

 **国家核安全局**
National Nuclear Safety Administration

**Supervision and Administration of
Civil Nuclear Safety Equipment**

National Nuclear Safety Administration, P. R. China
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The surveillance on the civil nuclear safety equipment began at 1992.

- *Regulations on Supervision and Administration of Civil Nuclear Safety Equipment*
- promulgated by Decree No. 500 of the State Council on July 11, 2007
- effective as of January 1, 2008

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**Regulations on Supervision and Administration of
Civil Nuclear Safety Equipment**
(Decree No. 500 of the State Council)

These Regulations are formulated for the purpose of strengthening the supervision and administration of Civil nuclear safety equipment, ensuring the safe operation of Civil nuclear facilities, preventing nuclear accidents, safeguarding the health of the staff and the public, protecting the environment.



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- NNSA is responsible for implementing supervision and administration of the design, manufacture, install and non-destructive examination activities of civil nuclear safety equipment.
- The organization for design, manufacture, install and non-destructive examination of civil nuclear safety equipment shall apply for license in accordance with the provisions of these regulations.

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Regulations on Supervision and Administration of Civil Nuclear Safety Equipment
(Decree No. 500 of the State Council)

“Civil nuclear safety equipment” in these Regulations means the equipment used for performing the function of ensuring nuclear safety in Civil nuclear facilities, including nuclear safety mechanical equipment and nuclear safety electrical equipment.



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Regulations on Supervision and Administration of Civil Nuclear Safety Equipment
(Decree No. 500 of the State Council)

“Nuclear safety mechanical equipment” includes the pressure vessel, steel containment, heat exchanger, pump, valve, hatch, pipe, flange, internals, control rod drive mechanism, support, mechanical penetration, as well as the castings and forgings of the equipment mentioned above.



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Steel Containment	Pipe and Pipe Attachment (including exchanging tube)
Storage Tank	Bellow
Heat Exchanger	Flange
Pump	Internals
Ventilator	Control Rod Drive Mechanism
Compressor	Mechanical Penetration
Valve	Castings and Forgings of the Equipment Mentioned above
Hatch	Expansion
Pressure Vessel	Support

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“Nuclear safety electrical equipment” includes the sensor, cable, control panel and screen, display instrument, emergency diesel generator, rechargeable battery, motor, valve operator, electrical penetration, etc.



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Safety Electric Equipment	Sensor
	Cable
	Electrical Penetration
	Instrument & Control Cabinet and Rack
	Control Panel and Display Instrument
	Diesel-Generator Units
	Batteries
	Motor
	Valve Operator

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➤ **Six Management Systems of The Regulations**

(1) License For Works of Civil Nuclear Safety Equipment

An organization applying for the license shall meet the following requirements:

- ① being a legal organization;
- ② having performance which is related or similar to the work it applies at least five years;
- ③ having suitable professional technicians who are qualified upon examination;
- ④ having suitable workplace, facilities and equipments
- ⑤ having a sound quality assurance system

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➤ **Six Management Systems of The Regulations**

(2) Registration For Works of Civil Nuclear Safety Equipment
The foreign organization that carries out the design, manufacture, installation and NDE of nuclear safety equipment for the Civil nuclear facilities located within China shall get Registration from NNSA in advance.



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➤ **Six Management Systems of The Regulations**

(2) Registration For Activities of Civil Nuclear Equipment
A foreign organization that applying for the registration shall meet the following requirements:

- (1) compliance with the laws and regulations of nuclear safety of China.
- (2) using mature or verified technologies.
- (3) having performance which is related or similar to the work it applies at least five years;
- (4) having suitable workplace, facilities and equipments
- (5) having a sound quality assurance system

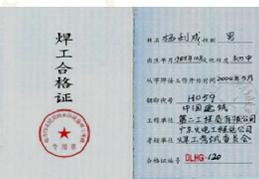
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(3) Qualification Certificates For Special Process Persons

The qualification certificates for welders and welding operators of Civil nuclear safety equipment shall be examined and issued by NNSA.



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(3) Qualification Certificates For Special Process Persons

Non-destructive examiners of Civil nuclear safety equipment shall take uniform examinations organized by NEA. The qualification certificates shall be issued by NEA upon approval by NNSA.

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(4) safety inspection of imported Civil nuclear safety equipment

- NNSA shall conduct safety inspection of imported Civil nuclear safety equipment in accordance with law.
- After passing safety inspection, the imported Civil nuclear safety equipment shall undergo commodity inspection conducted by the exit and entry inspection authority.

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(5) Supervision of Works of Civil Nuclear Safety Equipment

The supervision shall be conducted through routine and non-routine, mainly in forms of on-site inspection, document examination, record confirmation and interview.

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(5) Supervision of Activities of Civil Nuclear Safety Equipment

NNSA perform supervision with different frequencies and contents (comprehensive, specific, and checkpoint inspection) due to the importance, complexity and maturity of the nuclear safety equipment.



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(6) Administrative punishment

The organization for design, manufacture, installation or NDE of Civil nuclear safety equipment without the license of NNSA shall stop illegal act and be fined of 500,000 to 1,000,000 Yuan; the Responsible Person shall be fined of 20,000 to 100,000 Yuan.



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(6) Administrative punishment

The organizations which design, manufacture, installation or NDE of Civil nuclear safety equipment without the category or scope of license shall stop illegal act, rectify within the time limited and be fined of 100,000 to 500,000 Yuan; the Responsible Person shall be fined of 20,000 to 100,000 Yuan.



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