

A STUDY ON AMERICAN NUCLEAR SAFETY LEGAL SYSTEM
FROM THE PERSPECTIVE OF INTERNATIONAL LAW^{*}
国际法视阈下美国核安全法律制度研究

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China has 27 nuclear power plants which are already in operation and 24 more are in construction phase. By 2020, it is expected that its nuclear capacity will reach to 40,000 megawatts (mw), which will generate a total of 260-280 terawatt-hours of electricity. In the post-Fukushima era, how to ensure China's nuclear safety is the top priority for both China and the international community. Dr. Ran Guo's excellent work, *A STUDY ON AMERICAN NUCLEAR SAFETY LEGAL SYSTEM FROM THE PERSPECTIVE OF INTERNATIONAL LAW* 国际法视阈下美国核安全法律制度研究, has covered a thorough study regarding the best practice of the US and in consequence, provides a comprehensive solution towards both practical and theoretical values for China.

In order to implement its Active Nuclear Energy Development Strategy and "Go Global" Strategy, China needs to create domestic and international regimes by learning from international practices and participating in international governance of nuclear safety. Being the first country to operate nuclear power plants with the biggest nuclear capacity in the world, the US has established the most advanced legal system, regulatory structure and international coordination

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mechanism in relation to nuclear safety. The author aims to fulfill two goals. One is to help China strengthen its domestic governance of nuclear safety by taking lessons from the US' advanced legal system and regulatory structure. The other is to help China increase its voice in international governance regimes and create a favorable environment for its "Go Global" strategy by learning from the American interaction with international nuclear safety regimes.

The book is composed of four chapters along with Introduction and Conclusion. Chapter One devotes to a normative analysis of America's nuclear safety legal system. This comprehensive system includes Congress legislation, authorized legislation, the Nuclear Regulatory Commission ("NRC") regulations, and the supportive norms, such as regulatory guides, technical documents, and safety standards. Besides, it also includes relevant case laws and international conventions. This legal system is produced by a unique legislation system, which is characterized by the combination of congress and authorized legislation. This combination can "ensure the separation and balance of legislative and administrative powers on the one hand, and secure a professional, independent and authoritative regulatory authority on the other." The US nuclear safety laws and regulations have become the model for international nuclear safety legislation.

Chapter Two carries out a historical study on the US regulatory structure. In 1954, the Automotive Electronics Council, a civil administration, replaced the exclusive military administration to promote civil nuclear energy development. However, its two conflicting functions - promoting the development of nuclear energy and supervising its safety - became so tense that the Energy Reorganization Act of 1974 eventually laid down the principle of the separation. Finally, the promotion function was transferred to Electrical Research and Development Association and Department of Energy ("DOE") and the regulatory function was transferred to NRC. After the Three Mile Island Accident in 1979, the NRC struggled to maintain its independence and improve its regulations on accident preparedness and response, radiation safety, and license renewal. In the 1990s, the US finally established a modern nuclear safety regulatory structure that includes NRC as the federal regulatory authority for nuclear safety, whereas other agencies, such as EPA, DOE, Department of State, Department of Transportation, Department of Labor, and state government took supportive responsibilities. It is characterized by 'independent institutions,' 'unified regulation,' "the separation