Law No. (3) of 2018 on the National System for Accounting and Control of Nuclear Materials 3/2018 Number of Items: 13 Subject Index Materials

We, Tamim bin Hamad Al-Thani, Emir of the State of Qatar, after reviewing the Constitution, the Environmental Protection Law promulgated by Legislative Decree No. 30 of 2002, Decree-Law No. 31 of 2002 on Radiation Protection, Decree No. 38 of 1989 approving the accession of the State of Qatar to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), and Decree No. 123 of 2004. approving the accession of the State of Qatar to the Convention on the Physical Protection of Nuclear Material of 1980, Decree No. (17) of 2009 ratifying an Agreement for the Application of Safeguards under the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and the Small Quantities Protocol between the State of Qatar and the International Atomic Energy Agency (IAEA), and the Council of Ministers Resolution No. (26) of 2004 on the Establishment of the National Committee for the Prohibition of Weapons, as amended by Resolution No. (45) of 2007;On the proposal of the National Committee for the Prohibition of Weapons, and on the draft law submitted by the Council of Ministers, and after taking the opinion of the Shura Council, we decided on the following law:

Materials Article 1

In the application of the provisions of this Law, the following words and phrases shall have the meanings set forth in their respective contexts, unless the context requires otherwise:

Minister: Minister of State for Defense Affairs.

Agreement: Agreement for the application of safeguards signed with the International Atomic Energy Agency (IAEA) and ratified by Decree No. (17) of 2009 referred to.

Agency: International Atomic Energy Agency (IAEA)Committee: National Committee for the Prohibition of Nuclear Weapons.

Nuclear Materials: They are as follows:

- First: Source materials, which include: 1- Uranium containing a mixture of isotopes found in nature.2- Uranium poor in isotope (235), (less than the percentage found in nature).3- Thorium.
- Second: Special fissile materials, including: 1- Plutonium (239).2- Uranium (233).3- Uranium enriched with one of the two isotopes (235) or (233), or enriched with both isotopes in a quantity greater than the percentage of isotope (235) in natural uranium.
- Third: Any other nuclear material decided by the Board of Governors of the International Atomic Energy Agency (IAEA), approved by the State of Qatar, and issued by a decision of the Council of Ministers.

Control: Regulating the circulation of nuclear material and collecting information about it through inspectors or monitoring and measurement devices with the aim of detecting any inputs or outputs through means of containment, as well as detecting attempts to obfuscate or jam the

monitoring equipment, or alter samples or data. A reactor, critical facility, or plant that converts, produces, reprocesses or separates isotopes, separate storage facilities, or any facility or place where nuclear material is used in quantities exceeding one active kilogram.

Critical facility: The collection of a certain amount of nuclear material in a certain geometric manner, ensuring that chain fission continues to occur.

Chain fission: The fission of the nucleus into lighter nuclei that release energy and secondary neutrons, which in turn divert to other fission nuclei. A special unit used for the application of safeguards to nuclear materials, and the effective kilograms are calculated by: (a) in the case of plutonium: its weight in kilograms.b- in the case of uranium enriched with or greater than 0.01 (1%): the product of its weight multiplied in kilograms by its enrichment square.c- in the case of uranium enriched with less than 0.01 (1%) but by more than 0.005 (0.5%), the product of its weight in kilograms by 0.0001.d- in the case of depleted uranium with an enrichment of 0.005 (0.5%) or less, and in the case of thorium, the product Multiply the weight in kilograms by 0.00005.

Circulation of nuclear material: Anything that causes the nuclear material to be moved for the purpose of collecting, transporting, storing, processing or using it.

Enrichment: The ratio of the total weight of the isotopes of uranium (233) and uranium (235) to the total weight of the uranium enriched.

Measurement area: An area located inside or outside a facility where the amount or total of nuclear material stored, entering or leaving a facility, can be determined.

Inventory change: The increase or decrease is calculated in a step-by-step manner in the quantity of nuclear material in the measurement area of the nuclear material.

Strategic Point: A place chosen during the examination of design information, where information that is necessary and sufficient for the implementation of safeguards measures is obtained and verified, under normal conditions and when linked to information from other strategic points.

Increase in the quantity of nuclear material: an increase achieved as a result of the following:1. Import.2. Receipt of quantities from an internal source, whether at the moment of the commencement of the application of safeguards, or from other areas for the measurement of materials.3. Production of special fissile material in the reactor.4- Lifting the exemption by reapplying safeguards to nuclear materials that were previously exempt due to their use or quantity.

Decrease in the quantity of nuclear material: A decrease achieved as a result of the following:1- Export.2- Shipment of nuclear material to other regions for material measurement.3- Nuclear loss. 4- Measured residues: These are nuclear materials that have been measured or estimated on the basis of measurements, and are no longer fit for nuclear use after they have been disposed of.5- Retained waste: These are nuclear materials that have been generated either due to processing or due to an operational accident, and have been deemed to be temporarily

unrecoverable and stored.6- Exemption of nuclear materials from safeguards due to their use or quantity.7- Unintentional accidental nuclear loss and theft.

Nuclear loss: Loss of nuclear material due to its transformation to one or more other elements or to one or more counterparts due to nuclear reactions.

Amendment: Insertion of an addendum to an inventory record or report, indicating that there is a difference between the shipper's measurements and the recipient's measurements or the presence of unconfined material.

Difference between shipper measurements and recipient measurements: The material belonging to the charger in the measurement area of the nuclear material and this quantity when measuring the material belonging to the receiver in its measurement area.

Annual output: The amount of nuclear material transported annually out of a nuclear facility operating at nominal capacity.

Key measurement point: Enables the nuclear material to be displayed in a measurable manner to determine the movement of materials or a stock of material, including the amount of nuclear material ingoing, the amount of nuclear material outgoing, the stores located in the measurement areas of the nuclear material, etc.

Basic data: Information recorded during measurement or calibration processes, or information used to derive experimental relationships, information that allows the identification of nuclear material and the provision of batch data, and thus loss Includes the weight of the compounds, the conversion factors used to determine the weight of the element, specific gravity, the concentration ratio of the element, isotopic rates, the relationship between volume indicators and pressure indicators, and the relationship between the plutonium produced and the energy generated.

unconfined nuclear materials: the difference between the inventory and the physical inventory of the quantity of nuclear material that actually exists.

Inventory Inventory: The algebraic sum of the physical stockpile determined on the basis of the most recent inventory of the measurement area of the nuclear material plus all the stock changes that have occurred since that inventory was conducted.

Article 2

Subject to the provisions of the aforementioned Decree-Law No. (31) of 2002, the Committee shall undertake the work of inventorying and controlling nuclear materials, whether used or produced in all activities, including research activities, in accordance with the provisions of this Law and the provisions of the Agreement and the Statute of the Agency, and for this purpose it shall exercise the following competencies: 1. Inventory of nuclear facilities and the issuance and withdrawal of the necessary licenses for the exercise of their activities related to the circulation of nuclear materials, provided that coordination shall be made with the Ministry of

Municipality and Environment with regard to the relevant licenses A decree shall be issued by the Minister, upon the proposal of the Committee, to determine the conditions and procedures for the forms of issuance of licenses stipulated in the preceding paragraph and the fees prescribed therefor.2- Establish a system for measuring the quantities of nuclear material that the nuclear facility receives, produces, ships, or the materials it loses.3- Conducting an inventory of the basic data of nuclear materials, monitoring non-confined materials, cases of nuclear loss, and annual output.4- Evaluating the measurements in terms of their accuracy and accuracy with an estimate of the degree of 5- Establish procedures for identifying, reviewing and evaluating differences between shipper measurements and recipient measurements.6- Reviewing the physical inventory data of nuclear material and monitoring unconfined materials.7- Reviewing procedures for evaluating the accumulation of unmeasured assets and losses.8- Evaluating and adopting a system of records and reports that shows for each nuclear material measurement area the amount of nuclear material assets and changes in those assets, including the quantities that have entered the nuclear material measurement area.9- Monitoring cases of change in stocks of nuclear material, whether in excess or 10. Monitoring the restrictions and amendments made to the records of the inventory of nuclear materials. 11. Identify the strategic points and key measurement points to determine the movement of nuclear materials and their stockpiles and monitor the book stockpile. 12. Request the necessary data from the licensee and verify its commitment to the implementation of the provisions of this Law and the decisions implementing it.

Article 3

The Committee shall coordinate with the Agency with regard to the inspections mentioned in Article (9) of the Agreement, and take the necessary measures in this regard, and shall provide the Agency with the periodic reports requested by it in implementation of Article (8) of the Agreement, after they are presented to the Minister.

Article 4

Nuclear facilities shall be obliged to: 1. Provide the Committee with data and information related to the circulation of nuclear materials within the State or in any place under its control or supervision, as well as data related to the receipt and export thereof.2. Provide the Committee with the necessary data and information to meet the requirements of the Agency stipulated in the Agreement.3. Inform the Committee of the design data and information and any changes thereto as soon as they occur.4. Provide all facilities to the members and employees of the Committee, who have the capacity of judicial control, to carry out the necessary control work in implementation of the provisions of this Law 5. Implement the directives and measures issued by the Committee with regard to the control, inspection and accounting of nuclear materials. 6. Maintain books and make accurate and orderly entries for the indication of unrestricted nuclear material, the amount of its inventory and any amendments thereto.

Article 5

No person in charge of implementing this Law, whether a member of the Committee or connected with its work, shall disclose, directly or indirectly, any information that comes to his knowledge relating to the implementation of this Law.

Article 6

Without prejudice to any harsher penalty stipulated by any other law: 1. Any of the following: (a) embezzlement, seize, facilitate the seizure, theft, squander, possession, acquisition, or acquisition of nuclear material in violation of the provisions of the law. Attempted to commit any such act shall be punishable by the same penalty as for the offense.b. Gives information, makes a statement that is untrue or unnecessary, or withholds a statement, whether by himself or by others, for the purpose of committing one of the acts mentioned in clause (1)(a) of this Article.2. Anyone who violates any of the provisions of Articles (4, 4, 5, 6) and (5) of this Law shall be punished by imprisonment for a period not exceeding three years and a fine not exceeding (100,000) One Hundred Thousand Riyals or by one of these two penalties, anyone who knows of or attempts to commit any of the crimes stipulated in this Law and does not promptly inform the competent authority. The penalties stipulated in the preceding clauses shall be doubled in the case of recidivism, and the accused shall be considered to be a returnee under the provisions of this Law if he commits a similar crime within five years from the date of the expiry of the execution of the sentence imposed or its lapse upon the lapse of the period. For a period not exceeding one year.

Article 7

The person responsible for the effective management of the legal person shall be punished with the same penalties as prescribed for acts committed in violation of the provisions of this Law, if it is proven that he was aware of them, or if his breach of the duties imposed on him by that department contributed to the commission of the crime.

Article 8

The committee may issue decisions for the administrative closure of the violating nuclear facility for a period not exceeding one year, and if a final judicial ruling is issued in the case to close the facility or facility, the closure period shall be deducted from the period spent in the same violation. in the grievance permanently.

Article 9

The Chairman, Vice-Chairman, and employees of the Commission, and those assigned to work therein, who are authorized to serve as judicial officers, shall have a decision by the Attorney General, in agreement with the Minister, to seize and prove crimes committed in violation of the provisions of this Law.

Article 10

The Committee shall submit to the Minister every six months, and whenever requested, reports on the implementation of the provisions of this Law, including its proposals in this regard.

Article 11

Utilities and entities dealing in nuclear materials, which are in existence at the time of the entry into force of this Law, shall be obliged to regularize their status in accordance with its provisions, within six months from the date of its enactment.

Article 12

The Minister shall issue the necessary decisions to implement the provisions of this Law.

Article 13

All competent authorities, each in his own capacity, shall implement this law. It shall be published in the Official Gazette.