

Agent-Based Simulations for Electricity Market Regulation Advice: Procedures and an Example

Anke Weidlich and Daniel Veit, Mannheim

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Summary

This paper discusses the use of agent-based simulation models for regulatory advice in electricity market regulation. It briefly introduces the necessary procedures and the state-of-the-art of the methodology, and outlines its possible range of application. In a second part, the paper presents an agent-based simulation model developed by the authors. The model can be applied for analyzing different market designs and market structures in order to derive evidence for regulatory advice. This is exemplified through the analysis of two settlement rules in the balancing power market and of several divestiture scenarios of the German electricity sector.