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Energy Flexibility in Production Planning

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Abstract

The concept of energy flexibility has been gaining importance in the last years, partly due to the surge in utilization of renewable energy sources. Its commercialization also provides new possibilities for enterprises, not only to promote the reduction of CO₂ emissions, but also as a way to generate new incomes. However, offering this flexibility implicates a number of negative effects to the manufacturing systems which need to be weighed. This paper explains these factors and how they can be modelled. This is done from the point of view of production planning, in contrast to the usual technological assessments.

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