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Streszczenie rozprawy doktorskiej nt.:

"Metoda określania optymalnej strategii realizacji zobowiązań podjętych w ramach aukcji oraz wtórnego rynku mocy"

The thesis includes the development of a method for determining the optimal strategy for fulfilling capacity obligations resulting from auctions and the secondary capacity market and the preparation of a case study based on a set of prepared scenarios, assumptions and available data.

In the theoretical part, information on legal regulations specifying the principles of operation of the capacity market in Poland has been collected. The processes in which the units applying for participation in the capacity market participate are described. In connection with the creation of a new market, new definitions were introduced to describe the units participating in it, different from those used so far on the energy market. Capacity market auctions, the secondary market and the rules of performing Capacity Obligations are characterized in detail as an introduction to the further part of the work.

The practical part describes a strategy consisting of 3 groups of partial strategies, describing the principles of determining the optimal implementation of the processes of participation in auctions, the secondary market and the performance of the Capacity Obligation. For each of the strategies scenarios have been defined and the opportunities and risks related to the implementation of each of them have been developed. For the purposes of making optimal decisions, a set of assumptions and data necessary to develop the analysis of individual scenarios has been described.

The developed method was implemented for the management of the described processes and its effect is that the tested Capacity Market Units did not obtain penalties on the capacity market while achieving a positive financial result for the performance of Capacity Obligations.

Keywords: capacity market, strategic analysis, risk

Podpis Doktoranta