

# The Outlook For China's Nuclear Power Industry: Technology And Safety

## **ABOUT**

China has the fastest growing fleet of nuclear power plants in the world. At the same time, its indigenous technological capacities are advancing, along with its ambitious to be an international supplier. These seminars examine the outlook for China's nuclear power technology and the challenge of governing the safety of its domestic installations.

Registration

### Date

5 December 2018, Wednesday

# **Time** 2:00 pm – 5.00 pm

### Venue

Conference Room, Energy Studies Institute, 29 Heng Mui Keng Terrace Block A, #10-01 Singapore 119620

# **Enquiries**

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Click here to register

Admission is free but registration is required.

## **PROGRAMME**

14:00

14:15 – 15:30	Seminar 1 The Future of the Nuclear Industry Development in China – An Historical Perspective Dr Victor Nian, Research Fellow, Energy Studies Institute
15.30 – 15.45	Break
15:45 – 17:00	Seminar 2 Governing Nuclear Safety in China

Philip Andrews-Speed, Senior Principal Fellow, Energy Studies Institute



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# Seminar 1: The Future of the Nuclear Industry Development in China – An Historical Perspective

The Chinese nuclear industry development has come a long way since 1<sup>st</sup> October 1949. Through technology transfer from the western world and strong domestic research and development support, China has risen up as the 3<sup>rd</sup> strongest East Asian country besides Japan and South Korea in nuclear energy developments. Contrasting the negative western experience of cost escalation, completion time overrun, and abrupt stop in new builds, China has never experienced major construction cost and completion time overrun even with the latest nuclear power technologies. Having steadily constructed almost all types of western light water reactors, the most dominant commercial nuclear power reactor technology since 1985, Hualong One emerged as the nationally standardized technology targeting both the domestic and overseas markets. Building upon a review of historical reactor technology and market development in China and worldwide, this session brings future perspectives of Chinese indigenous technologies in their domestic and foreign markets.

**Dr Victor Nian** is a Research Fellow at the Energy Studies Institute of the National University of Singapore, and a participant in the project "Policy and Law for Nuclear safety and Security". He has about 10 years' experience in nuclear policy and strategy research. He is the Executive Director of a UNi-LAB on Integrated Systems Analysis Tools under the "Research & Innovation without Borders" initiative of Applied Energy Journal. His research on nuclear energy covers almost all aspects including safety, security, and safeguards, policy and regulation, peaceful and strategic use of atomic energy, and technology and industry developments.

# Seminar 2: Governing Nuclear Safety in China

The safety of the China's fleet of nuclear power plants is of concern not just to the country's leadership and citizens, but also to the wider Asian region. However, the ability of China's government to ensure the safety of its nuclear power plants has come under scrutiny both at home and abroad. These concerns have a number of grounds: the rapid growth of the country's fleet of nuclear power plants; perceived inadequacies of the nuclear safety regulator; deficiencies in the legal framework; potential weaknesses in the safety culture; a lack of transparency in the industry; the potential for malfeasance and corruption; and the generally low standard of safety in other energy industries. This session examines the progress made in recent years and identifies the challenges that remain.

**Dr Philip Andrews-Speed** is a Senior Principal Fellow at the Energy Studies Institute of the National University of Singapore, and principal investigator of the project "Policy and Law for Nuclear safety and Security". He has 40 years in the field of energy and resources, starting his career as a mineral and oil exploration geologist before moving into the field of energy and resource governance. His main research interest is the political economy of energy and resource governance, at national, regional and global scales.