Valuation and Optimal Exercise Strategy of Electricity Swing Options.

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Electricity swing options represent a special kind of American-style path dependent power derivatives. Thus, valuation of a swing option is inevitably linked to the determination of an optimal exercise strategy up to the end of the option's exercise period. In cooperation with a major European power producer and trader, this project deals with swing option valuation by means of a special multistage stochastic programming approach: a software tool was developed and implemented which accomplishes the requirements of a trading department with respect to pricing accuracy, run-time behaviour and handling comfort.

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