



Law of Nuclear and Radiological Control







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Definitions

Article I

The following terms and phrases -used herein- shall have the meanings assigned thereto unless the context requires otherwise:

Kingdom:

The Kingdom of Saudi Arabia.

Law:

The Law of Nuclear and Radiological Control.

Regulations:

The Implementing Regulations of the Law.

Commission:

The Nuclear and Radiological Regulatory Commission.

Commission Laws:

The Law, Regulations, Commission Statute, and other regulations and decisions issued by the Commission in implementation of the provisions of the Law.

IAEA:

International Atomic Energy Agency.



Nuclear Materials:

Plutonium, Uranium-233, or enriched Uranium in either of the two isotopes (Uranium-233 or Uranium-235), Uranium containing an admixture of its naturally occurring isotopes, but which is not ore or ore residue, or any other material the Commission classifies as nuclear material. For purposes of the application of nuclear safeguards, nuclear materials shall mean any source material or fissionable material as defined in the relevant the Kingdom signed Safeguards Agreement.

Radioactive Material:

Any material from which ionizing radiation is emitted, whether spontaneously or within other equipment, and which is designated as subject to the control of the Commission, including naturally occurring radioactive materials.

Safety:

Protecting human beings and the environment from ionizing radiation hazards, as well as ensuring the safety of the facilities and activities from which such hazards may arise.

Security:

Prevention and detection of any theft, sabotage, unauthorized access, illegal transfer (or any other criminal act) involving nuclear, nuclear-related or radioactive materials and associated facilities.

Activity:

The production, use, possession, storage, transport, import, or export of radioactive, nuclear or nuclear-related items; the siting, construction, commissioning, operation or decommissioning of facilities; radioactive waste management and site rehabilitation; or any other act specified by the Commission in accordance with its laws.

Clearance:

The removal of radioactive material or radiation source subject to this Law from the control imposed thereon by the Commission because the radiation exposure resulting therefrom is too small to warrant the application of such control.

Decommissioning:

The processes of dismantling and decontamination and the measures taken to release a facility, other than a disposal facility, from the control of the Commission.

**Disposal:**

The emplacement of nuclear spent fuel or radioactive waste on a permanent or long-term basis in a facility satisfying the requirements.

Exclusion:

Deliberate exclusion of a particular category of radiation exposure from the scope of this Law, on basis that it is not subject to the control of the Commission.

Exemption:

The Commission's decision that a radiation source or certain radiation practice need not be subject to its partial or full control on the basis that the exposure to radiation resulting from such source or practice is too low to warrant application of such control, or that this is the optimum option available after taking necessary preventive measures for minimizing the risks of exposure to ionizing radiation.

Import/Export:

Transferring any nuclear, nuclear-related components, or radioactive material into or out of the Kingdom.

Radiation Exposure:

Any act or condition causing exposure to ionizing radiation.

Ionizing Radiation:

Radiation capable of creating ion pairs in materials.

License:

A legal document issued by the Commission granting authorization to perform a specific activity or practice.

Licensee:

Any person holding a valid license.

Person:

Any natural or corporate person.

Nuclear Facility:

Any facility where activities or practices utilizing nuclear materials are conducted, including a nuclear power plant, research reactor, nuclear material fabrication facility, spent fuel storage facility, enrichment plant, reprocessing facility, or any other facility as defined in the nuclear Safeguards Agreement, as well as any similar facility designated by the Commission.

Facility:

This shall include a nuclear facility; installation where a radiation source is used; mining and raw materials processing facilities, such as uranium mines; radioactive waste management facilities; and any other locations where radioactive materials



are produced, processed, used, handled, stored or disposed of to the extent warranted by safety and security.

Nuclear or Radiological Emergency:

Any emergency, which results or is likely to result in exposure risk to ionizing radiation.

Nuclear-Related Items:

Any nuclear or radiological-related substance, commodity, technology, software or data, as well as nuclear and non-nuclear dual-use materials and components that are subject, when used, to specific restrictions, as they are susceptible to be misused.

Incident:

Any unplanned event, including operation errors or equipment failure; pre-accident situations; pre-accident warnings; near-miss incidents; harmful or non-harmful unauthorized acts, the actual or potential consequences of which cannot be ignored in terms of protection or safety.

Practice:

Any human activity that causes or is likely to cause exposure to ionizing radiation, excluding procedures of medical diagnosis or treatment of patients by healthcare practitioners.

Radioactive Waste:

Any material, regardless of its physical form, resulting from activities, practices or interventions such as decontamination, for which no further use is foreseen and which contains or is contaminated with radioactive substances, and has radiological activity or concentration higher than the level set for clearance from regulatory control.

Radioactive Source:

Any radioactive material permanently sealed in a capsule or closely bonded and in a solid form.

Radiation Source:

Any radiation generator, radioactive source, or any other radioactive material outside the nuclear fuel cycles of research and power reactors.

Orphan Source:

Any radioactive source not under the control of the Commission, because it has never been under such control, or has been abandoned, lost, withdrawn or stolen, or has been circulated through illicit trafficking.

Spent Fuel:

Nuclear fuel that has been irradiated in and permanently removed from a nuclear reactor core.



Nuclear Safeguards:

The processes of verification, inspection, monitoring and technical assistance conducted by IAEA to ensure that nuclear materials and installations, equipment and services related thereto are not converted or used for non-peaceful purposes.

Safeguards Agreement:

Agreement between the Kingdom and IAEA for the application of nuclear safeguards in connection with the Treaty Non-Proliferation Treaty of Nuclear Weapons (NPT), approved pursuant to Royal Decree no. M/51, dated 11/8/1429H.

Transport:

All operations and conditions associated with the movement of nuclear and radioactive material, whether through, from or into the territory of the Kingdom.

General Provisions

Article II

This Law aims to:

1. Achieve the highest standards of safety, security and safeguards for nuclear activities and facilities;
2. Provide adequate protection for humans and the environment from harmful effects of ionizing radiation; and
3. Meet commitments of the Kingdom under relevant international treaties and agreements.

Article III

The provisions of the Law shall apply to:

1. All activities and facilities that involve peaceful uses of nuclear power and ionizing radiation;
2. Any actual or potential radiation exposure by humans or the environment in the Kingdom; and
3. Transport of radioactive materials as well as import and export of nuclear materials and nuclear-related items.

Article IV

The licensee and persons assisting him shall provide the Commission with any document or information required for the performance of its duties.



License

Article V

1. No person shall carry out any activity without a license or an exemption from the Commission in accordance with its laws.
2. A person intending to perform any activity shall, prior to commencement, inform the Commission of his intention.
3. A license applicant shall have the means, capabilities and financial resources needed to carry out the activity subject of the license, taking into consideration fulfillment of the requirements of nuclear safety, security and safeguards.

Article VI

1. The approval of the Council of Ministers shall be obtained prior to review of license applications for nuclear facilities.
2. The Commission's Board of Directors shall have the power to issue, renew, modify, suspend or revoke a license for nuclear facilities, or approve the sites of such facilities.
3. The Commission shall set a classification of licenses and specify their types according to hazards resulting from activities and facilities and shall set relevant terms and conditions.

4. The Commission shall set criteria and rules for determining license fees.
5. The Commission shall approve the decommissioning plan for the facility subject of the license and verify that the applicant has the required financial resources.

Article VII

1. The licensee shall be fully liable for the safety, security and safeguards of the nuclear activity, even if the license is suspended, revoked or not renewed, in accordance with Commission laws.
2. The licensee shall:
 - a. Comply with Commission laws as well as terms and provisions stated in the licenses issued according thereto;
 - b. Employ qualified staff to perform the licensed activity;
 - c. Provide necessary means and training to prevent staff exposure to radiation hazards; and
 - d. Keep accounting and operational records of nuclear and radioactive materials and submit periodic reports to the Commission.

Article VIII

In the event of a nuclear or radiological emergency, incident, loss of control over a radiation source or nuclear material, theft or illegal seizure of a nuclear



or radioactive material, or sabotage or threat of sabotage of a facility, the licensee shall:

1. Promptly notify the Commission;
2. Submit a written report on the event to the Commission; and
3. Provide any additional information or assistance required by the Commission.

Safety

Article IX

Subject to the principles of justification, optimization and dose limitation of ionizing radiation, and guided by the international best practices, the Commission shall issue the regulations and decisions related to the safety of activities, practices and facilities and shall specify the categories of exposure to be excluded from the application of the Law or exempted from Commission control.

Security

Article X

1. The Commission shall establish regulations for security of nuclear and radioactive materials in coordination with the competent security agencies, subject to an assessment of nuclear security threat in accordance with international best practices.

2. The licensee shall be in charge of security relating to activities, practices, facilities and radiation sources subject of his license.
3. The competent security agencies shall be in charge of protection of the perimeters of nuclear facilities.

Article XI

In the event of theft, armed robbery, or illegal seizure of nuclear or radioactive materials, or sabotage of a facility, or threat thereof, the Commission shall inform the competent security agency as well as the competent authorities in countries that might be concerned and relevant international organizations, and shall agree with them on cooperation arrangements necessary for the protection or recovery of such materials in coordination with the relevant agencies in the Kingdom.

Article XII

It is prohibited for any person to:

1. Disclose any confidential information relating to the physical protection of nuclear material; or
2. Communicate, without authorization, any information to a third party, or facilitate access thereto, knowing that such information could undermine the physical security of any nuclear material or items related thereto, radioactive material, or facility, unless permitted.



Nuclear Safeguards

Article XIII

1. The Commission shall adopt an accounting system to manage and monitor the inventory of nuclear materials.
2. The Commission shall set the nuclear safeguards regulations for activities and practices.
3. The Commission shall verify the implementation of the nuclear safeguards agreement and any amendment thereto.
4. The Commission shall, in coordination with the relevant agencies, facilitate entry of IAEA inspectors into the Kingdom.

Article XIV

1. No person may, without a license, export or import nuclear materials or items related thereto, radioactive materials, facility components or any other material determined by the Commission.
2. The Commission shall, in coordination with the relevant agencies, set conditions for the import and export of materials referred to in paragraph 1 of this Article.

Transport

Article XV

The Commission shall, in coordination with the relevant agencies, set regulations for nuclear safety, security and safeguards during transport of nuclear and radioactive materials, in line with international best practices.

Emergency Preparedness and Response

Article XVI

1. The Commission shall set requirements for emergency preparedness and response plans for facilities and activities, which shall constitute part of the requirements for obtaining a license or renewal thereof.
2. The licensee shall set an emergency preparedness and response plan for the facility he operates and shall review, update and test said plan on a regular basis. The Commission shall approve such plan and any update thereof.

Article XVII

In the event of a nuclear or radiological emergency, the following measures shall be taken:

1. The licensee shall implement the nuclear or radiological emergency plan approved by the Commission.



2. If the spread of radioactive contamination beyond the boundaries of the facility is probable, the national plan for response to nuclear or radiological emergency shall be executed.
3. If the spread of radioactive contamination beyond the boundaries of the Kingdom is probable, the Commission shall immediately notify IAEA and provide any information or assistance regarding nuclear or radiological emergencies that may be required under relevant international agreements.

Radioactive Waste and Spent Fuel

Article XVIII

The Commission shall, upon setting the licensing terms and conditions for radioactive waste and spent fuel management facilities, consider the following:

1. Keeping the generated radioactive waste at the practical minimum level;
2. The interdependence among the steps of radioactive waste and spent fuel management;
3. Biological, chemical and other hazards that may be associated with radioactive waste management;
4. Adequate protection for the criticality and removal of residual heat generated during radioactive waste management;
5. Measures that reasonably minimize predictable impacts on future generations that might exceed those permitted for the current generation; and

6. Avoiding placing any costly additional burdens on future generations.

Article XIX

1. The prime responsibility for ensuring the safety and security of radioactive waste and spent fuel inside and outside a disposal facility shall rest with the licensee.
2. If the licensee fails to undertake the responsibility referred to in paragraph 1 of this Article, King Abdullah City for Atomic and Renewable Energy shall assume such responsibility, without relieving the licensee from his obligations under the Commission laws, including his financial responsibilities.
3. Any licensee in charge of a disposal facility shall provide assistance to the Commission, upon its request, in recovering and storing orphan sources and any other seized radiation source, in accordance with his applicable procedures. The Regulations shall set relevant procedures.

Inspection

Article XX

The Commission shall:

1. Set an inspection program for activities and facilities according to their hazards;



2. Inspect and monitor activities and facilities to verify their compliance with the Commission laws;
3. Detect violations and take appropriate action; and
4. Conduct investigations, issue notices and take necessary measures in case of any violation of the Commission laws, subject to the jurisdiction of the Public Prosecution provided for in Article XXXII of this Law.

Article XXI

The Commission shall, in implementation of Article XX of this Law, have the following powers:

1. Access any facility, part thereof or annex thereto, or any other place licensed to perform activities, in order to conduct periodic or unscheduled inspection; examine the adequacy of the licensee's procedures for nuclear safety, security and safeguards; install and use surveillance and monitoring devices; survey and collect samples for such purpose; and take necessary measures to seize materials, devices and documents that may constitute a breach of nuclear safety, security and safeguards.
2. Obligate facility operators to take corrective measures to remedy the violations.
3. Access, in coordination with the relevant agencies, places or facilities that contain or are suspected to

contain nuclear or radioactive materials to carry out an inspection, seize their inventory, order a full or partial shutdown thereof, install surveillance devices, survey and collect samples, and dispose of or seize any radiation source, nuclear material or items related thereto.

Violations and Penalties

Article XXII

A person shall be deemed in violation if he:

1. Carries out any activity without obtaining a license from the Commission;
2. Refuses to comply with a decision or directive issued by the Commission or its inspectors;
3. Provides the Commission with false statements or misleading information; or
4. Carries out any other act in violation of Commission laws or license terms or conditions.

Article XXIII

1. Without prejudice to any harsher penalty provided for in another law, a person who commits any of the violations stipulated in Article XXII of this Law shall be subject to a fine not exceeding twenty million riyals.
2. The fine referred to in paragraph 1 of this Article



shall be determined according to the gravity of the violation. Violations shall be considered by a committee of five specialists, from other than Commission personnel, appointed pursuant to a decision by the Council of Ministers upon nomination by the Commission's chief executive officer. Said committee shall include at least one legal counselor. Committee decisions shall be issued pursuant to rules and procedures set by the Regulations and shall be subject to appeal before the Administrative Court according to its law.

Article XXIV

Without prejudice to any harsher penalty provided for in another law, a person committing any of the following offenses shall be subject to imprisonment for a period not exceeding ten years and a fine not exceeding thirty million riyals, or either penalty:

1. Receipt, possession, use, transport, alteration, dispersion, modification or disposal of nuclear materials, without a license, which causes (or is likely to cause) death or serious injury to any person or substantial damage to property or to the environment.
2. Any breach of Commission laws relating to nuclear safety, security or safeguards resulting in substantial damage or hazard to people or to the environment.

3. Theft, robbery, embezzlement or fraudulent acquisition of nuclear, nuclear-related, or radioactive materials.
4. Unlawful transport of nuclear, nuclear-related, or radioactive materials into or out of the Kingdom.
5. Any unlawful act directed against a facility or activity, or an act disrupting their operation, which causes death or serious injury to a person or substantial damage to property or to the environment through exposure to radiation or release of radioactive materials.
6. Any act with the intention to obtain nuclear or radioactive material through the use of force or threat thereof, or any other form of intimidation,
7. Threat to:
 - a. Use nuclear or radioactive materials with the intent to cause death or serious bodily injury to any person or substantial damage to property or to the environment;
 - b. Use nuclear material to commit any of the acts set out in paragraph 5 of this Article;
 - c. Commit any of the acts set out in paragraphs 3 and 5 of this Article, with the intent to compel a person, international organization or state to carry out an act or refrain therefrom.

Article XXV

The imprisonment or fine set forth in Article XXIV of



this Law shall not be less than half its maximum if the offense is coupled with any of the following:

1. The offense is committed through organized crime;
2. The offender has been previously convicted of similar offenses, including foreign convictions.

Article XXVI

Any person who attempts to commit any of the offenses stipulated in this Law shall be subject to a penalty not exceeding half the maximum penalty prescribed for such offense.

Article XXVII

Any person who conspires, through collusion, incitement, or assistance, to commit any of the offenses stipulated in this Law shall be subject to the same penalty prescribed for the offense.

Article XXVIII

The conviction of a corporate person of any of the offenses stipulated in this Law shall not relieve a natural person, whether a board member, manager or officer working for said corporate person, from responsibility and due penalty upon establishment that the offense has been committed with his consent or due to his negligence or connivance.

Article XXIX

A corporate person may be punished by permanent or temporary suspension of his licensed activity whether directly or indirectly, by permanent or temporary closure of his installation which was involved in committing the offense, or by liquidation of his business.

Article XXX

An offender may be exempted from the penalties designated for the offenses prescribed under this Law if he provides the competent authorities with information on such offenses prior to their commission, provided such information leads to detecting the offense prior to its commission, apprehending the offenders, or preventing the commission of such offense. If the offender informs the competent authorities after the commission of the offense and prior to the investigation, he may be exempted from the penalty if such information leads to the apprehension of the other offenders or the seizure of the tools used in the offense. If such information is provided during the investigation, the penalty may be mitigated.

Article XXXI

The Commission shall provide technical support and assistance during pre-investigation of offenses



stipulated in this Law and during investigation and trial, if so requested.

Article XXXII

The Public Prosecution shall have the jurisdiction to investigate and prosecute offenses stipulated in this Law.

Conclusion Provisions

Article XXXIII

A person against whom a decision has been issued by the Commission may appeal in writing against such decision to the Commission's chief executive officer within sixty days from the date of his knowledge thereof.

Article XXXIV

The Regulations shall be issued pursuant to a decision by the Commission's Board of Directors within 180 days from the date of publication of this Law and shall enter into force on the date this Law becomes effective.

Article XXXV

This Law shall enter into force after 180 days from the date of its publication in the Official Gazette and shall repeal any conflicting provisions.



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