

# Finite Element Valuation of Swing Options

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Financial instruments enjoy an increasing popularity in risk management in electricity markets. Especially swing type derivatives are favoured, since they offer the desired flexibility in delivery with respect to both timing and amount of energy. To evaluate these complex derivatives, we derive an algorithm based on finite element methods. The obtained numerical results are highly accurate and allow the influence of spot price models on option prices to be analyzed. A comparison of the proposed finite element algorithm with Monte Carlo methods demonstrates the strengths of your procedure.