

An introduction to the Draft Regulations on Nuclear Secutiy

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- Introduction of Chinese legal system of nuclear security
- Introduciton of the draft regulations on nuclear security
- The prospect of China's nuclear security legal framework construction

China's Legal System

Laws

• Formulated and promulgated by the National People's Congress and having the supreme legal force.

Administrative Regulations

 Formulated and promulgated by the State Council in accordance with the Constitution and Laws, and are legally binding.

Departmental Rules

 Formulated and promulgated by the relevant Departments under the State Council, in accordance with Laws and Regulations. and have legal effect within their functions.

Normative Documents

• Formulated and promulgated by the competent departments.

Legal System of Nuclear Security

Since the beginning of the development of nuclear industry, China has paid great attention to the security of nuclear materials and nuclear facilities.

With the development of the nuclear industry, a series of management rules and procedures, adapted to historical conditions and technological development conditions, were issued , which standardized the security work of nuclear materials and nuclear facilities and laid a good foundation for establishing and improving the China's legal system of nuclear security.

Legal System of Nuclear Security — Laws

Legal name	Content involved in nuclear security
Atomic Energy Law (Under development)	The direct upper-level legislation of nuclear security
Nuclear Safety Law	Interface between nuclear security and safety
Law on Prevention and Control of Radioactive Pollution	Security of nuclear facilities and radioactive sources
National Security Law	The status of nuclear security in national security
Anti-terrorism Law	Fight against nuclear terrorism
Internet Security Law; Law on Guarding State Secrets	Cyber security and information security
Emergency Response Law	Nuclear security incident response
Criminal Law; Public Security Administration Punishment Law	Nuclear security enforcement
Law of the People's Armed Police; People's Police Law	Nuclear security response force
Contract Law; Foreign Trade Law; Customs Law	Control of Nuclear and radioactive materials trade
Law on Road Traffic Safety; Law of Post	Transportation Security

Legal System of Nuclear Security — Regulations

Name of Regulations	Content involved in nuclear security
Regulations on Nuclear Security (Under development)	Special regulations for nuclear security
Regulations on Nuclear Material Control	Security of nuclear materials
Regulations on Interior Security and Protection for Enterprises and Public Institutions	Security and protection
Regulations on the Safety Management of Major Public Events	Security for major public events
Regulations on the Security Protection for Computer Information System	Cyber security
Regulations on the Safety Administration of the Transport of Radioactive Materials; Management Rule for Foreign Ships; Enforcement Rules for Postal Law; Security Guard Ordinance for Civil Aviation; Road Transport Ordinance; Express Provisional Regulations(Under development).	Transport security
Regulations on the Safety and Protection of Radioactive Isotopes and Radiation generating device	Security of other radioactive materials
Regulations on Nuclear Export Control; Regulations on Export Control of Nuclear Dual - Use Goods and Related Technologies	Export control

Legal System of Nuclear Security - Departmental Rules

Name of Departmental Rules	Content involved in nuclear security
Implementation Rules of Regulations on Nuclear Material Control	Security of nuclear material
Rules on Security and Protection of Nuclear Power Plant	Security of nuclear facilities
 Rules on the Physical Protection of Nuclear Material in International Transport Waterway Transport Rules on Dangerous Goods Rules on the Administration of Road Transport of Radioactive Materials 	Transport security
 4. Rules on the Safe Management of Dangerous Goods at Ports 6. Rules on the Supervision and Administration of Railway Transportation for Dangerous Goods 	
Rules on the Management of Security Products	Nuclear security equipments

Legal System of Nuclear Security-Normative Documents

	Name of Normative Documents	Nuclear Security Content
	Preliminary Design Documentation of Physical Protection System of Nuclear Facilities;	Security of nuclear materials and nuclear facilities
	Measures for the Examination and Approval of Transshipment and Transit; Transport of Nuclear Products (tentative); Interim Provisions on Road Transport Management of Spent Nuclear Reactor fuel	Transport security
	substances (Tentative); Requirements on Security for Highly Toxic Chemicals, Radioactive	Security of radioactive substances

the Status of the Draft Regulations

- In one word, China has developed a set of legal documents on nuclear security. They provide administrative rules and technical guidance on different aspects of nuclear security. And China has maintained a good record of nuclear security in the past decades.
- But in the national level, China does not have a specialized law or regulations to manage nuclear security affairs.
- The 《Nuclear Security Regulations》 would be China's first specialized nuclear security domain regulations.

Scope of Applicability

- > nuclear materials;
- nuclear facilities;
- > other radioactive material and their associated facilities,
- > as well as related activities

within the territory of the People's Republic of China and the maritime under the jurisdiction of China

Difinition of nuclear security

- nuclear safety and nuclear securtiy in Chinese;
- In the draft, "nuclear security" is defined as "the prevention of, detection of, and response to, criminal or intentional unauthorized acts involving or directed at nuclear material, other radioactive material, associated facilities, or associated activities." It is same as the definition which is given by the IAEA.

Organization and Responsibilities



Organization and Responsibilities



- <u>CAEA</u>:regulates and supervises the security of nuclear material s and nuclear facilities nationwide, and is responsible for intern ational cooperation in nuclear security and the implementation of international treaties in relation thereto.
- <u>MPS</u>:supervises the security of other radioactive material and r elevant facilities;shall offer guidance and conduct supervision on the security efforts of the nationwide holders or operators of nuclear materials, nuclear facilities, other radioactive material a nd associated facilities.
- <u>MEP</u>:grants license for holding or operating other radioactive ma terial and relevant facilities;
- <u>MOT</u>: supervises the security efforts of transportation of nuclear materials andother radioactive material by means of road, water way or railway;
- <u>GAC</u>:monitors on the customs



Prevention first, Constant vigilance, Effective response, Assured security.

- Categorized management on nuclear security.
 - nuclear materials:shall be divided into three categories, including Category I, Category II and Category III, in descending order of the potential risks, according to the type of material, and the enrichment and quantity of fissile isotopes.
 - nuclear facilities:shall be divided into three categories, including Category I, Category II and Category III, in descending order of the severity of any radioactive consequences that may result from their damages.
 - Other radioactive material (and associated facilities): shall be divided into Category I, Category II and Category III in descending order of their potential harm to human health and the environment, according to the nature and activity of radioactive nuclides.

Threat Assessment

- <u>National DBT</u>: The draft designates the CAEA, in consultation with the public security authority and the national security authority under the State Council, responsible for the development and regular update of the country's Design Basis Threat, in the light of the national security situation and the specific categorization of nuclear materials and nuclear facilities in concern.
- <u>Facility DBT</u>: The holders or operators of nuclear materials and nuclear facilities should formulate or update their own design basis threats(in facilities level) in accordance with the state design basic threats, and should submit them to CAEA.

The Security of Nuclear Materials And Nuclear Facilities

- the review of the design: the security system for the Category I or II nuclear materials and nuclear facilities shall not be constructed unless its design plan has been reviewed and approved by CAEA.
- <u>the acceptance inspection</u>: upon completion, the security system shall be subject to be inspected by CAEA for acceptance before commencing operation.
- <u>the evaluation of the system's effectiveness</u>: The holders or operators of Category I or II nuclear materials or nuclear facilities shall evaluate the effectiveness of its security system annually, and holders or operators of Category III nuclear materials or nuclear facilities shall do the same every three years.

The Security of Nuclear Materials And Nuclear Facilities

- No-fly zone: The draft makes regulations for unmanned aerial vehicles, helicopters, model aircraft, airships or any other aircraft that forbids operation in the low-altitude airspace inside the perimeter of the limited access area of any Category I or II nuclear materials and nuclear facilities.
- The draft stipulates that the holders or operators of nuclear materials, nuclear facilities shall prepare an emergency plan in response to nuclear security incidents and carry out emergency drills regularly in the light of the categorization of those materials and facilities.

The Security of Nuclear Materials And Nuclear Facilities

 The holders or operators of nuclear materials, nuclear facilities, other radioactive material and their associated facilities shall establish a personnel management system that meets the requirements on nuclear security efforts. Working staff' s access to security areas is authorized and regulated based on their respective duties so as to keep the number of those personnel entering any security area or place at the reasonably minimum level, and shall conduct regular examinations accordingly.

Protection of Nuclear Material in Transport

- <u>Categorized management</u>: The draft states that the state takes control of nuclear materials and other radioactive material in transport in line with their categorization for security purposes.
- <u>Consignor responsibility</u>: The draft gives the consignor of nuclear materials and other radioactive material the responsibility for the transportation security, whilst the carrier thereof shall be held liable accordingly for the security thereof as agreed in the transportation contract.
- <u>Escorted transport</u>: The draft stipulates that the nuclear materials and other radioactive material in transport shall be escorted by specially-assigned people. Among others, "Category I" nuclear materials in transport shall be escorted by armed personnel, whilst "Category II or III" nuclear materials and "Category I or II" other radioactive material in transport shall be escorted by full-time security staff.

Information and Cyber Security

- The draft orders the holders or operators of nuclear materials, nuclear facilities, other radioactive material and their associated facilities and the implementers of associated activities shall take necessary measures to protect sensitive information on nuclear security, restrict the distribution scope of such information and prevent the information from being disseminated.
- And the operators of nuclear facilities shall establish a security control system and take technical protection measures in compliance with applicable laws, regulations and standards in regard to cyber security of the state and in line with the categorization of those nuclear facilities in concern and the severity of any consequences that may result from their damages, so as to ensure the safety of any computer and information system as well as their network relating to the operating safety of nuclear facilities, nuclear security and nuclear emergency.

The prospect of China's nuclear security legal framework construction

- The "Atomic Energy Law" is a general law in the field of atomic energy research, development and utilization and would be comprehensive, fundamental, and relative principle. It would be the "parent law" of all other nuclear laws and regulations. In the "Atomic Energy Law", there would be some overall requirements to the national nuclear security regime. It will provide legal basis for other nuclear security related rules and regulations. At present, the draft of this law has been submitted to the State Council and is in the final process of legislation.
- The "Nuclear Security Regulations" would be China's first specialized nuclear security domain regulations. It will provide comprehensive and systematic rules and requirements on the China's nuclear security competent authorities' duties, the security requirements and management measures of nuclear and other radioactive substances and related facilities, nuclear security incident response procedures, as well as punitive measures of violation of the relevant provisions on nuclear security, etc.



THANKS!