

## National legislative and regulatory activities

### Canada

#### **Liability and compensation**

*An Act respecting Canada's offshore oil and gas operations, enacting the Nuclear Liability and Compensation Act, repealing the Nuclear Liability Act and making consequential amendments to other Acts (Short title: Energy Safety and Security Act)*

Canada's new Nuclear Liability and Compensation Act received Royal Assent and passed into law on 26 February 2015.<sup>1</sup> The Energy Safety and Security Act changes Canada's civil liability regimes in the offshore oil and gas and in the nuclear energy industries by substantially increasing the absolute liability threshold limits. The current thresholds for offshore oil and gas operations are CAD 40 million in the Arctic and CAD 30 million for all other offshore areas. For nuclear facilities, the current threshold is CAD 75 million.

The increase addresses the recommendations to update Canada's liability limits for the offshore and nuclear industries that were made in the autumn 2012 report from Canada's Commissioner of the Environment and Sustainable Development.<sup>2</sup> It also comes after two high profile disasters, the explosion of British Petroleum's offshore drilling rig, Deepwater Horizon, on 20 April 2010 and the incident at the Fukushima Daiichi Nuclear Power Station following a tsunami caused by the Tohoku earthquake on 11 March 2011.

The Nuclear Liability and Compensation Act contains the updated nuclear liability scheme and, when it comes into force, it will repeal the 1976 Nuclear Liability Act. The Nuclear Liability and Compensation Act strengthens and modernises Canada's nuclear liability regime to better deal with liability and compensation for a nuclear accident within Canada. The legislation puts Canada in line with international compensation levels and clarifies the heads of compensation, setting out what is covered and the process for claiming compensation. The legislation maintains the absolute liability of operators of nuclear facilities for civil injury and damage. The operator will be exclusively liable. Thus, there is no need for an affected person to prove fault when making claims for injury or damages, and only the operator will be held liable.

The new legislation provides for a gradual increase of the absolute liability amount for nuclear facility operators over a three-year period, from the current CAD 75 million up to CAD 1 billion. CAD 650 million will be the liability limit upon proclamation of the law.<sup>3</sup> The three-year phase-in period will see yearly increments from the initial CAD 650 million at entry into force, to CAD 750 million, CAD 850 million and then to CAD 1 billion at year three. This will provide an

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1. Statutes of Canada (S.C.) 2015, Chapter 4 (Nuclear Liability and Compensation Act or NLCA). The NLCA has been reproduced in this edition of the *Nuclear Law Bulletin* and can be found in the Section "Documents and Legal Texts".
  2. Office of the Auditor General of Canada (2013), "2012 Fall Report of the Commissioner of the Environment and Sustainable Development", available at: [www.oag-bvg.gc.ca/internet/English/parl\\_cesd\\_201212\\_e\\_37708.html](http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201212_e_37708.html).
  3. NLCA, supra note 1, subsection 24(1).

opportunity for the insurance markets to realign, for operators to get the insurance required and to have the fiscal elements in place. As well, the legislation requires the review of the limit of liability at least once every five years.<sup>4</sup>

The new legislation includes other domestic improvements with respect to compensable damages and the claims period. It enlarges the heads of compensable damages to include, for instance, bodily injury, loss of life, property damage, psychological trauma associated with bodily injury and economic loss. As well, the claims limitation period for bodily injury is extended from 10 to 30 years in order to address latent illnesses. All other damage claims are subject to a 10-year limitation period.

The enactment allows for the establishment of a nuclear administrative quasi-judicial claims tribunal for the purposes of examining and adjudicating claims in an expeditiously and equitable manner,<sup>5</sup> which will replace the regular courts system if needed.

The coming into force of the Nuclear Liability and Compensation Act will allow Canada to ratify the Convention on Supplementary Compensation for Nuclear Damage (CSC), which deals with nuclear civil liability and compensation in the event of transboundary and transportation incidents. Canada became a signatory to the CSC on 3 December 2013, and the CSC entered into force on 15 April 2015. Once Canada ratifies the CSC, it will have strengthened its nuclear civil liability structure by supplementing its domestic regime financially. Furthermore, the ratification will allow Canada to establish nuclear civil liability treaty relations with the United States, which has already ratified the CSC.

The timing of the entry into force of the Nuclear Liability and Compensation Act is divided. Firstly, those provisions of the Act that do not rely on the CSC being in force will come into force on a day or days to be fixed by order of the Governor in Council.<sup>6</sup> This is expected to occur once the regulations that are required for the legislative scheme to be implemented, have been finalised.<sup>7</sup> Those provisions which contemplate the CSC being in effect cannot take effect before the convention is in force. Finally, the provisions of the statute which affect such things as making consequential amendments to other Acts and which repeal the existing Nuclear Liability Act, will have their own coming into force date fixed by order of the Governor in Council.

## France

### **Liability and compensation**

*Decree No. 2014-1049 of 15 September 2014 on the recognition and indemnification of the victims of nuclear tests conducted by France*<sup>8</sup>

The decree of 15 September 2014 abrogates and replaces decree No. 2010-653 of 11 June 2010 implementing the Act No. 2010-2 of 5 January 2010.

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4. *Ibid.*, section 26.

5. *Ibid.*, section 41.

6. In Canadian law, an order of the Governor-in-Council is the order of the Executive, basically the federal Cabinet.

7. For instance, pursuant to NLCA, section 7, nuclear installations, the site where a facility or facilities are located and that contain nuclear material, and the operator of nuclear installations may be designated by regulations.

8. *Décret n° 2014-1049 du 15 septembre 2014 relatif à la reconnaissance et à l'indemnisation des victimes des essais nucléaires français*, JORF 17 September 2014, p. 15200, text no. 1.

As a reminder, the Act of 5 January 2010 on the recognition and indemnification of the victims of nuclear tests conducted by France requires that in order to get compensation, a claimant must suffer radiation-induced illnesses as a result of their exposure to ionising radiation due to nuclear tests conducted by France. The type of illness shall be part of a list set out in a decree in line with the research conducted by the international scientific community. The claimant must also have lived in or visited specific geographical areas in either the Sahara or French Polynesia during precise periods.<sup>9</sup>

The decree of 15 September 2014 modifies the following points in particular:

- the list of radiation-induced illnesses resulting from exposure to ionising radiation due to nuclear tests conducted by France. Twenty-one types of illness are now listed;
- the geographic co-ordinates of the concerned areas of the Sahara;
- the status of the committee for the compensation of victims of nuclear tests (*comité d'indemnisation des victimes des essais nucléaires* or CIVEN), which is now recognised as an independent administrative authority having the jurisdiction to decide on the award of compensation pursuant to the Act of 5 January 2010. In the past, CIVEN was a consultative organ merely addressing recommendations to the French Minister of Defence.

Act No. 2014-1655 of 29 December 2014 amending the finance law for 2014<sup>10</sup>

Article 114 of the Act amending the finance law for 2014 indicates that the minister in charge of the economy is entitled to grant the French Atomic Energy and Alternative Energy Commission (CEA) a state guarantee pursuant to the third party nuclear liability regime by virtue of the environment code requiring the operator to have and maintain a financial guarantee up to an amount equivalent to that of its liability for an accident.

This guarantee shall be applied for each nuclear installation and each nuclear accident, and will be capped at EUR 700 million. It shall come into force on a date determined by decree, at the latest on 1 January 2016.

### **Nuclear safety and radiological protection**

*Tomorrow's nuclear safety: a financial and democratic issue – Information report No. 634 (2013-2014), by Mr Michel Berson of the French Senate's Finance Committee*<sup>11</sup>

This information report, authored by the French Senate's Finance Committee, issues a variety of recommendations on the public financing of nuclear safety, of radioprotection and of nuclear transparency based on three principles: independent control, rationalised financing and democratic transparency.

It makes the following recommendations in particular:

- ensure a long-lasting financing of nuclear safety by creating a contribution for nuclear safety and transparency perceived by the Nuclear Safety

9. More information on Act No. 2010-2 of 5 January 2010 can be found in NEA (2010), *Nuclear Law Bulletin*, No. 85, Paris, pp. 104-105.

10. *Loi n°2014-1655 du 29 décembre 2014 de finances rectificative pour 2014*, JORF 30 December 2014, p. 22898, text no. 3.

11. Berson, M. (2014), *La sûreté nucléaire de demain : un enjeu financier et démocratique – Rapport d'information n°634 (2013-2014)*, la Commission des finances du Sénat, available at: [www.senat.fr/notice-rapport/2013/r13-634-notice.html](http://www.senat.fr/notice-rapport/2013/r13-634-notice.html).

Authority and paid for by operators of nuclear installations; the amount thus perceived should be capped, with the surplus being transferred to the general budget of the state;

- create an annex to the year's budget law giving an overview of the total public funding earmarked for nuclear safety, radioprotection and transparency, in order to ensure greater political clarity;
- carry out, with a view to simplification, a general review of the legal rules applicable in the field of nuclear safety and radioprotection.

*Order of 20 November 2014 on the ratification of Nuclear Safety Authority decision No. 2014-DC-0462 of 7 October 2014 on criticality risk control in basic nuclear installations*<sup>12</sup>

*Nuclear Safety Authority decision No. 2014-DC-0462 of 7 October 2014 on criticality risk control in basic nuclear installations*<sup>13</sup>

The order of 7 February 2012 setting the general rules for basic nuclear installations (INB) (so-called "INBs order") stipulates that "with a view to control the risk of nuclear chain reactions, the operator shall demonstrate that the measures adopted allow the prevention of any risk of criticality which is not sought".

Pursuant to this provision, the decision of the Nuclear Safety Authority of 7 October 2014, approved by the order of 20 November 2014, details the objectives and general principles applicable to the criticality risk control, the provisions relating to the prevention of the criticality risk as well as the organisation rules for any operator of a basic nuclear installation. It applies to all INBs in the area where fissile material is present, excluding those where criticality is physically impossible, in the stages of conception, construction, operation, definitive shutdown, dismantling, maintenance and monitoring.

## Greece

### **Organisation and structure**

*Law re-establishing the regulatory authority in radiation protection and nuclear safety*

The law entitled "Research, Technological Development and Innovation and other provisions" was published in the *Official Government Gazette* on 8 December 2014.<sup>14</sup> Specifically, Chapter E (Articles 39-46, article 90) entitled "Management of Nuclear Energy, Technology and Radiation Protection – Greek Atomic Energy Commission (EEAE)" enlarges the scope of the existing national legal, regulatory and organisational framework for ensuring radiation and nuclear safety and protection of the general public, the environment and the goods of the country against the risks arising from ionising radiation emitted by any kind of devices, nuclear installations and radioactive material (natural and artificial), as well as artificially produced non-ionising radiation.

12. *Arrêté du 20 novembre 2014 portant homologation de la décision n°2014-DC-0462 de l'Autorité de sûreté nucléaire du 7 octobre 2014 relative à la maîtrise du risque de criticité dans les installations nucléaires de base*, JORF 2 December 2014, p. 20047, text no. 15.

13. *Décision n°2014-DC-0462 de l'Autorité de sûreté nucléaire du 7 octobre 2014 relative à la maîtrise du risque de criticité dans les installations nucléaires de base*, *Bulletin officiel de l'Autorité*, available at: [www.asn.fr/Reglementer/Bulletin-officiel-de-l-ASN/Decisions-de-l-ASN/Decision-n-2014-DC-0462-de-l-ASN-du-7-octobre-2014](http://www.asn.fr/Reglementer/Bulletin-officiel-de-l-ASN/Decisions-de-l-ASN/Decision-n-2014-DC-0462-de-l-ASN-du-7-octobre-2014).

14. Law 4310, *Government Gazette Folio No.258/A/* (8 December 2014).

Article 41 defines the competent Minister and the EEAE as the regulatory authority for the control, regulation and supervision in the fields of nuclear energy, nuclear technology, radiological, nuclear safety and radiation protection.

Article 42 lists the competencies of the Ministries involved.

Article 43 describes EEAE legal status and responsibilities. EEAE is established as a legal entity of public law, enjoying full administrative and financial independence in relation to its duties. EEAE has the legal competence and the power to attend trials independently in all cases regarding its actions, omissions or legal relationships.

Article 44 refers to EEAE management.

Article 45 refers to EEAE revenues and mechanisms of ensuring financial resources.

Article 46 describes the enforcement power of EEAE as a regulatory authority; the sanctions that can be imposed are listed in detail.

Article 90 concerns the licensing of activities and facilities where radiation use is involved (e.g. medicine, industry, research). This responsibility is fully assigned to the regulatory authority.

## Hungary

### **General legislation**

Act VII of 2015 regarding modifications to Act CXVI of 1996 on Atomic Energy and Government Decree No. 118/2011 (VII. 11.) on the nuclear safety requirements of nuclear facilities and the procedures of the Hungarian Atomic Energy Authority in nuclear safety regulatory matters have recently entered into force. The new provisions affect, among other matters:

- definitions of the Law;
- the use of standards;
- data protection, information rights and privacy issues;
- the scope of the authority; and
- remuneration of Government servants.

## India

### **Liability and compensation**

#### *India-US Administrative Arrangement to Implement 123 Agreement*

In January 2015, Indian Prime Minister Narendra Modi and United States President Barak Obama reached an understanding during President Obama's visit to India with respect to the India-US civil nuclear co-operation agreement. This understanding was reached after months of negotiations between the so-called "Contact Group", which was established during Prime Minister Modi's visit to the United States in September 2014 to advance the implementation of civil nuclear energy co-operation. The full text of the understanding has not yet been made public by either government.

In February 2015, the Indian government (through the Ministry of External Affairs) posted a “Frequently Asked Questions and Answers” page on its website, where it clarified issues related to:<sup>15</sup>

- suppliers’ liability;
- operator’s right of recourse;
- establishment of India Nuclear Insurance Pool and Nuclear Liability Fund.

The Government of India made further clarifications regarding the implementation of the 123 Agreement.<sup>16</sup> The clarification clearly states that there is no proposal to amend the Civil Liability for Nuclear Damage Act of 2010 (CLND Act of 2010)<sup>17</sup> or the Civil Liability for Nuclear Damage Rules of 2011 (CLND Rules).<sup>18</sup> The government of India intends to ratify the Convention of Supplementary Compensation (CSC) as there is a general understanding that the CNLD Act of 2010 is compatible with the CSC. Relating to the ambiguity raised by the operator’s right of recourse under Section 17(b) of the CNLD Act of 2010, India clarified that the actions and matters contemplated in Section 17(b) should be considered in the context of the relevant clause in the contract between the operator and supplier on product liability or service contracts. The understanding makes it clear that section 17(b) of the CNLD Act of 2010 is in conformity with the CSC, since Annex 10(a) of the CSC Annex does not restrict the contents of the contract between the operator and the supplier. As a policy matter, it is clarified that the Nuclear Power Corporation of India (NPCIL), the sole operator as per the CNLD Act 2010, would insist for provisions providing a right of recourse consistent with Rule 24 of the CLND Rules of 2011 in nuclear supply contracts. In this regard, a market-based mechanism – the India Nuclear Insurance Pool – will be instituted to compensate third parties for nuclear damage and, in case of the invocation of right of recourse, the suppliers can seek insurance coverage from this Pool.

Section 46 of the CNLD Act of 2010 has raised concerns among both domestic and foreign suppliers regarding the scope as its broad language brings the possibility of legal liability on the suppliers and also allows victims to invoke foreign jurisdiction against the operator or the supplier. The clarification states that the language of section 46 of the CNLD Act of 2010 is provided routinely in similar other Indian legislations, which continue to operate in their respective domains, and that the legislative intent that should be used in interpreting statutes does not provide

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15. Government of India, Ministry of External Affairs (2015), “Frequently Asked Questions and Answers on Civil Liability for Nuclear Damage Act 2010 and related issues”, [www.mea.gov.in/press-releases.htm?dtl/24766/Frequently\\_Asked\\_Questions\\_and\\_Answers\\_on\\_Civil\\_Liability\\_for\\_Nuclear\\_Damage\\_Act\\_2010\\_and\\_related\\_issues](http://www.mea.gov.in/press-releases.htm?dtl/24766/Frequently_Asked_Questions_and_Answers_on_Civil_Liability_for_Nuclear_Damage_Act_2010_and_related_issues) (accessed 28 April 2015).

16. A “123 Agreement” is an agreement made according to section 123 of the US Atomic Energy Act relating to significant transfers of nuclear material, equipment or components from the United States to another nation. For more information on 123 Agreements, see US National Nuclear Security Administration (n.d.), “123 Agreements for Peaceful Cooperation”, [http://nnsa.energy.gov/aboutus/ourprograms/nonproliferation/treatiesagreements/123\\_agreementsforpeacefulcooperation](http://nnsa.energy.gov/aboutus/ourprograms/nonproliferation/treatiesagreements/123_agreementsforpeacefulcooperation) (accessed 28 April 2015).

17. The full text of the Act can be found here: <http://dae.nic.in/sites/default/files/civilnucliab.pdf>. More information on the CLND Act of 2010 can be found here: NEA (2010), “India: Civil Nuclear Liability Act (2010)”, *Nuclear Law Bulletin*, No. 86, NEA, Paris, pp. 78-79.

18. More information on the CLND Rules, as well as the CLND Act of 2010, can be found here: NEA (2011), “India: The Civil Liability for Nuclear Damages Act 2010 (Act) and the Civil Liability for Nuclear Damages Rules, 2011 (Rules)”, *Nuclear Law Bulletin*, No. 88, NEA, Paris, p. 80.

liability to the suppliers during the adoption of the CNLD Act of 2010. Similarly, the clarification provides that section 46 of the CNLD Act of 2010 “exclusively covers the remedies that are available against the operator” and also negatives victims’ ability to approach foreign courts under section 46 based on legislative intent.

The India Nuclear Insurance Pool has a total capacity of Indian National Rupee (INR) 1 500 crores<sup>19</sup> with INR 750 crores contributed by the Pool Administrator, GIC Re, and four others public sector insurance companies, with the balance contributed by the Indian government. The Pool covers risks related to the nuclear operator’s liability under section 6(2) of the CNLD Act of 2010 and the supplier’s liability under section 17 through three types of policies: a Tier 1 policy for operators, a Tier 2 policy for turn key suppliers and a Tier 3 policy for suppliers other than turn key suppliers. Section 6(1) of the CLND Act of 2010 provides a maximum liability amount of INR that is equivalent of 300 million Special Drawing Rights (SDR).<sup>20</sup> In the event that the total liability exceeds the operator’s maximum liability of INR 1 500 crores, any gap in coverage beyond the India Nuclear Insurance Pool capacity will be contributed by the Indian government. The Indian government plans to access international funds under the CSC once it becomes a party for amounts beyond the INR equivalent of SDR 300 million. The clarification highlights the Indian government’s plan to establish a Nuclear Liability Fund by charging operators based on power generation from existing and new nuclear plants over a period of 10 years.

Further, the clarification negates the possibility that operators and suppliers will be asked to provide more compensation in the future than under current existing contracts. Established jurisprudence does not support retrospective laws that affect contracting parties’ substantive rights. The clarification concludes by placing the onus on the companies to continue negotiations and come up with viable techno-commercial offers and contracts consistent with Indian law and practice.

## Japan

### **Liability and compensation**

On 15 January 2015, Japan deposited its

instrument of acceptance to the Convention on Supplementary Compensation for Nuclear Damage (CSC). In November 2014, the Japanese parliament passed two pieces of legislation to ratify the CSC,<sup>21</sup> which came into effect on 15 April 2015, the effective date of the CSC.

*Act on the Partial Amendment of the Act on Compensation for Nuclear Damage and the Government Indemnity Agreement Act*

This legislation amended the two existing Acts in accordance with the CSC on the following points:

- The amendment made it clear that the contractual terms concerning right of recourse and liabilities for transportation shall be expressed in writing

19. One crore is equal to the number ten million.

20. As of 28 April 2015, 1 SDR was equivalent to approximately 88 INR. By this calculation, SDR 300 million equals approximately INR 2641 crores. This leaves a gap of approximately INR 1141 crores.

21. Unofficial English translations of the Act on Compensation for Nuclear Damage and Act on Indemnity Agreements for Compensation of Nuclear Damage (extracts) can be found in the section “Documents and Legal Texts” of this edition of the *Nuclear Law Bulletin*.

(Paragraph 2, Article 3 and Paragraph 2, Article 5 of the Act on Compensation for Nuclear Damage [the Compensation Act]).

- The Civil Code stipulates: “If the obligee is *negligent* regarding the failure of performance of the obligation, the court shall determine the liability for damage and the amount thereof by taking such elements into consideration” (emphasis added). This rule was also applicable to nuclear liability before the amendment. Instead of this rule, newly inserted Article 5-2 of the Compensation Act stipulates a special provision for nuclear liability, which eliminates the case of “slight negligence”.
- The former Paragraph 1, Article 5 of the Compensation Act provided a right of recourse if the nuclear accident resulted from an act by a “third party” (including both legal entities and individuals) with intent to cause damage. Legal entities are eliminated from the scope of the new Paragraph 1, and only individuals are included.
- Newly inserted Article 9-2 of the Compensation Act stipulates restrictions on the cancellation of nuclear liability insurance contracts. The cancellation of nuclear liability insurance contracts shall take effect after 90 days from the date when the authority receives the notification of cancellation from insurer. Nuclear liability insurance contracts for transportation shall not be cancelled during the carriage, i.e. from the commencement to the end of the shipment. Article 16 of the Act on Indemnity Agreements for Compensation of Nuclear Damage (Government Indemnity Agreement Act) is also amended accordingly.

*Act on Subsidisation etc. of Nuclear Damage Compensation for Enforcement of the Convention on Supplementary Compensation for Nuclear Damage*

This new legislation establishes the domestic system for distribution and financing of the 2<sup>nd</sup> tier of the CSC.

#### *Distribution*

When Japan is entitled to use the 2<sup>nd</sup> tier funds, the government provides the funds in the form of subsidies to the operator who is liable for the nuclear damage. The operator may request the subsidies when:

- The total amount of compensation which the operator has already paid or on which the operator and the claimant have already reached an agreement, exceeds SDR 300 million; and
- Japanese courts have jurisdiction according to Article 13 of the CSC.

The subsidies shall be used for the compensation of damage that are specified in Article 5 of the CSC. Other procedures, terms and conditions of the subsidies are set by the government according to the Subsidy Budget Rationalisation Act.

#### *Financing*

Nuclear operators shall pay contributions to the government to finance the 2<sup>nd</sup> tier. There are two types of contributions:

- *General contributions* are paid every year by all Japanese nuclear operators. These contributions correspond to Japan’s contributions to the 2<sup>nd</sup> tier in case a nuclear accident is caused by an operator of another state party to the CSC.
- *Special contributions* are paid by the nuclear operator liable for a nuclear accident. These contributions correspond to Japan’s contributions to the 2<sup>nd</sup> tier in case the accident occurs at the nuclear installation of a Japanese nuclear operator.

The definition of “nuclear operator” is almost the same as in the Compensation Act, as it includes operators of nuclear power plants, research reactors, nuclear fuel cycle facilities, etc. The amount of the contributions is calculated according to the rule set by the government ordinance of 8 April 2015.

## Korea

### **Liability and compensation**

*Amendment of Article 3 of the Enforcement Decree of the Nuclear Liability Act: increase of the financial security amount required from operators of nuclear power reactors*

The Korean government has increased the financial security amount required from nuclear operator operating nuclear power reactors up to the liability compensation amount, i.e. SDR 300 million. This therefore aligns the financial security amount with the current nuclear liability compensation amount, which had been increased in 2001 to reflect the revision of the Vienna Convention on Civil Liability for Nuclear Damage in 1997. Until 2014, the financial security amount for nuclear power reactors per site covered by the insurance or the state indemnity agreement was only KRW 50 billion (approximately SDR 30 million). The aim of the amendment therefore was to eliminate the gap between the two amounts.

*Amendment of Article 2 of the Enforcement Decree of the Act on Indemnity Agreements for Nuclear Liability: the Korean Government will take over the risks of environmental damages*

The Korean government decided to take over the risks of environmental damage from the insurance market, by entering into a state indemnity agreement with the operator. Before this amendment, the risks related to environmental damage were covered by insurance, but the Korean nuclear insurance pool did not have the capacity to meet the increased level of financial security to SDR 300 million if the risks of environmental damage were to be included in the coverage.

## Lithuania

### **General legislation**

*Revised rules of procedure for drafting nuclear safety requirements and rules*

The Rules of Procedure for Drafting Nuclear Safety Requirements and Nuclear Safety Rules, approved by the Head of State Nuclear Power Safety Inspectorate (VATESI), establish rules of procedure for planning and implementing the process of drafting new and amended nuclear safety rules and requirements, adopted by VATESI. The amendment (new edition)<sup>22</sup> of the Rules was adopted in order to:

- formally introduce and elaborate on the use of the principle of a graded approach in the process of establishing rules and requirements for licensees;
- harmonise the Rules with recently amended general rules of legal technique.

The amendment came into force on 29 November 2014.

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22. Rules of Procedure for Drafting Nuclear Safety Requirements and Nuclear Safety Rules, Order No. 22.3-215, 28 November 2014, approved by the Head of the State Nuclear Power Safety Inspectorate, on the amendment of Order No. 22.3-58, 15 June 2009, approved by the Head of the State Nuclear Power Safety Inspectorate, on the approval of Nuclear Safety Requirements BSR-1.1.1-2011, available in Lithuanian at: [www.e-tar.lt/portal/lt/legalAct/bf22c29076d711e49710918558376243](http://www.e-tar.lt/portal/lt/legalAct/bf22c29076d711e49710918558376243).

### **Transport of radioactive material**

#### *Amendment of requirements for shipment of radioactive material, radioactive waste and spent nuclear fuel*

The amendment<sup>23</sup> to the Rules on Shipment, Import, Transit and Export of Radioactive Material, Radioactive Waste and Spent Nuclear Fuel, approved by joint order of the Minister of Health and the Head of the State Nuclear Power Safety Inspectorate (VATESI), came into force on 1 May 2015. It aims to clarify existing regulation on shipment, import, transit and export of radioactive material, radioactive waste and spent nuclear fuel by harmonising it (removing inaccuracies) with:

- recently amended and adopted Lithuanian legislation;
- IAEA's Regulations for the Safe Transport of Radioactive Material, SSR-1, 2012 edition;
- Council Directive 2006/117/Euratom of 20 November 2006 on the supervision and control of shipments of radioactive waste and spent fuel.

Additionally, some of the approved application forms were amended in order to simplify their readjustment to electronic application procedure. Further, the separation of functions was clarified between two Lithuanian regulatory authorities (the State Nuclear Power Safety Inspectorate and the Radiation Protection Centre) in the area of issuing permits for shipment.

## **Slovak Republic**

### **International co-operation**

#### *Details about international agreements concluded by the Slovak Republic*

Since the last edition of the *Nuclear Law Bulletin*, No. 94, as regards the international agreements status, the Slovak Republic hasn't acceded, signed, ratified or terminated any treaty in the field of nuclear energy.

### **Liability and compensation**

Act No. 54/2015 Coll.

Concerning the international nuclear liability regime under the 1963 Vienna Convention and the European Union (EU) Council Decision 2013/434/EU,<sup>24</sup> the Slovak Republic was considering the pros and cons of ratifying the 1997 Protocol to amend the Vienna Convention. The Nuclear Regulatory Authority (NRA) had initiated and co-ordinated the co-operation of the relevant ministries in the Interdepartmental Working Group for the Civil Liability for Nuclear Damages that provided NRA with

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23. Rules on Shipment, Import, Transit and Export of Radioactive Material, Radioactive Waste and Spent Nuclear Fuel, Order No. V-1164/22.3-194, 11 November 2014, approved by the Minister of Health and the Head of the State Nuclear Power Safety Inspectorate, on the Amendment of the Order No. V-1271/22.3-139, 24 December 2008, approved by the Minister of Health and the Head of the State Nuclear Power Safety Inspectorate, available in Lithuanian at: [www.e-tar.lt/portal/lt/legalAct/b82e8de0753611e4805fa6cb12e2ef99](http://www.e-tar.lt/portal/lt/legalAct/b82e8de0753611e4805fa6cb12e2ef99).

24. Council Decision 2013/434/EU of 15 July 2013 authorising certain member states to ratify, or to accede to, the Protocol amending the Vienna Convention on Civil Liability for Nuclear Damage of 21 May 1963, in the interest of the European Union, and to make a declaration on the application of the relevant internal rules of Union law, *Official Journal of the European Union* (OJ) L 220/1 (17 August 2013).

support when elaborating the non-legislative material “Analysis of the advisability of accession of the Slovak Republic to the Protocol amending the 1963 Vienna Convention on the Civil Liability for Nuclear Damage caused by Nuclear Incidents as fulfilment of the Council Decision 2013/434/EU” (Analysis).

The Analysis was submitted to the government in March 2014 to provide the government with a wide range of information and expected results of such ratification.

The government took the Analysis into consideration and adopted resolution No. 152 as of the 2 April 2014 based on which the NRA is supposed to:

- submit to the government a separate draft law on civil liability for nuclear damage and its financial coverage based on the 1963 Vienna Convention (until the end of December 2014);
- report to the government on the status and developments of the European legislation as regards civil liability for nuclear damage (until the end of March 2017);
- postpone the intended legislative works considering the accession to the 1997 Protocol amending the 1963 Vienna Convention until the submission of the abovementioned report in 2017.

Based on government resolution No. 152, the NRA elaborated a draft law on civil liability for nuclear damage that was adopted by the Parliament on 19 March 2015 and published as Act No. 54/2015 Coll. on civil liability for nuclear damage and its financial coverage.<sup>25</sup> The act will take effect on 1 January 2016.

By adoption of the separate law on civil liability for nuclear damage, the Slovak national legislation finally separated special civil law provisions on nuclear damage issues from the exclusively administrative law provisions on conditions of the peaceful use of nuclear energy as set by the 2004 Atomic Act.

New separated Act No. 54/2015 Coll. on civil liability for nuclear damage and its financial coverage provides a complete set of provisions on:

- civil liability for nuclear damage caused by nuclear incidents (causal nexus);
- competences of the NRA relating to the application of this act;
- competences of the National Bank of Slovakia as the Financial Market Authority in relation to the subjects of the financial market providing the financial security for nuclear liability coverage;
- sanctions applicable.

However, the legal provisions concerning the civil liability for nuclear damage in the new separate act are not new in the national legislation. Prior to Act 54/2015, there were provisions in Chapter VII of the 2004 Atomic Act that were applicable in the case of nuclear damage. Act 54/2015 provides for the incorporation of the non-revised 1963 Vienna Convention on civil liability for nuclear damage, which the Slovak Republic is bound by as a signatory state.

There are provisions providing for the application of the relevant provisions of the Vienna Convention. Also, definitions of nuclear incident, nuclear damage, nuclear installation, operator, insurance of the financial coverage, financial security

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25. The Act is available in Slovak at: [www.ujd.gov.sk/ujd/WebStore.nsf/viewKey/Zakon\\_54\\_2015/\\$FILE/54\\_2015.pdf](http://www.ujd.gov.sk/ujd/WebStore.nsf/viewKey/Zakon_54_2015/$FILE/54_2015.pdf). An unofficial English translation of the Act can be found in the Section “Documents and Legal Texts” of this edition of the *Nuclear Law Bulletin*.

and the transport of radioactive material are incorporated. Furthermore, there are provisions which provide for the liability of the operator in case an accident occurs during the operation of a nuclear installation or during transport.

The limits of the operator's liability for nuclear damage are set at the same level as in Act No. 143/2013 amending the 2004 Atomic Act (in effect since 1 January 2014), and the limits are as follows:

- for a nuclear installation with a nuclear reactor or nuclear reactors for energy purposes, during their commissioning and operation, up to EUR 300 million (for each nuclear incident);
- for a nuclear installation with a nuclear reactor or nuclear reactors used for research or training purposes exclusively, during their commissioning and operation, up to EUR 185 million (for each nuclear incident);
- for management of nuclear materials, for management of spent fuel or for the storage, conditioning and processing of radioactive waste, up to EUR 185 million (for each nuclear incident);
- for nuclear damage caused by each nuclear incident during the decommissioning of the nuclear installations as mentioned in the paragraphs above, up to EUR 185 million;
- for nuclear damage caused by each nuclear incident during the transport of radioactive material, up to EUR 185 million (except for excepted and exempted cases).

The new provisions were set to establish the claims handling process to determine the justification required regarding the financial security to cover the operator's nuclear liability, the procedure to inform the public of the occurrence of the nuclear incident, as well as the sanctions in case of breach of the provision in Act No. 54/2015.

Moreover, the one competent court for handling nuclear damage claims was set and is located in the Regional Court of Nitra (located in the vicinity of both nuclear power plant locations in the Slovak Republic).

## Slovenia

### **General legislation**

*Amendments of the Decree on areas of restricted use of space due to a nuclear facility and the conditions of facility construction in these areas<sup>26</sup>*

The Decree on areas of restricted use of space due to a nuclear facility and the conditions of construction in these areas was adopted in 2004 and amended in 2006. The latest amendments to the Decree were adopted to comply with the provisions of the Construction Act to the extent it relates to the demolition, replacement works and removal of structures, and also to align the terminology. Furthermore, the amendments also ensure compliance with the new requirements for classifying and sorting objects according to the complexity of the construction and align the terminology with the Act on Protection Against Ionising Radiation and Nuclear Safety.

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26. Official Gazette of the Republic of Slovenia, No. 92/2014.

The aim of the latest amendments remain the same, i.e. to ensure the implementation of radiation and nuclear safety measures, which restrict the use of land in the vicinity of nuclear facilities, thereby reducing the possibility of industrial or other accidents outside the nuclear facility, which could have an impact on nuclear safety. The amendments also aim to impose restrictions in relation to population density and the requirements relating to local infrastructure facilities to minimise the possibility of damage to human health and to the environment if an incident at a nuclear facility occurs. The provisions of the amendments are based on the principle of integrity which provides all appropriate and reasonable measures to prevent possible harm to human health, radioactive contamination of the environment, the degradation of space and negative effects on nuclear and radiation safety.

The amendments to the Decree entered into force on the day following its publication in the Official Gazette of the Republic of Slovenia, i.e. on 20 December 2014.

*Decree on the criteria for determining the compensation rate regarding the restricted use of space and intervention measures in the area of nuclear facilities*<sup>27</sup>

This Decree lays down the criteria for determining the amount of compensation:

- for restricted use of space (“the compensation”), the nuclear operator must pay the municipalities where the use of space is limited due to nuclear facility radiation and nuclear safety measures;
- for planning and implementation of intervention measures (“the charge”), the operator must pay to the municipalities that are partly or entirely within the nuclear facility intervention planning areas.

The Decree was adopted as a corrective measure on the basis of the conclusions of the Court of Audit, which were set out in the Audit Report on the site selection of the repository for low and intermediate level radioactive waste. This Decree is now consistent with the Act on Protection Against Ionising Radiation and Nuclear Safety and with the latest amendments of the Decree on areas of restricted use of space due to a nuclear facility and the conditions of facility construction in these areas in order to eliminate the deviation of the current determination of compensation, as they were identified in the report of the Court of Audit.

This Decree entered into force on 1 January 2015. Upon entry into force of this Decree, the previous Decree on the Criteria for Determining the Amount of Compensation Due to the Restricted Use of Land in the Area of Nuclear Facility<sup>28</sup> ceased to apply.

## Switzerland

### **Liability and compensation**

*The Swiss Federal Council adopts the revised Nuclear Energy Third Party Liability Ordinance*

On 25 March 2015, the Swiss Federal Council adopted a total revision of the Nuclear Energy Third Party Liability Ordinance (ORCN).<sup>29</sup> This ordinance details the

27. Id.

28. Official Gazette of the Republic of Slovenia, No. 134/2003 and 100/2008.

29. Office fédéral de l'énergie OFEN (2015), *Le Conseil fédéral adopte une révision totale de l'ordonnance sur la responsabilité civile en matière nucléaire* [The Federal Council adopts a total

implementation of the new Nuclear Energy Third Party Liability Act (LRCN) that was adopted by Parliament in 2008, but which has not yet come into force. The new LRCN and the revised ORCN can only enter into force once the Paris Convention on Nuclear Third Party Liability as amended by the 2004 Protocol, already ratified by Switzerland in 2009, is in effect.

On 13 June 2008, the Swiss Parliament adopted the new Nuclear Energy Third Party Liability Act and approved the ratification of the corresponding conventions, which had been revised in 2004 (i.e. the Paris Convention and the Brussels Convention Supplementary to the Paris Convention) as well as the Joint Protocol relating to the Application of the Vienna Convention on Civil Liability for Nuclear Damage and the Paris Convention. Switzerland ratified the Paris and Brussels Supplementary Conventions in March 2009.

Pursuant to the revised LRCN, the minimum insurance to be covered at the national level increases from CHF 1 billion to EUR 1.2 billion (CHF 1.26 billion based on the exchange rate as of 10 June 2015), which is in line with the international third party liability regime. The revision also greatly simplifies the compensation procedure, thereby improving the protection of victims in the case where an accident in Switzerland would also see victims in Switzerland. In such a case, the conditions of compensation and the procedural provisions that would apply to Switzerland would be the same as for all other signatory states.

#### *Total revision of the ORCN*

The revision of the ORCN sets the amount of the minimum cover that must be paid by private insurers to CHF 1 billion and defines which types of risk insurers may exclude. The ordinance also contains the method to calculate the premiums that must be paid by nuclear operators to the Federal insurance. The latter assumes the amount of nuclear damage not covered by private insurers or exceeding their maximum cover limit up to the amount of EUR 1.2 billion.

The fully revised ordinance sets the amount of the insurance cover for nuclear research installations and for the federal interim storage site at EUR 70 million; with regard to the transport of certain nuclear substances, the cover is set at EUR 80 million. In addition, the ordinance stipulates that nuclear facilities and the transport of nuclear material must be insured separately.

An analysis report of the results of the consultation on the total revision of the ORCN was published in 2013.<sup>30</sup>

## **United States**

### **Radioactive waste management**

*Nuclear Regulatory Commission publishes Proposed Rule that would update the existing regulations governing near-surface commercial disposal of low-level radioactive waste*

On 26 March 2015, the US Nuclear Regulatory Commission (NRC) published a Proposed Rule in the Federal Register to amend its regulations in 10 CFR Part 61 governing

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revision of the Ordinance on civil nuclear liability], Press release, available at: [www.bfe.admin.ch/energie/00588/00589/00644/index.html?lang=fr&msg-id=56671](http://www.bfe.admin.ch/energie/00588/00589/00644/index.html?lang=fr&msg-id=56671).

30. Département fédéral de l'environnement, des transports, de l'énergie et de la communication, DETEC (2013), *Ordonnance sur la responsabilité civile en matière nucléaire, Rapport explicatif*, available at: [www.admin.ch/ch/f/gg/pc/documents/2015/ORCN\\_Rapport-expl\\_fr.pdf](http://www.admin.ch/ch/f/gg/pc/documents/2015/ORCN_Rapport-expl_fr.pdf).

near-surface commercial low-level radioactive waste (LLRW) disposal sites.<sup>31</sup> If enacted, the proposed rule would adopt a more site-specific approach to LLRW. This would ensure that LLRW streams differing from those anticipated when the LLRW rules were initially enacted in 1982 are accounted for. Additionally, the proposed rules would improve uniformity and require additional analyses with a site-specific approach.

10 CFR Part 61 regulates all phases of near-surface commercial disposal of LLRW, including site selection, design, licensing, operations, closure, monitoring and the cessation of institutional controls. The rules require licensees to meet key “performance objectives”. This is intended to protect the general population from release of radionuclides, protect people at the site during operations, protect inadvertent intruders after cessation of institutional controls and ensure site stability following closure of the facility. Currently, the LLRW disposal rules in 10 CFR Part 61 emphasise passive, integrated systems, focus on site stability and specify the minimum geological and geomorphic standards for site suitability. While the current rules do not reference the concept of “defence in depth”, the passive, integrated approach is conceptually similar. 10 CFR Part 61 also categorises LLRW into four classifications – A, B, C and Greater-than-class-C waste – with correspondingly stricter controls for higher classifications of waste.

The NRC has proposed revising the existing regulations for several reasons. First, while the current rules require licensees and applicants to analyse potential pathways that could lead to a release of radioactive material, they do not specify the timeframe that must be analysed. Agreement states have mandated different timeframes, resulting in inconsistency. Next, some LLRW waste streams were not anticipated when 10 CFR Part 61 was initially created in 1982. The NRC, at that time, did not foresee the high amounts or concentration of depleted uranium that would be produced by enrichment activities and did not anticipate that the United States Department of Energy would consider disposing of its significant stockpiles of depleted uranium in commercial facilities. The NRC also anticipated that only a small fraction of the waste disposed of at a site would be at the classification limit for the site. In other words, the rule makers expected that most of the material at a Class B site, for example, would have a much lower radioactivity level than the Class B upper limit. However, licensees now use a process known as blending, where different waste stream types are blended together, resulting in a waste stream where most of the material approaches the upper classification limit for the site. Because of this, the NRC believes it is possible that an inadvertent intruder could receive a greater than 5 milliSievert per year dose, even for a site that meets all regulatory requirements.

If adopted, the new rules would require licensees and applicants to perform several new site-specific technical analyses. The first of these would be a performance assessment to ensure that the site will meet the regulatory requirements to protect the general public from releases of radioactivity. The proposed rules would require the performance assessment to calculate peak dose and calculate an exposure pathway analysis for a 1 000 year compliance period, showing that no member of the general public would be exposed to more than 0.25 milliSievert per year. The dose methodology would be consistent with 10 CFR Part 20 radiation protection standards. The performance assessment would focus on what could happen, how likely a release would be, the potential impacts of a release, and how those impacts compare to the regulatory standards. The performance assessment would include a detailed description of the site and system

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31. 80 Fed. Reg. 16082 (26 March 2015).

design, what events could affect long-term performance, the processes keeping radionuclides isolated from the environment, a computation of potential doses to the general population and finally an evaluation of the uncertainties in the results.

While protection of inadvertent intruders has always been a regulatory requirement of 10 CFR Part 61, the current rules do not require licensees or applicants to perform an analysis to demonstrate how their specific site will meet these requirements. As discussed earlier, the current rules rely on generally applicable passive requirements that will limit the exposure of an inadvertent intruder. The proposed rules would require a new analysis, focusing on site-specific conditions, to show that an inadvertent intruder at the site would receive no more than a 5 milliSiervert per year dose. The results of the analysis would be compared to the performance objective in 10 CFR Part 61 for protection of an inadvertent intruder and would analyse a 1 000 year compliance period.

The proposed rule would also require other new analyses including a protective assurance analysis with a 10 000 year compliance period for certain long-lived LLRW and a site stability analysis focusing on the waste forms' stability, the facility design and the geotechnical characteristics of the site. Finally, the proposed rule would require licensees to update their safety case and technical analyses when they apply to amend their license for closure. This requirement would provide greater assurance that LLRW streams different from those initially considered when issuing the license will be safely disposed of and meet the regulatory performance objectives.

If adopted, the proposed rule would affect near-surface commercial LLRW disposal licensees or license applicants that are regulated by the NRC or by an NRC agreement state. All current LLRW disposal facilities are licensed by Agreement States. Agreement States would have three years from the date of the publication of the final rule to adopt compatible regulations.