UNIVERSITY OF CAMBRIDGE | Energy Policy Research Group

What effect has the 2015 power market reform had on power prices in China? Evidence from Guangdong and Zhejiang

EPRG Working Paper 2010

Cambridge Working Paper in Economics 2043

Bai-Chen Xie

Jun Xu

Michael G. Pollitt

Abstract This paper presents an analysis of the impact of the recent power market reform process in China – following the No.9 Document of March 2015 - on the industrial price of electricity. We do this by picking a typical power price for a medium sized industrial customer in two of China's leading reform provinces: Guangdong and Zhejiang. We find that power market reform, which is characterised by the introduction of wholesale electricity markets, has substantially reduced prices. Our detailed analysis shows that these price falls have come from a number of different sources: falls in the prices paid to generators, reductions in grid charges and falls in government taxes and additional charges. We show that the regulated price falls by 26.4% in Guangdong and by 26.9% in Zhejiang. The market price falls even further by 27.7% in Guangdong and 30.4% in Zhejiang. We conclude that while the impact of the power markets is significant, the associated changes to network charges and other government determined components of the price are more significant.

Keywords Chinese power market reform, electricity prices, No.9 Document

JEL Classification L94

Contact xujun84@zufe.edu.cn
Publication May 2020
Financial Support EPRG; the National Natural Science foundation of China(71874121, 71603232); Major projects of the National Social Science Fund of China(17ZDA065, 18ZDA111) ; National Key R& D Programme of China (No. 2018YFC0704400); ESRC Impact Acceleration Award.

EPRG WORKING PAPER