



China's Response to Nuclear Safety Post-Fukushima: Genuine or Rhetoric?

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Abstract The Fukushima crisis has brought the nuclear safety problem to the world's attention. China is the most ambitious country in the world in nuclear power development. How China perceives and responds to nuclear safety issues carries significant implications on its citizens' safety and security. This paper examines the Chinese government's promised and actual response to nuclear safety following the Fukushima crisis, based on (1) statistical analysis of newspaper coverage on nuclear energy, and (2) review of nuclear safety performance and safety governance. Our analysis shows that (i) the Chinese government's concern over nuclear accidents and safety has surged significantly after Fukushima, (ii) China has displayed strengths in reactor technology design and safety operation, and (iii) China's safety governance has been continuously challenged by institutional fragmentation, inadequate transparency, inadequate safety professionals, weak safety culture, and ambition to increase nuclear capacity by three-fold by 2050. We suggest that China should improve its nuclear safety standards, as well as safety management and monitoring, reform institutional arrangements to reduce fragmentation, improve information transparency, and public trust and participation, strengthen the safety culture, introduce process-based safety regulations, and promote international collaboration to ensure that China's response to nuclear safety can be fully implemented in real-life.

Keywords nuclear safety, media focus, computational text analysis, regulatory governance, safety management

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