A modelling breakthrough for market design analysis to test massive intermittent generation integration in markets results of selected OPTIMATE studies - DTU Orbit (27/09/2019)

The OPTIMATE platform focuses on electricity system and market designs modelling in order to assess current and innovative designs in Europe. The current paper describes the results of the first validation studies conducted with the tool. These studies deal with day-ahead market rules, load flexibility, cross-border management and intermittent renewable support schemes with a view to better integrating large amounts of renewable energy in Europe. Market and system designs were assessed based on economic efficiency, security of supply and environmental impact indicators. These results give a promising insight into the tool and its possible future use by transmission system operators, regulators, and other public entities.

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