is also subject to a number of conditions that are set out in an agreement that NRCan has negotiated with each operator.

The financial test is a function of the operator's tangible net worth and its credit rating. In support of the operator's application to self-insure a portion of its required financial security under the NLCA, it must provide information attesting to its tangible net worth, as well as credit ratings from a number of certified credit rating agencies. This information permits the Department to assess the maximum amount of self-insurance that the operator may hold. In practice, the financial test also acts as a second and more stringent limit than the 50% limit on alternate financial security imposed by the NLCA.

As a condition of the approval to self-insure, the operator is also required to maintain a minimum amount of unencumbered liquidity to honour its self-insurance obligations for any compensation arising from civil nuclear damages that may result from a nuclear incident.

Other conditions imposed on the operator and ongoing oversight mechanisms contained in the agreement between the operator and NRCan include:

- periodic evaluation of an operator's current ratio of assets divided by current liabilities, to assist in determining how much of the operator's current assets could be used towards honouring any civil nuclear damages that may result from a nuclear incident;

- an annual review of the composition of the operator's tangible net worth calculation (i.e. the asset base) to determine the level of current versus non-current assets, in order to assess how quickly the operator could pay the associated liability resulting from a nuclear incident;
- the requirement that the operator have assets in Canada equal to the amount of the obligations being covered as the self-insured amount;
- the requirement that the operator provide updated credit rating information as new reports are released, as this has a direct effect on the amount of self-insurance that an operator is able to carry;
- the requirement that the operator report any material adverse change that could result in an adverse effect on the operator's ability to self-insure; and
- the requirement that the operator, on an annual basis, report and remit its audited financial information , and provide updated compliance certificates.

NRCan considers that the assessment that is conducted on operators that seek to self-insure and the obligation placed on those operators as a condition of their approval to self-insure are adequate to ensure that the compensation funds from the self-insurance will be available when needed.

## **Conclusion**

Canada's nuclear liability regime has been revamped with the coming into force of the NLCA on January 1, 2017, and Canada's ratification of the CSC on June 6, 2017.

The NLCA's provisions reflect the modern international nuclear civil liability standards, including higher operator liability limits; a broadened definition of compensable damages, which includes environmental damages, preventive measures, and certain forms of economic loss; and an extended limitation period to 30 years for making claims for bodily injury and loss of life.

The NLCA also has a number of innovative features such as a dual system for the compensation of claim, under which claims would be initially be addressed by the courts, but in the event of a serious incident could be managed by a special quasi-judicial tribunal to better address a large number of claims.

The NLCA also contains special provisions for alternative financial security mechanisms to cover operator liability, which provide operators with the opportunity to lessen the financial burden of premium costs associated with the insurance to cover the higher limit. The alternative forms of financial security are subject to rigorous terms and conditions set by the Minister, and to ongoing Ministerial supervision.

The NLCA strengthened Canada's nuclear liability regime and has responded to the 2012 recommendations made by the IAEA's International Expert Group on Nuclear Liability, as required by the IAEA Action Plan on Nuclear Safety.

Finally, Canada has become part of the international nuclear liability community by joining the CSC. Canada chose to join the CSC because it provides legal certainty on jurisdiction in the case of a nuclear incident in Canada or another CSC-member country.

## References

- [1] Strengthening Canada's nuclear liability regime, Buenos Aires 2014;  
Financial Security Criteria under Canada's Nuclear Civil Liability Regime, Manchester 2012
- [2] Criteria for Alternative Financial Security (i.e., Alternative to Insurance) under Canada's  
New Nuclear Civil Liability Regime, Toronto 2009