

Abstract

This thesis examines the current situation on the electricity market in the Czech Republic. A particular emphasis is put on the regulation of distribution system operators (DSOs). The Czech regulator applies only general efficiency factors for all incumbents, and the efficiency of the incumbents is not taken into account in the regulatory formula. In many countries, the regulators apply benchmarking methods to assess the efficiency of operators. This thesis analyses the current regulatory formula in international comparison and considers the application of benchmarking methods to the regulation of DSOs. The first part provides a description of the theoretical approach to the regulation of network industries, relevant legal norms, the current situation on the Czech electricity market and practices of the regulatory bodies in selected European states. The second, empirical, part presents an international benchmarking study based on data of 15 regional DSOs including two Czech operators. The study examines the application of yardstick methods using data envelopment analysis (DEA) and stochastic frontier analysis (SFA). Based on our results, we find that the cost efficiency of each of the Czech DSOs is different. This suggests that introducing individual efficiency factors in the fourth regulatory period is a suitable action.

JEL Classification: **K23, L43, L49, L94**

Keywords: Regulation, benchmarking, electricity distribution, utilities