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COMPARISON OF ENERGY AND ENVIRONMENTAL REGULATIONS FOR THERMAL POWER PLANTS IN CHINA

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Abstract

The energy and environmental regulations of thermal power plants became crucial issues in China due to the coal dependence of electricity generation. The regulation costs, which are distributed differently between the plants are evaluated based on directional distance functions approach using the input and pollution data of the main thermal power plants in 2008. The results of our analysis show that potential cost for complying with the regulations entailing coal consumption for power generation companies in the PRC is about 23% of output level in 2008, 24% for the regulation of coal consumption and SO₂ and around 25% for the regulation of coal consumption, SO₂, flue gas and NO_x. In money terms, the potential environmental regulation costs of power generation companies are CNY180-200 billion (at 2008 prices). The insights on the scope for government regulatory strategies are provided.

Key words: environmental and economic benefit, directional distance function, environmental regulation, pollution

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