

A Simulated Annealing Algorithm For Unit Commitment

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Summary

This paper presents a simulated annealing algorithm (SAA) to solve the unit commitment problem (UCP). New rules for randomly generating feasible solutions are introduced. The problem has two subproblems: a combinatorial optimization problem; and a nonlinear programming problem. The former is solved using the SAA while the latter problem is solved via a quadratic programming routine. Numerical results showed an improvement in the solutions costs compared to previously obtained results

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